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

FORM 20-F

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACTOF 1934**
OR
☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For fiscal year ended December 31, 2021
OR
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF1934**
For the transition period from____ to _____
OR
☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACTOF 1934**
Date of event requiring this shell company report:

Commission file number 001-38524

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

Ontario, Canada
(Jurisdiction of incorporation or organization)

76 Berkeley Street
Toronto, Ontario M5A 2W7
Canada
(416) 548-7522
(Address of principal executive offices)

Stephen Lemieux
Titan Medical Inc.
76 Berkeley Street
Toronto, OntarioM5A 2W7
Canada
Tel: (416) 548-7522
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

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

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

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

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:**As at December 31, 2021, 111,202,690 Common Shares of the Registrant were issued and outstanding**.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

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

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

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

Indicate by check mark 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. ☐

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

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

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:
Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No☒

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes ☐ No ☐

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INTRODUCTION

In this annual report on Form 20-F, which we refer to as the "Annual Report", except as otherwise indicated or as the context otherwise requires, the "Company", "Titan", "we", "our" or "us" or similar terms refer to Titan Medical Inc. and its consolidated subsidiaries. The Company is a "foreign private issuer" as defined in Rule 3b-4 under the Securities Exchange Act of 1934, as amended (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.

TRADEMARKS AND SERVICE MARKS

This Annual Report contains reference to certain trademarks and trade names which are protected through registrations, pending applications or common law rights, including Titan Medical, and the Enos single-access robotic surgical system (the "Enos System"). Solely for convenience, the trademarks and trade names referred to in this Annual Report are listed without the ® and ™ symbols, but we will assert, to the fullest extent under applicable law, our rights to these trademarks and trade names.

CURRENCY

Unless otherwise indicated, all dollar amounts in this Annual Report are in United States (U.S.) dollars.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report and the documents incorporated by reference herein contain "forward-looking statements", within the meaning of applicable Canadian and U.S. securities laws. 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 that 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 "expect", "anticipate", "believe", "intend", "estimate", "predict", "continue", "potential", "project", "target", "plan", "possible", "milestone", "objective" and similar expressions, or statements that events, conditions or results "will", "may", "could", "would" or "should" occur or be achieved. Any forward-looking statements or statements of "belief", including the statements made under "Risk Factors", represent the Company's estimates only as of the date of this Annual Report and the documents incorporated by reference herein, respectively, and should not be relied upon as representing the Company's estimates as of any subsequent date. These forward-looking statements may concern anticipated developments in the Company's operations in future periods, the adequacy of the Company's financial resources and other events or conditions that may occur in the future, and include, without limitation, statements regarding:

- the Company's development, regulatory and commercialization objectives, including plans/milestones, any estimated costs, schedules for completion and probability of success and including without limitation the table set forth under the heading "Development Plan";
- 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 is focused on the development and commercialization of innovative surgical technologies for single access robotic assisted surgery ("RAS") requiring only a single patient access point;
- 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 surgical 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 surgical procedure;
- the Company's intent to initially pursue gynecologic surgical indications for use of its Enos System;
- the Company's plan to develop 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's expectation that the Enos System will be classified as a Class II medical device by the U.S. Food and Drug Administration (the "FDA");
- the Company's intention to obtain marketing authorization through a classification request for novel devices in accordance with a De Novo classification submission in the U.S.;
- the Company's intention to submit a Technical File to a European Notified Body to obtain CE marking;
- the outcome of any review by the FDA and the time required to complete activities necessary for marketing authorization;
- the Company's plans on further communications with the FDA to clarify the requirements for the investigational device exemption ("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 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 as well as the recruitment of patients willing to participate in the IDE study, with each hospital site requiring approval of their independent 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;
- 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 plan, where appropriate, to license in from or license out to third parties certain technologies and any associated intellectual property;

- 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 common shares in the capital of the Company (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 Report, including but not limited to those described in the section titled, "Risk Factors", in this Annual Report, 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 with third parties 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 several important aspects of the Company's business, including those related to clinical activities, and there are a range of issues that are outside of the Company's direct control;
- the development, regulatory and commercialization plans for the Enos System may not be completed within the estimated timeframes, if at all;
- the RAS 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 has licensed a portion of its intellectual property portfolio to Medtronic plc ("Medtronic"), which limits its ability to independently enforce those licensed rights without seeking the cooperation of Medtronic;
- the Company may be unable to obtain or maintain the Company's trademarks or trade names 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 or may otherwise tarnish our reputation;
- 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;
- upon obtaining marketing authorization, subsequent modifications to the Company's products may require new regulatory marketing authorizations and may require us to cease marketing or recall the modified products until further authorization is obtained;
- upon obtaining marketing authorization for our products, we are still subject to extensive post-market regulations and our failure to meet strict regulatory requirements could require us to pay fines, incur other costs or even close our facilities;
- if one of our products, or a malfunction of one of our products, causes a death or contributes to a death or a serious injury, we will be subject to medical device reporting regulations, which can result in voluntary corrective actions or agency enforcement actions;
- 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;
- a lengthy and uncertain sales cycle for the Enos System could have a negative impact on our operating results;
- the failure of the Company to meet its established product development, regulatory and commercialization milestones in a timely manner or at all, may affect the Company's operational and financial results;
- the Company is still in the process of developing its Enos System and there can be no certainty that a commercially viable product will emerge from this process;
- 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 does not control all aspects of the development of the Enos System as it relies on third-party suppliers and development firms;
- the success of the IDE clinical study depends on the engagement of a sufficient number of hospital sites, surgeons, and the recruitment of a sufficient number of patients;
- 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 be delisted from Nasdaq if it does not satisfy continued listing requirements;

- the Company may not be able to maintain the Company's status as a "Foreign Private Issuer" or otherwise be eligible to use the Multijurisdictional Disclosure System ("MJDS");
- 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 2022 may be adversely affected by global political, economic and health-related disruptions, including the ongoing COVID-19 pandemic and the Russian invasion of Ukraine and the responses of governments around the world; and
- the impact of supply chain constraints and the availability of or lead times of certain components, including those resulting from global political, economic and health-related disruptions, could adversely affect our development program, commercialization efforts, operations and financial results

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 authorizations, 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 Enos 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.

PART I.

Item 1. Identity of Directors, Senior Management and Advisers

Not Applicable.

Item 2. Offer Statistics and Expected Timetable

Not Applicable.

Item 3. Key Information

A. [Reserved]

B. Capitalization and Indebtedness

Not Applicable.

C. Reasons for the Offer and Use of Proceeds

Not Applicable.

D. Risk Factors

In addition to the other information presented in this Annual Report, the following should be considered carefully in evaluating us and our business. This Annual Report contains forward-looking statements that involve risk and uncertainties. Our actual results may differ materially from the results discussed in the forward-looking statements. If any of these risks occur, the Company's business, results of operations or financial condition could be materially adversely affected. In that case, the trading price of the securities could decline, and you may lose all or part of your investment. Factors that might cause such a difference include, but are not limited to, those discussed below and elsewhere in this Annual Report.

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

We will require additional financing in order to continue our development program through to regulatory marketing authorization and take advantage of commercialization and future opportunities. Our ability to arrange such financing in the future will depend in part upon prevailing capital market conditions, as well as upon our business success.

There can be no assurance that we will be successful in our efforts to arrange additional financing on terms satisfactory to us. If additional financing is raised by the issuance of shares or convertible securities from treasury, our control may change and shareholders may suffer additional dilution. If additional funds are raised through strategic partnerships, we may be required to relinquish rights to our products, or to grant licenses to our intellectual property on terms that may not be favorable to us. If adequate funds are not available, or are not available on acceptable terms, we may not be able to complete development, obtain regulatory marketing authorization, commercialize our technologies, take advantage of opportunities, or otherwise respond to competitive pressures, which may delay or reduce our operations and ability to remain in business and continue as a going concern.

Unexpected increases in costs and expenses due to operational decisions made by the Company and/or factors beyond the Company's control, such as COVID-19 or any variants, the Russian conflict with Ukraine, or any delays related to sourcing of parts and materials or higher than expected inflation rates impacting pricing of parts and materials could cause a material impact on working capital resources of the Company and result in greater capital requirements than projected.

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

We have a history of losses, and there is no assurance that any of our contemplated products will generate sustainable revenues or earnings, be profitable or provide a return on investment in the future. We have not paid dividends in the past.

We had negative cash flow from operating activities for our fiscal year ended December 31, 2021 and this negative cash flow is expected to continue. We will continue to incur research and development and general and administrative expenses related to our operations. We expect to incur sales and marketing expenses in anticipation of the commercialization of the Enos System if and when FDA marketing authorization is obtained. If the Enos System fails in development or does not gain regulatory marketing authorization, or if it does not achieve market acceptance, we may never generate revenue or free cash flow or become profitable. Even if we generate revenue or free cash flow or achieve profitability in the future, we may not be able to sustain revenues, free cash flow or profitability in subsequent periods.

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

We rely on contractual arrangements with third parties and there can be no assurance that these arrangements will achieve their goals.

We rely upon, and expect to rely upon, contractual engagements with original equipment manufacturers and medical technology development firms for the assistance in product design, development, volume purchase orders and manufacturing (including manufacturing for the purposes of IDE clinical studies). There can be no assurance that the strategic alliances will achieve their goals or can be maintained to the satisfaction of the Company.

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

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

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

We expect that commercial activities subsequent to regulatory marketing authorization including our expansion into areas and activities requiring additional expertise, such as manufacturing, sales, marketing and distribution will place additional requirements on our management, operational and financial resources. We expect these demands will require an increase in management, 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 and engineering related to RAS systems. The failure to attract and retain such personnel or to develop such expertise could materially adversely affect our business, financial condition and results of operations.

Our trade secrets or other confidential information may be compromised.

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

We rely on third parties for several aspects of our business, including those related to clinical activities, and there are a range of issues that are outside of our direct control.

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

We rely or expect to rely on third parties, such as technology 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. While we rely on these parties, in certain cases extensively, as independent third parties we do not control many aspects of their activities. As a result, certain important aspects of product development are outside our direct control. If the third parties conducting preclinical or clinical studies do not perform their contractual duties or obligations, do not meet expected patient recruitment or other deadlines, fail to comply with good laboratory practice regulations, do not adhere to protocols or otherwise fail to generate reliable data, development, approval and commercialization of our products may be extended, delayed or terminated or may need to be repeated, and we may not be able to obtain regulatory clearance.

The development, regulatory and commercialization plans for the Enos System may not be completed within the estimated timeframes, if at all.

While the description of the development, regulatory and commercialization plans set forth herein for the Enos System are based on information available to the Company as of the date of this Annual Report, there is no assurance that such plans will be completed within the timeframes forecasted, if at all, and there can be no assurance with respect to the resources that may be required to complete the plans and achieve the milestones, including both internal resources, and third party development and manufacturing firms. Furthermore, additional development or regulatory tasks could be identified in the course of the development, manufacturing and testing of the Enos System which may extend the timeline beyond what is currently forecasted. The review times for IDE applications as well as De Novo classification requests with the FDA can vary greatly, and there can be no assurance as to the time it will take to receive FDA marketing authorization for the Enos System, or whether such clearance will be obtained at all. The development, regulatory and commercialization plans set forth herein are based upon the following key assumptions:

- The completion of each milestone within the projected timeframe and at the estimated cost;
- All applicable regulatory authorizations, approvals or clearances including without limitation the planned IDE application and the planned De Novo classification request with the FDA will be received on a timely basis;
- There will be no significant changes to the regulatory marketing authorization process in the United States;
- A sufficient number of hospital sites, surgeons and patients as part of the IDE clinical study can be secured;
- The costs of materials and components required, availability of sufficiently qualified personnel and the wages and salaries of such personnel and the costs and timing of engaging third parties in respect of our planned clinical study and the manufacturing of the Enos System will remain stable;
- That despite global supply chain challenges, we, along with our manufacturing partners, will be able to secure components and subsystems for the Enos System on a timely basis, and no unforeseen shortages or shipping delays will arise;
- We will be able to raise the financing required on a timely basis to support our development program, manufacturing, human clinical study and operations;
- The design of the Enos System and related platforms and equipment will not be required to materially change for any reasons (including without limitation due to results of safety and verification testing, market demands, intellectual property or regulatory issues); and
- The Company will be able to engage, retain and recruit, as necessary, technical personnel, contractors and third parties (such as development firms and manufacturers) with the type of specialized skill and knowledge required to develop, manufacture and test the Enos System.

The foregoing list of assumptions is not exhaustive. Although the Company has attempted to identify on a reasonable basis the key assumptions related to forward-looking statements in the development milestone table set forth in this report, there can be no assurance that the 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.

The RAS industry is highly competitive, and a number of our competitors have significantly greater financial and human resources.

The RAS 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. This market is dominated by larger, more established and better capitalized companies with substantially greater resources than we have. New products, including the Enos System, may be slow to be accepted into the market or may not be accepted at all. We are constantly exposed to the risk that our competitors may implement new technology before we do, or may offer lower prices, additional products or services or other incentives that we cannot, may not or will not offer. We can give no assurances that we will be able to compete successfully against existing or future competitors. Competition in the RAS market is intense, and we expect competition to increase with the entrance of new companies and/or the transition of established medical companies into the robotic field.

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

- the successful development of the Enos System in a form that is competitive in features, performance and price;
- the successful identification and development of enhancements to the Enos System or new products for the RAS market;
- our ability to anticipate customer and market requirements and changes in technology and industry standards in a timely manner;
- our ability to gain access to and use technologies in a cost-effective manner;
- our ability to introduce cost-effective new products in a timely manner;
- our ability to differentiate our products from our competitors' offerings;
- our ability to gain customer acceptance of our products;
- the performance of our products relative to our competitors' products;
- our ability to market and sell our products through effective sales channels;
- our ability to establish and maintain effective internal financial and accounting controls and procedures;
- our ability to obtain required regulatory marketing authorizations in a timely manner;
- our ability and the ability of our manufacturing partners to source supplies and components on a timely basis and on terms consistent with our financial projections;
- the protection of our intellectual property, including our processes, trade secrets and know-how; and
- our ability to attract and retain qualified technical, executive and sales personnel.

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

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

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

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

There is no guarantee that patent applications assigned to the Company will be granted, or, even if allowed to grant, will be granted in their current form or granted with a scope of protection sufficient to protect key aspects of our commercially valuable technology. The scope of protection, if any, that may be afforded by our patent applications

is uncertain. Further, even if patents issue from pending or future filed applications, any issued patents may be deemed by courts or patent offices as invalid or have a narrower scope of protection, and may be subject to invalidation proceedings commenced by third parties, which if commenced, are inherently unpredictable. If an invalidation proceeding commenced by a third party in respect of an issued patent owned by us is successful, the subject patent will be ordered invalid and therefore unenforceable.

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

We have licensed a portion of our intellectual property portfolio to Medtronic, which limits our ability to independently enforce those licensed rights without seeking the cooperation of Medtronic.

Pursuant to license agreements with Medtronic, 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 our 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 these agreements and subject to Medtronic's exclusive license, we would need to obtain Medtronic's permission before enforcing against the third party. There can be no guarantee that Medtronic would give permission for such enforcement on a timely basis or at all.

See the discussion under "*Significant Transactions – Development Agreement & License Agreement with Medtronic*" in the management's discussion and analysis of the Company for the year ended December 31, 2021 and the year ended December 31, 2020 incorporated by reference into this Annual Report as Exhibit 15.1 and Exhibit 15.2, respectively.

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

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

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

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

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

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

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

- the successful development and commercialization of the Enos System in a timely manner and in accordance with budgeted expenditures;
- actions relating to regulatory matters;
- results of clinical and preclinical testing;
- timing and ability to develop manufacturing and sales and marketing capabilities;
- the general market demand for RAS systems;
- the extent to which our products gain market acceptance;
- the progress of surgical training in the use of products;
- ability to develop, introduce and market new versions of our products or enhancements thereto on a timely basis;
- product quality problems or alleged product quality problems;
- ability to protect proprietary rights and defend against third party challenges; and

- ability to license additional intellectual property rights as required.

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

The market for our proposed technology is relatively new and is likely to undergo substantial development and changes. The market for our technology may develop more slowly than we anticipate, in which case we may be unable to recover the losses we have incurred in the development of our technology and may achieve profitability at a slower pace or not at all. We cannot guarantee that this market will develop as anticipated or that we will secure market share necessary to achieve profitability and growth.

There is no assurance that surgeons or hospitals will choose the Enos System (if and when it is commercialized) over the systems offered by our competitors. There is also no assurance that RAS systems will continue to be used (or their use increased) by potential customers and that RAS 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, or newer technologies or methods that may be deemed by the surgical community as superior to RAS technology.

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

Existing RAS companies could advance their products and new competitors could enter the market with superior technology, including potential competition from large and well-established medical device companies or new entrants with advanced technologies. New and competitive products introduced into the marketplace that are based on or incorporate more advanced technologies, or provide performance similar to our products at a lower cost, may impact our operating and financial results.

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

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

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

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

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

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

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

Regulatory authorities can delay, limit, or deny marketing authorization 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;
- that general controls, or general and special controls, provide a reasonable assurance of the safety and effectiveness of a medical device candidate, in the case of a De Novo 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 our processes or facilities or those of any of our third-party manufacturers; or
- regulatory authorities may change marketing authorization policies or adopt new regulations.

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

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

If our products have received FDA marketing authorization, modifications to our products may require new regulatory marketing authorizations and may require us to cease marketing or recall the modified products until further authorization is obtained.

If we receive marketing authorization from the FDA, we may subsequently decide to make certain modifications to our products for a number of reasons including those based on customer feedback.

Any modification to a device that has received FDA marketing authorization, including via the De Novo classification process, that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, design, or manufacture, would require new marketing 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 our decisions regarding whether new marketing authorizations are necessary. If the FDA disagrees with our determinations for any future changes, or prior changes to previously marketed products, as the case may be, we may be required to cease marketing or to recall the modified products until we obtain marketing authorization, and we may be subject to significant regulatory fines or penalties.

Furthermore, the FDA's ongoing review of its marketing authorization programs including the De Novo classification process, 510(k) clearance process and the PMA approval process, may make it more difficult for us to make modifications to our products, either by imposing more strict requirements on when a new marketing authorization for a modification to a previously cleared product must be submitted, or applying more onerous review criteria to such submissions.

Even after obtaining marketing authorization for our products, we are still subject to extensive post-market regulations and our failure to meet strict regulatory requirements could require us to pay fines, incur other costs or even close our facilities.

Even after we have obtained the proper regulatory marketing authorization for 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 marketing 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 our products and adversely affect our reputation and the perceived safety and efficacy of our products.

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

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

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

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

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

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

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

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

We are subject to numerous tax and accounting requirements, and changes in existing accounting or taxation rules or practices, or varying interpretations of current rules or practices, could have a significant adverse effect on our financial results or the manner in which we conduct our business. We have issued our financial statements for the year ended December 31, 2021 in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

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

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

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

A lengthy and uncertain sales cycle for our Enos System could have a negative impact on our operating results.

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

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

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

The failure to meet our established product development, regulatory and commercialization milestones in a timely manner or at all may affect our operational and financial results.

We have established a product development and regulatory plan that we use to assess our progress toward developing a commercially viable product. To assess progress, we test and evaluate our technology and if such evaluations indicate technical defects or failure to meet cost or performance goals, our pathway to marketing authorization and ultimately, commercialization, could be delayed, and potential purchasers of the Enos System may decline to purchase or choose to purchase alternative technologies. Whether or not we meet our milestones, there is no assurance that our technology will be successful in the market. As the development of the Enos System progresses, our existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of our development program, the availability of financing and the ability of our engineering teams and development firms engaged by us to satisfactorily complete work assigned to them.

We are still in the process of developing our Enos System and there can be no certainty that a commercially viable product will emerge from this process.

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

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

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

We do not control all aspects of the development of the Enos System as we rely on third-party suppliers and development firms.

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

We rely 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 our direct control.

We are 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. Our 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 our study protocols or otherwise fail to generate reliable preclinical or clinical data, development, approval and commercialization of our products may be extended, delayed or terminated or may need to be repeated, costs may significantly increase and we may not be able to obtain regulatory approval within the time frames forecasted, if at all.

The success of the IDE clinical study depends on the engagement of a sufficient number of hospital sites, surgeons, and the recruitment of a sufficient number of patients.

Upon obtaining the IDE from the FDA, the performance of human surgeries as part of the proposed IDE clinical study with the Enos System will require an engagement of a sufficient number of hospital sites, surgeons, and the recruitment of a sufficient number of patients to complete the study. We have not entered into agreements with any hospital sites or with a Contract Research Organization. In addition, pandemics, including the reoccurrence of the COVID-19 pandemic or its variants, may slow or otherwise prevent us from installing equipment and training users on the equipment, may slow or prevent recruiting patients as part of the study, or may cause clinical study sites to limit, delay or otherwise cancel clinical studies of the Enos System. Subjects who participate in the study could be lost to treatment or follow ups, including as a result of the COVID-19 pandemic or other medical conditions, resulting in the need to replace those subjects and delay the study completion. Clinical study sites may also face staffing challenges that may also limit, delay or cancel clinical studies of the Enos System. The inability to visit clinical study sites to monitor, audit, or source data may limit or slow the closure of the clinical study. Furthermore, any adverse events during the clinical study may impact our ability to continue recruitment and complete the study. Any such limitations, delays or cancellations may cause us to delay or fail to complete the IDE clinical studies, and such delay or failure could have a material adverse impact on our business, financial condition, results of operations, or cash flows.

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

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 our 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 our products, which would adversely affect our financial condition and results of operations.

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

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

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

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

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

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

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

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

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

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

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

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

On December 20, 2021, we received notification by Nasdaq that we were not in compliance with Nasdaq Listing Rule 5550(a)(2) since the closing bid price for our Common Shares listed on Nasdaq was below $1.00 for 30 consecutive business days. Nasdaq Rules further provide us with a period of 180 calendar days from the date of notification to regain compliance with the above noted Rule.

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

We may not be able to maintain our status as a "foreign private issuer" or otherwise be eligible to use MJDS.

In order to maintain our status as a "foreign private issuer" as defined in Rule 3b-4 under the Exchange Act, a majority of our Common Shares must be either directly or indirectly owned by non-residents of the U.S. unless we also satisfy one of the additional requirements necessary to preserve this status. We may in the future lose our foreign private issuer status if a majority of our Common Shares are held in the United States and if we fail to meet the additional requirements necessary to avoid loss of our foreign private issuer status. The regulatory and compliance costs under U.S. federal securities laws as a U.S. domestic issuer may be significantly more than the costs incurred as a Canadian foreign private issuer eligible to use MJDS. If we are not a foreign private issuer, we would not be eligible to use the MJDS or other foreign issuer forms and would be required to file periodic and current reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer. In addition, we may lose the ability to rely upon exemptions from NASDAQ corporate governance requirements that are available to foreign private issuers.

While we may qualify as a foreign private issuer, we may still not otherwise qualify to use the MJDS if the aggregate market value of our outstanding Common Shares held by non-affiliates is not at least US$75,000,000.

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

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

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

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

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

The Company may face cyber-security risks and threats.

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

Our financial condition and results of operations for fiscal 2022 may be adversely affected by global disruptions, including the ongoing COVID-19 pandemic.

If a pandemic, epidemic or outbreak of an infectious disease occurs in Canada, the United States or globally, our business may be adversely affected. Since early 2020, the COVID-19 pandemic has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel restrictions, self-imposed quarantine periods, workplace limitations such as social distancing and masking, testing requirements, along with the uncertainty around the disease itself, have caused material disruption to business globally. 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 our financial results and condition in future periods. Due to the uncertainty caused by the COVID-19 outbreak, we have experienced a longer recruitment cycle for recruiting technical personnel, and travel restrictions have slowed our ability to select and qualify suppliers for certain aspects of our products. Furthermore, contractors and suppliers that we have engaged 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. Despite the recent lifting of certain government imposed restrictions related to COVID-19 in the United States, Canada, UK and Europe in response to decreases in cases, there can be no assurance that restrictions will not again be implemented in response to further pandemic related developments if any.

The ultimate impact of the COVID-19 pandemic on the future sales of the Enos System (once all necessary regulatory marketing 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, many 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 RAS procedures may result in a substantial negative impact on the market prospects for RAS systems, instruments, accessories and related services.

Accordingly, COVID-19 may have a material adverse effect on numerous aspects of our business, including:

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

Challenging global political and economic conditions and the impact of supply chain constraints could adversely affect our development program, commercialization efforts, operations and financial results.

The general economic and business conditions around the world affect the Company's business prospects and the demand for its products in Canada, the United States, Europe and elsewhere in the world. Such conditions include short and long-term interest rates, inflation, fluctuations in international trade agreements or laws, fluctuations in securities prices and capital markets, exchange rates, debt crisis periodically affecting certain countries, volatility in the financial markets throughout the world, the tightening of liquidity in selected financial markets, and the strength of the regional and international economies.

All of these factors affect the business and economic conditions in a given geographic region and, consequently, may affect the availability of materials, components and services from third party contractors and suppliers required by the Company to carry out its development plan and the pricing, terms and conditions upon which they may be available to the Company; these factors may also impact the demand for the products being developed by the Company. Currency rate movements and trade relationships in the United States and other countries where the Company seeks to purchase materials, components and services or to market or distribute its products may significantly impact the Company's business prospects and future costs and earnings. The monetary policies of the Bank of Canada, the US Federal Reserve and the European monetary authorities as well as other interventionist measures in capital markets by public organizations are impacting economic conditions and therefore have consequences on the Company's business prospects. Ultimately, these factors may cause delays in the projected timelines and escalations of the projected expenses of the Company's development milestones.

The Company has no control over changes in inflation and interest rates, foreign currency exchange rates and controls or other economic factors affecting its business or the possibility of political unrest, legal and regulatory changes in jurisdictions in which the Company operates or intends to market its products.

Credit and liquidity problems may make it difficult for some businesses to access credit markets and obtain financing and may cause some businesses slowdowns and liquidity needs. In the future if and when the Company's products are made available in the marketplace, the Company's exposure to bad debt losses could increase if customers are unable to pay for products previously ordered and delivered. Global economic conditions may have adverse effects on the Company's business. The Company's global market may include governmental entities or other entities that rely on government healthcare systems or government funding. If government funding for healthcare becomes limited, the Company's future customers may be unable to pay their obligations on a timely basis or to make payment in full and it may become necessary to increase reserves.

Additionally, the Company's development plans may be impacted by global supply chain challenges including extended delivery times, increases in pricing and constraints on the availability of materials and components required by the Company and the development and manufacturing firms it has engaged including severe constraints in the semiconductor market. Prices of numerous materials and components have increased and they may continue to increase due increased demand and supply constraints. If supply constraints and pricing increases continue, the Company could fail to complete its milestones within the timelines forecast or at all and such failure could have a material adverse impact on the Company's business, financial condition, results of operations, or cash flows.

The recent events arising from the Russian invasion of Ukraine and the responses of governments around the world are likely to have a significant effect on the global economy.

The Russian invasion of Ukraine and the responses by governments around the world raises the prospects of increased cybersecurity attacks, strains on global supply chains, increases in energy prices, chip shortages since Russia and Ukraine are critical suppliers of neon gas and palladium used in chip production and challenges in natural resource extraction, refinement and transportation, among other possible impacts. The conflict may have a direct or indirect material adverse impact on our business, financial condition, results of operations, or cash flows.

The IDE clinical study and the potential impact of COVID-19.

Upon obtaining the IDE from the FDA, the performance of human surgeries as part of the proposed IDE clinical study with the Enos System will require an engagement of a sufficient number of hospital sites, surgeons, and the recruitment of a sufficient number of patients to complete the study. The Company has not entered into agreements with any hospital sites or with any contract research organizations. In addition, pandemics, including the reoccurrence of the COVID-19 pandemic or its variants, may slow or otherwise prevent the Company from installing equipment and training users on the equipment, may slow or prevent recruiting patients as part of the study, or may cause clinical study sites to limit, delay or otherwise cancel clinical studies of the Enos System. Subjects who participate in the study could be lost to treatment or follow ups, including as a result of the COVID-19 pandemic or other medical conditions, resulting in the need to replace those subjects and delay the study completion. Clinical study sites may also face staffing challenges that may also limit, delay or cancel clinical studies of the Enos System. The inability to visit clinical study sites to monitor, audit, or source data may limit or slow the closure of the clinical study. Furthermore, any adverse events during the clinical study may impact the Company's ability to continue recruitment and complete the study. Any such limitations, delays or cancellations may cause the Company to delay or fail to complete its IDE clinical studies, and such delay or failure could have a material adverse impact on the Company's business, financial condition, results of operations, or cash flows.

Item 4. Information on the Company

A. History and Development of the Company

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

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

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

The head office and registered office of Titan is located at 76 Berkeley Street, Toronto, Ontario M5A 2W7. Titan's main telephone number is (416) 548-7522. Our website is www.titanmedicalinc.com. Information contained on the Company's website does not form part of this Annual Report.

The common shares (the "Common Shares") of the Company are listed for trading in Canada on the TSX under the symbol "TMD". The Common Shares are also traded on the Nasdaq in the United States under the symbol "TMDI".

Capital Expenditures

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

(in thousands)	Machinery	IT Equipment	Furniture and Fixtures	Patent Rights
2021	134	173	18	385
2020	152	49	54	319
2019	-	-	-	458

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

Available Information

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

B. Business Overview

Development

The Company's business is focused on the development and commercialization of innovative surgical technologies for single access RAS requiring only a single patient access point. The Company is presently focused on the development of the Enos System, which comprises a surgeon-controlled patient cart with a 3D high-definition vision system and multi-articulating instruments for performing surgical 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 surgical 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 various stakeholders including surgeons and operating room staff experienced in RAS, specialized medical technology firms and from the Company's surgeon advisory board. This approach has positioned the Company to design a robotic surgical system intended to include the traditional advantages of RAS, 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 surgical site for optimal surgical positioning of the patient cart. 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 surgeon workstation. The reusable multi-articulating instruments provide for highly dexterous movement in use and are designed to facilitate an assortment of permanent and detachable single patient use end effectors. The use of reusable robotic instruments for a specific number of uses 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 for surgical positioning 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 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 has worked to deepen its intellectual capital through the recruitment of an in-house technical team and continuously evaluates its technologies under development for intellectual property protection through a combination of trade secrets and patent application filings. The Company continues to focus on the filing and prosecution of patents that management believes validate the novelty of its unique technology.

Regulatory Overview

RAS systems are highly regulated, complex medical devices. The Company has used a combination of internal and external resources 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 Food and Drug Administration of the United States Department of Health and Human Services (the "FDA") for marketing authorization in the US, followed by 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 US, the regulatory clearance process includes a Q-Submission 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 Investigational Device Exemption ("IDE") applications, 510(k) applications and De Novo classification requests. Certain Q-Submissions, termed Pre-Submissions, typically include a request for written feedback, and if desired, 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 marketing authorization, nor does it preclude any identified future changes in regulatory pathways.

The Company has filed a number of Q-Submissions and based on ongoing communications with the FDA, expects that the Enos System will be classified as a Class II device and accordingly plans to obtain marketing authorization through a classification request for novel devices in accordance with section 513(f)(2) of the U.S. Federal Food, Drug and Cosmetic Act (the "FD&C Act"), commonly known as a De Novo classification submission. In 2020, the Company filed a Request for Information in response to communications the Company had with the FDA, in which the FDA raised the question of whether RAS devices would generally continue to be eligible for classification as Class II devices and the 510(k) submission pathway, or whether a De Novo submission would be more appropriate for such devices. While the Company had previously confirmed with the FDA that the Enos System would be suitable for marketing authorization through a 510(k) submission, in December 2020, it received 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 indicated that the FDA believes, based on information provided to it, that the Enos System is appropriate for classification through the De Novo submission pathway. The FDA stated that the technological differences between the Enos System and RAS devices previously cleared for marketing by the FDA raise new questions of safety and effectiveness, and that a 510(k) application submitted by the Company claiming substantial equivalence to any previously marketed RAS device would most likely be determined to be not substantially equivalent. In view of the Written Response and additional guidance provided by the FDA to the Company, the Company plans to proceed with a De Novo classification request for the Enos System following successful completion of the IDE clinical study as described below.

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 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 review days) is made to either grant or decline the request. Review days are calculated as the number of calendar days between the date the De Novo request was received by the FDA and the date of the FDA's decision, excluding the days a request was on hold for an additional information 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 applications for marketing authorization, 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 marketing authorization is not quantifiable at this time. The FDA's recent review and response to the Company's proposed IDE clinical study general design and planning occurred during a video conference call held in September, 2021. While the general design of the Company's planned IDE clinical study was confirmed, more detailed communication will be required to reach agreement on the content of a complete IDE application, including the final clinical design, detailed risk analyses, extensive safety testing, human factors testing, and preclinical data. Accordingly, the Company plans on further communications and submissions with the FDA to clarify the requirements for the IDE application and to understand any special controls which the FDA may apply to the IDE clinical study. Additional Pre-Submissions will allow the FDA to review the state of the current design of the Enos System, and the inclusion of test data and more detailed proposals for 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. An IDE allows the investigational device to be used in a clinical study in order to collect safety and effectiveness data. Further, the recruitment of surgeons from multiple hospital sites will be necessary to perform the surgeries as well as the recruitment of patients willing to participate in the IDE study. 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 De Novo classification for marketing authorization.

Previous results achieved by surgeons in operating prototypes in numerous 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 Practices ("GLP") and subsequently, on July 18, 2019, announced the successful completion of those studies. Following the completion of the GLP procedures, the Company proceeded to perform human factors evaluation ("HFE") studies, which included verification of production system operation with clinical experts under simulated robotic manipulation exercises. However, during the GLP and HFE studies, the Company identified opportunities to improve the performance of instruments, camera systems and sterile interfaces before proceeding further, which may require repeating those studies with enhanced designs.

During the third quarter of 2021, the Company completed additional pre-clinical GLP studies. The pre-clinical studies involved utilizing the Enos System to perform hysterectomies in porcine subjects. The subjects successfully completed the survival period in the study. With the completion of these studies, surgeons have now performed over 70 pre-clinical procedures representing multiple subspecialties with Titan's Enos System.

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 2021, a surveillance audit of the Company's quality system was successfully completed by the Company's Notified Body.

Development Plan

The Company is focused on the development and commercialization of the Enos System. The following chart and narrative are provided to outline the significant development and regulatory milestones required to achieve the overall goal of commercializing the Enos System.

While the milestone chart is based on information currently available to the Company, there is no assurance that the development, regulatory and commercialization milestones set forth above will be completed within the timeframes forecasted, if at all, and are based upon the key assumptions set forth in the section titled "Risk Factors".

The Company notes the following with respect to each of the milestones listed in the chart above:

- **Completion of Product Development and Transfer to Manufacturing** – The Company is presently working to complete product development to accommodate the transfer of the Enos System to manufacturing, including the areas of supply chain management, product assembly and testing, and implementation of software updates related to safety controls. Completion of product development is anticipated to be completed by mid- 2022. The Company relies on its employees as well as engagements with consultants, development firms and manufacturers to complete product development. Any interruptions in the engagement of the forgoing or from other interruptions related thereto, such as supply chain interruptions, will impact the Company's ability to complete product development.

- **Manufactured Units Safety and Verification Testing** – Upon completion of product development and the delivery of manufactured units of the Enos patient cart and surgeon workstation, the Company anticipates completing system verification and validation and safety testing in support of the planned IDE submission.

- **IDE Application, FDA Review, IDE Study** – Upon successful completion of safety and verification testing of the Enos patient cart and surgeon workstation as well as the biocompatibility testing of instruments, cameras and accessories, the Company expects it will have the requisite information necessary to submit a complete IDE application to the FDA in the first quarter of 2023. Upon receiving approval of the IDE application by the FDA, the Company plans to commence human clinical studies to validate the safety and effectiveness of the Enos System.

  With the feedback from the FDA during the second half of 2021, it is anticipated that the IDE clinical study will include total laparoscopic hysterectomies performed on 30 to 40 patients at 3 to 4 clinical sites. The Company has already begun IRB site preparation for the selected clinical sites. Based on the expected timing of filing the IDE application and the FDA review and approval process, the Company anticipates that the surgical procedures associated with the IDE, and the associated follow-up, can likely be completed in early 2024.

- **De Novo Application and FDA Review** – Assuming the successful completion of the IDE study, including follow-up data, the Company expects to submit its De Novo application to the FDA and receive the FDA's response in 2024.

- **Commercialization** – The Company anticipates a commercial launch of the Enos System in early 2025 upon receipt of marketing authorization from the FDA. Commercial manufacturing of the Enos System is expected to be an extremely detailed and complex process with the potential for delays, interruptions (including supply chain interruptions) or cost overruns.

The total costs to complete the development of our Enos System cannot yet be determined with a high degree of certainty, and the costs may be substantially higher than any estimated by the Company. Please see "*Special Note Regarding Forward-Looking Statements*" and "*Risk Factors*".

Market Opportunity

Robotic Surgery

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

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

Market Acceptance

To date, robotic surgical technologies have been employed in urology, gynecology, colon and rectal surgery, cardiothoracic surgery, general surgery, head and neck surgery, orthopedic surgery, neurosurgery, catheter-based interventional cardiology and radiology, and endoscopic, diagnostic and therapeutic bronchoscopy procedures. The success of robotic technologies in these applications has led to the growing adoption and commercialization of these technologies in the medical industry and is likely to grow with advancements in technology.

Competitive Conditions

The industry leader within the robotic surgical market is Intuitive Surgical, Inc., manufacturer of several models of the da Vinci® Surgical System. Having entered the market in 1999, Intuitive Surgical product line now includes multiple generations of da Vinci multi-port robotic systems, as well as a single-port da Vinci SP® model cleared by the FDA for urologic and trans-oral applications, with customer shipments that began in the third quarter of 2018. In multi-port robotic surgery, several other players have emerged, with South Korea's Meere Company receiving approval from the South Korea Ministry of Food and Drug Safety for its Revo-i surgical robot in August 2017; Asensus Surgical Inc. (formerly TransEnterix Inc.) receiving FDA clearance for its Senhance™ Surgical Robotic System in October of 2017; CMR Surgical receiving CE Mark approval for its Versius® Surgical Robotic System in March 2019; and Medtronic plc receiving CE Mark approval and a Health Canada licence for its Hugo™ robotic-assisted surgery system in October 2021 and December 2021, respectively. In single-port surgery, Memic Innovative Surgery Ltd. received a De Novo granting order from the FDA for its Hominis® robot-assisted surgical platform and Vicarious Surgical is developing a single-port surgical system. In addition, Medrobotics Corporation has received FDA clearance for abdominal indications for its Flex® Robotic System with manual endoscopic instruments, which had previously been cleared for natural orifice (ENT) surgery. In 2019, Ethicon, Inc. (a division of Johnson & Johnson) acquired Auris Health, Inc., the maker of the Monarch^{TM} surgical platform.

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

Regulation

United States Regulatory Process

In the United States, our surgical system will be subject to regulation by the FDA. Management's expectation after review of FDA guidelines, is that the Enos surgical system will be classified as a Class II medical device. Class II devices are those which are subject to the general controls and require premarket demonstration of adherence to certain performance standards or other special controls, as specified by the FDA, and clearance by the FDA. In view of recent conversations with the FDA using the Pre-submission protocol, the Company plans to proceed by way of a De Novo Classification request – see "*Regulatory Overview*" under "*Business Overview*".

European Union

Medical devices in the European Union ("EU") are regulated under the EU Medical Device Regulation (MDR) and must bear the CE mark prior to being placed on the market. The Company continues to explore EU regulatory approval.

Specialized Skill and Knowledge

The development and engineering of our Enos System requires specialized skill and knowledge. Given the limited capital available, there is no assurance that we will be able to procure the required skill and knowledge to carry out our research and development and the resources that are available to us, through our current officers, employees and third-party medical technology development firms, may be insufficient. We will continue to assess our requirements and recruit and engage required qualified personnel and development firms as needed, subject to budget limitations.

Intellectual Property and Licensing

We continuously evaluate our technologies under development for intellectual property protection. In accordance with industry practice, our proprietary rights are currently protected through a combination of copyright, trademark, patents, trade secret laws and contractual provisions.

Patent applications are filed in various jurisdictions internationally, which are selectively chosen having regard to the likely value and enforceability of intellectual property rights in those jurisdictions, and to strategically reflect our anticipated principal markets. Patents provide us with a potential right to exclude others from incorporating our technical innovations into their own products and processes. Where appropriate, we may license in third party technologies to provide us with the flexibility to adopt preferred technologies, and furthermore, where also appropriate, we may license out to third parties certain technologies and the associated intellectual property. Intellectual property protection, including patent filing and prosecution, is costly and there is no assurance that we will have sufficient funding required in order to file, prosecute or defend patent applications for any or all of our inventions.

As of February 28, 2022, we owned over 200 patents and patent applications. We anticipate expanding our intellectual property portfolio by filing additional patent applications as we progress in the development of robotic surgical technologies, and if appropriate, acquiring and/or by licensing suitable technologies.

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

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

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

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

Operations

We maintain our head office at subleased premises in Toronto, Ontario. As described below, the Company's subsidiary is responsible for research and development activities as well as associated regulatory activities. Certain aspects or components of the Enos System are being developed to our specifications by various third-parties through purchase orders.

As of December 31, 2021, the Company had a total of 49 full-time employees, 7 are located in Canada and the other 42 are located in the U.S.

C. Organizational Structure

On May 29, 2020, the Company established Titan Medical USA Inc. ("Titan USA"), a Delaware corporation and a wholly-owned subsidiary of the Company, located in Chapel Hill, North Carolina, whose principal activity consists of research and development along with regulatory activities.

D. Property, Plants and Equipment

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

Item 4A. Unresolved Staff Comments

Not applicable.

Item 5. Operating and Financial Review and Prospects

Overview

A. Operating Results

See the management's discussion and analysis of the Company for the year ended December 31, 2021 and the year ended December 31, 2020 incorporated by reference into this Annual Report as Exhibit 15.1 and Exhibit 15.2, respectively.

B. Liquidity and Capital Resources

See the management's discussion and analysis of the Company for the year ended December 31, 2021 and the year ended December 31, 2020 incorporated by reference into this Annual Report as Exhibit 15.1 and Exhibit 15.2, respectively.

C. Research and Development, Patents and Licenses, etc.
See the management's discussion and analysis of the Company for the year ended December 31, 2021 and the year ended December 31, 2020 incorporated by reference into this Annual Report as Exhibit 15.1 and Exhibit 15.2, respectively.

D. Trend Information

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

See the management's discussion and analysis of the Company for the year ended December 31, 2021 and the year ended December 31, 2020 incorporated by reference into this Annual Report as Exhibit 15.1 and Exhibit 15.2, respectively.

E. Critical Accounting Estimates

Not applicable.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

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

Name and Municipality of Residence	Offices Held	Director Since	Principal Occupation(s) During the Five- Year Period Ending December 31, 2021

Paul Cataford Calgary, Alberta, Canada	Interim President & CEO, Chairman and Director	2020	Prior to assuming the role of Interim President & CEO, Mr. Cataford, was the CEO and co-founder of Zephyr Sleep Technologies Inc., a private medical device company specializing in the treatment and diagnoses of sleep-disordered breathing. In his over 10 years at Zephyr, Mr. Cataford was able to grow the team to over 65 people, clear class II medical devices through both 510(k) and De Novo FDA approval paths and build a 13485:2016 certified manufacturing facility. Zephyr successfully closed on two joint ventures with established dental technology companies raising over $20 million from a combination of strategic and private investors. Prior to Zephyr, Mr. Cataford was the President and CEO of University Technologies International, University of Calgary's technology transfer and early-stage company incubator from 2004-2009. Mr. Cataford has also served as an independent corporate director on a number of public boards of directors at companies listed on the TSX, TSX-V and Nasdaq, including: Sierra Wireless Inc., Trakopolis IoT Corp., SemiBioSys Genetics Inc. and AGJunction Inc. Mr. Cataford has 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 Directors College, Rotman School of Business at the University of Toronto.

Name and Municipality Offices Held and Country of Residence	Offices Held	Director Since	Principal Occupation(s) During the Five- Year Period Ending December 31, 2021
Anthony J. Giovinazzo(1)(3) Toronto, Ontario, Canada	Lead Independent Director	2020	Mr. Giovinazzo serves as a director and Executive Chairman on the board of Sublimity Therapeutics, a private late clinical stage biopharmaceutical company addressing gastrointestinal and autoimmune diseases. Mr. Giovinazzo is a co-inventor of the FDA approved drug KYNMOBI™ (apomorphine HCI) sublingual film, developed by Cynapsus Therapeutics Inc. (a TSX and Nasdaq listed company), where from November 2009 to March 2017 he served as CEO and director when the company was acquired in an all-cash transaction with Sunovion Pharmaceuticals Inc. for CAD $841 million. In 2017, Mr. Giovinazzo was chosen as the inaugural recipient of the Bloom Burton Award as judged by a panel of leading industry experts. 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. Mr. Giovinazzo received a Bachelor of Arts degree in Economics from McMaster University and an MBA from IMD Geneva, Switzerland, along with a completing the Harvard Business School Executive Program in Leadership and Strategy in Pharmaceuticals and Biotech, and obtaining a Graduate Certificate Studies in Canadian Law (Taxation) from Osgoode Hall Law School at York University. He was also a business advisory board member of the National Research Council of Canada's Genomics funding program, for two terms from 2007 to 2012.
Cary G. Vance(2)(3) Lehi, Utah, USA	Director	2020	Mr. Vance was most recently President and CEO of Xcath Incorporated and is currently Principal at Vance Consulting Group, LLC. He also serves on the Advanced Medical Technology Association (AdvaMed) Accel Board of Directors, the division within AdvaMed dedicated to the needs of smaller medical technology manufacturers. Mr. Vance previously served as President and CEO of OptiScan Biomedical from May 2018 to June 2020. From 2017 to 2018, he served as President and CEO of Myoscience Incorporated and from 2014 to 2016, he served as President and CEO of Hansen Medical, where he led a turnaround effort that resulted in the successful sale of the company. Prior to Hansen, Mr. Vance served in various global executive leadership roles including as President of the Anesthesia & Respiratory global business and as Executive Vice President North America of Teleflex Incorporated; Vice President & General Manager of Interventional Oncology – Americas and Vice President & General Manager for energy-based devices at Covidien LP; and in a series of roles with progressive responsibility to an executive level leading a $1B business at GE Healthcare. Mr. Vance is Lean/Six Sigma Black Belt certified and holds a Bachelor of Arts in Economics and an MBA from Marquette University.

Name and Municipality Offices Held and Country of Residence	Offices Held	Director Since	Principal Occupation(s) During the Five- Year Period Ending December 31, 2021
Heather L. Knight(1)(2)(3) Barrington, Illinois, USA	Director	2021	Ms. Knight is a sales and marketing executive with nearly 25 years of proven healthcare commercial experience. She currently serves as General Manager of U.S. Hospital Products at Baxter Healthcare where she is responsible for U.S. commercialization including sales, national accounts, marketing, commercial operations and business integration. Ms. Knight previously served as Global President of Sofradim/France and Vice President and General Manager for Surgical Innovations, MITG at Medtronic where she led all portfolio, strategy and growth initiatives for the global business, including commercialization in all regions across the globe. Ms. Knight is very active in volunteerism, diversity and inclusion and currently serves as the executive sponsor of the Baxter Black Alliance, a business resource group that serves as a business partner to help save and sustain lives in the Black patient community, and to support the recruitment, engagement and advancement of Baxter's Black talent. She also serves as a member of Baxter's Global Inclusion Council and previously served as co-chair of the Medtronic Women's Network Executive Committee. She has been named as a 2021 Healthcare Businesswomen's Association (HBA) Luminary. Ms. Knight holds a Bachelor of Science in Biological Sciences from the State University of New York and completed the Executive Sales Strategy and Management program at the University of Chicago, Booth School of Management. She is presently enrolled in the Harvard Business School Advanced Management Executive Program.
Cathy Steiner(1)(2) Toronto, Ontario, Canada	Director	2021	Ms. Steiner is a Principal of Origin Merchant Partners having over 20 years of experience as an investment banker, capital markets advisor, and CFO, working closely with healthcare and growth companies on successful financings and strategic transactions. Ms. Steiner was previously CFO for technology companies through capital raising and M&A transactions. For over a decade prior to that, Ms. Steiner was Managing Director for Nucleus GC, a boutique healthcare advisory firm working with numerous clients on financings and strategic transactions, as well as product development, commercialization, positioning and launch. For nearly ten years prior to that, Ms. Steiner led Healthcare Investment Banking for CIBC World Markets and Yorkton Securities. Ms. Steiner has significant experience in dealings with public and private healthcare companies at all stages of development, and across all subsectors including pharmaceutical, medical device, healthcare information technology, drug development and healthcare services. Ms. Steiner holds an MBA from the Schulich School of Business at York University and a MSc in Immunology from McMaster University. She has a CPA, CA designation, earned while working at Deloitte, and has contributed to her field as a volunteer advisor for the healthcare practice at MaRS Discovery District in Toronto and as an occasional lecturer for the Chartered Professional Accountants of Ontario.

Notes:

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

Leadership Team

The Company's leadership team is as follows:

Paul Cataford
Interim President and Chief Executive Officer, Director and Chairman

See table above.

Stephen Lemieux
Chief Financial Officer

Mr. Lemieux has more than 19 years of experience in public companies including over 10 years as a Chief Financial Officer and 14 years in the health care industry. Mr. Lemieux has been involved with or led numerous debt and equity financings, licensing and M&A transactions valued at over $400 million. Mr. Lemieux served as CFO and Secretary of NeuPath Health (TSXV: NPTH) from 2019 to 2021.

Prior to NeuPath, Mr. Lemieux served as the CFO and Secretary at Cipher Pharmaceuticals (TSX:CPH) from 2016 to 2019 and acted as Interim-CEO from November 2016 to April 2017. Prior to Cipher Pharmaceuticals, Mr. Lemieux was CFO at Nuvo Pharmaceuticals (TSX:NRI) and Crescita Therapeutics (TSX:CTX). Crescita was created on March 1, 2016 by way of a plan of arrangement that reorganized Nuvo Research Inc. into Nuvo and Crescita. Mr. Lemieux is a Chartered Professional Accountant and holds a Master of Management & Professional Accounting degree from the University of Toronto.

Jasminder Brar
Vice President of Legal and IP, General Counsel and 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 – and continues to influence and enhance – the company's overall business strategy.

Before joining Titan, Mr. Brar practiced 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. Mr. Brar is deeply passionate about innovation that enhances people's quality of life and the role of intellectual property in driving, supporting and testing such innovation. He has a Law degree (LL.B.) and a Bachelor of Science degree in Computer Engineering, both from the University of Manitoba.

Chien Huang
Vice President of Finance

Mr. Huang is a financial executive with over 20 years of experience developing and implementing financial models and systems, and accounting practices to support the achievement of strategic corporate objectives.

Mr. Huang has strong expertise in evaluating investment opportunities and long-term value creation as well as extensive knowledge of IFRS and U.S. GAAP reporting requirements. Most recently, he served as Senior Vice President, Corporate Finance at Quarterhill Inc., where he led the finance systems migration and reorganized key business processes, streamlining external reporting processes. Prior to Quarterhill, Mr. Huang served as Vice President, Finance at Aralez Pharmaceuticals, responsible for implementing systems upgrades, negotiating potential divestitures and advising on private equity financing. Prior to this, Mr. Huang was Senior Director, Finance at Astellas Pharma. Mr. Huang holds a Bachelor of Science in Physiology from the University of Toronto, a Graduate Diploma in Public Accountancy from McGill University, and has Chartered Accountant Designation.

Perry Genova, PhD
Senior Vice President of R&D

Dr. Genova is an accomplished, innovative, and seasoned executive who, over a career spanning 30 years, has been recognized for building and leading successful teams in both small and multi-national companies. He has led four medical device startup companies and has broad expertise across pharmaceutical, medical device, and consumer product industries.

He received PhD and Master of Science degrees in Biomedical Engineering from the University of North Carolina (UNC) at Chapel Hill and a Bachelor of Science degree in Electrical Engineering from UNC Charlotte. Dr. Genova is a co-inventor on 55 issued and pending U.S. patents and co-author of over 30 scientific papers and presentations.

Tammy Carrea
Vice President of Quality and Regulatory Affairs

Ms. Carrea has more than 25 years of experience in managing quality assurance and regulatory affairs activities in the medical device industry, including robotic assisted surgery. Ms. Carrea has been responsible for global submissions and registrations for Class 1, 2, and 3 medical devices including De Novo applications.

Ms. Carrea served as Vice President, Regulatory and Clinical Affairs and Security Officer of Translational Imaging Innovations, Inc, from 2019 to 2021. Prior to this, she served as Vice President, Quality and Regulatory at Baebies, Inc, from 2016 to 2019. In 2015, she served as Director, Quality and Regulatory Affairs for Bioptigen. From 2009-2014, Ms. Carrea was Vice President Quality Assurance and Regulatory Affairs at TransEnterix Inc, (now Asensus Surgical Inc, NYSE American: ASXC). Ms. Carrea holds a Bachelor of Science Degree in Materials Science and Engineering from North Carolina State University, and a Master of Science Degree in Quality and Regulatory Affairs from Temple University, with a concentration in medical devices and clinical research.

Chris Seibert
Vice President of Upstream Marketing

Mr. Seibert has 16+ years of experience in the medical device industry, spanning clinical sales, sales leadership, strategic planning and product development at companies ranging from those with a very mature product lifecycle to early stage, pre-submission products.

Mr. Seibert has spent 15 years focusing on robotic medical devices, including stints of increasing levels of responsibility at both Intuitive Surgical, Inc., and Stereotaxis, Inc. Mr. Seibert has an in-depth, national network of innovative physicians and healthcare executives. He has worked for four start-up companies and has extensive relationships across the IDN/GPO landscape. Mr. Seibert has a Bachelor of Arts from the University of Alabama, a Master of Arts in Human Relations from the University of Oklahoma and an MBA from the University of South Alabama.

Kristen Galfetti
Vice President of Corporate Communications and Investor Relations

Ms. Galfetti has over 20 years of experience leading investor relations and corporate communications programs. Most recently, Ms. Galfetti provided consulting services to small and medium companies in the life science industries.

Her corporate experience includes serving as Vice President, Investor Relations & Corporate Communications at Cynapsus Therapeutics. Prior to Cynapsus, she was Senior Director, Investor Relations at Sanofi, responsible for integrating the Genzyme Corporation investor relations program post-merger. Prior to Sanofi, Ms. Galfetti was Senior Director, Corporate Communications and Investor Relations at AMAG Pharmaceuticals. Prior to AMAG, Ms. Galfetti held Investor Relations roles of increasing responsibility at Genzyme Corporation. Ms. Galfetti holds a Bachelor of Arts in Political Science from the University of Vermont and a Master of Business Administration (with distinction) from Bentley University.

Deepak Basra
Vice President of Strategy and Business Development

Mr. Basra joined Titan with over 20 years' experience in global Business Development and Mergers and Acquisitions (M&A). Latterly working as a Board Member and Business Advisor for early-stage companies, his corporate experience includes serving as Vice President of Business Development and Licensing for Covidien's Vascular Therapies division, and Senior Vice President, Strategy and Business Development at Smith & Nephew.

Prior to that, Mr. Basra worked in the telecommunications industry and held various Business Development roles at Cable & Wireless, British Telecommunications PLC, and

Phillips. Mr. Basra holds a Bachelor of Science from Edinburgh University and a Master of Business Administration from Henley Management College, UK.

Surgeon Advisory Board

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

Ricardo Estape, MD

Dr. Estape is board certified in Obstetrics and Gynecology and in Gynecologic Oncology. He attended medical school at the University of Pennsylvania and completed his residency in Obstetrics and Gynecology as well as his fellowship in Gynecologic Oncology at the University of Miami/Jackson Memorial Hospital Program in Miami, Florida. He was an Associate Professor in Gynecologic Oncology and became the Director of the Gynecologic Oncology Site Group for the Sylvester Cancer Center at the University of Miami until he went into private practice in South Miami in 2002. Dr. Estape is a member of the Society of Gynecologic Oncology, a fellow of the American College of Obstetrics and Gynecology, a member of the American Association of Gynecologic Laparoscopists, member of the Society of Laparoendoscopic Surgeons, and a member of Alpha Omega Alpha Medical Honor Society.

J. Scott Magnuson, MD, FACS

Dr. Magnuson is a board-certified otolaryngologist – head and neck surgeon and a pioneer in the field of robotic surgery for the head and neck. He possesses advanced training in robotic-assisted surgery and is a leading authority on Transoral Robotic Surgery whose areas of expertise include advanced head and neck surgery, tumor removal, skin cancer surgery, sleep apnea surgery, airway surgery, thyroid and parathyroid surgery, reconstructive surgery and voice and swallowing disorders. Dr. Magnuson is the founder of AdventHealth Medical Group's elite ear, nose and throat surgical team. He is also Chief Medical Officer of the AdventHealth Nicholson Center, one of the leading surgical education centers in the world, with a specific focus and expertise in robotic surgical devices and procedures. His credentials include his medical degree earned at the University of Texas Medical School in Houston as well as his internship in general surgery and otolaryngology residency at the University of Alabama at Birmingham.

Arleen H. Song, MD, MPH

Dr. Song is currently an Assistant Professor in the Division of Minimally Invasive Gynecologic Surgery in the Department of Obstetrics and Gynecology at Duke University. She is board certified in obstetrics and gynecology. She received her medical degree from University of North Carolina at Chapel Hill School of Medicine and completed her OB/GYN residency and minimally invasive gynecologic surgery fellowship at the University of Michigan. She remained on faculty at the University of Michigan in the Division of Minimally Invasive Gynecologic Surgery during which time she was a faculty preceptor for fellows and served as Director of Clinical Services for the MIGS division. She is a long time member of the American Association of Gynecologic Laparoscopists (AAGL) and served as Chair of the AAGL robotic special interest group.

Kevin J.E. Stepp, MD, FACOG, FPMRS

Dr. Stepp is the Director of Urogynecology and Pelvic Surgery at one of the nation's largest hospital systems in the country: Atrium Health in Charlotte, North Carolina. 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. In 2010 he relocated to Charlotte to establish a combined surgical division in Urogynecology and Minimally Invasive Surgery. Under his leadership, the division has grown to one of the busiest surgical programs in the country and become a highly sought-after fellowship in Urogynecology and Reconstructive Surgery. Dr. Stepp is a member of the American Urogynecologic Society, the American College of Obstetrics and Gynecologists and the American Association of Gynecologic Laparoscopists.

Family Relationships

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

Arrangements

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

B. Compensation

Compensation Discussion and Analysis

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

As noted in the previous paragraph, the Company currently has four Named Executive Officers and places primary importance on the talent of these employees to manage and grow the Company. Based on the size of the Company and its relatively small number of employees, the Company's executives are required to be multi-disciplined, self-reliant and highly experienced. In determining specific compensation amounts for the executive officers, the Board of Directors considers factors such as experience, individual performance, length of service, role in achieving corporate objectives, positive research and development results, stock price and compensation compared to other employment opportunities for executives.

The Company is an early-stage company engaged in the design and development of surgical technologies for single-access RAS. As the Company is largely in the product development stage, it cannot rely on revenues from its operations alone to finance its activities and advance its goals. Consequently, the Company looks to raising the requisite capital to finance such activities through equity financings, which are influenced by the financial market's assessment of the Company's overall enterprise value and its prospects. These in turn are influenced, to a great extent, by the results of its development activities in progressing towards commercializing its robotic surgical technologies. The contribution that the President and Chief Executive Officer makes to this endeavor, on a subjective analysis by the Compensation Committee and the Board of Directors

at the end of each fiscal year, is the primary factor in determining aggregate compensation. In considering such contribution, the Board of Directors considers various factors, including, among other things, (i) the ongoing and progressive development of the Company's RAS technologies; (ii) the identification and attainment of appropriate milestones that adequately reflect the development of the Company's RAS technologies towards regulatory marketing authorization and commercialization, (iii) the formation and development of key partnerships with leading academic and research organizations through which the Company's products can be tested, and (iv) the recruitment, management and retention of qualified technical and other personnel, among other things.

Compensation for Named Executive Officers consists of base salary, short-term incentive plan ("STIP") bonuses, and long-term incentive plan ("LTIP") equity-based compensation, namely stock options, RSUs and DSUs (as defined below under "*Compensation Plans*"). In establishing compensation, the Company attempts to pay competitively in the aggregate as well as deliver an appropriate balance between annual compensation (base salary and cash bonuses) and equity-based compensation (stock options, RSUs and DSUs).

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

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

In 2020, the Compensation Committee retained Aon Consulting, Inc., through its Rewards Solution subdivision ("Aon"), to serve as the Committee's independent compensation consultant, replacing prior engagements by the Company with Hugessen Consulting Inc. ("Hugessen") and Pear Meyer & Partners, LLC ("Pearl Meyer"). In December 2020, Aon commenced a review and benchmarking of executive and non-employee director compensation, including:

- Performing a high-level review of executive and director compensation levels and design
- Providing input on the topics of equity compensation and peer group design; and
- Providing additional input and advice to the Compensation Committee, as requested.

The Company did not engage the services of Aon or any other compensation consultant in 2021. The table below outlines fees paid to consultants in 2021 and 2020:

(in thousands)	2021 Fees	2020 Fees
	$	$
Executive Compensation Related Fees:		
Aon	**30**	-
Hugessen	-	-
Pearl Meyer	-	3
Subtotal	30	3
All Other Fees:		
Aon	-	-
Hugessen	-	-
Pearl Meyer	-	-
Subtotal	-	-
Total	**30**	**3**

The Compensation Committee did not follow a formal practice to consider the implications of the risks associated with the Company's compensation policies and practices in 2021.

Compensation Committee

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

In assessing the general competitiveness of the compensation of the Company's Named Executive Officers, the Compensation Committee considers base salary, total cash compensation and total direct compensation (including the value of LTIP awards) relative to a comparator group of publicly listed companies and reviews benchmark data composed of the group's executive compensation data for matching positions. The peer group of over one hundred companies includes the following companies with business profiles comparable to that of the Company having regard to stage of development, IP and technology intensive and scale and geography of the prospective markets for each company's products under development:

Agenus Inc.	Helius Medical Technologies, Inc.
Aravive, Inc.	IVERIC Bio, Inc.
Celsion Corporation	Kodiak Sciences Inc.
Clearside Biomedical, Inc.	Precision BioSciences, Inc.
Curis, Inc.	Regulus Therapeutics Inc.
Ekso Bionics Holdings Inc.	Voyager Therapeutics, Inc.

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

Compensation Plans

Option Plan

The purpose of the stock option plan ("Option Plan") is to advance the interests of the Company by closely aligning the participants' personal interests with those of the Company's shareholders generally.

Directors, officers and employees of the Company, as well as persons or companies engaged by the Company to provide services on a continuous basis for an initial, renewable or extended period of twelve months or more (and may include persons or companies such as consulting researchers, doctors and other consultants), are eligible to be granted options under the Option Plan even if they are not full-time employees of the Company.

Options granted under the Option Plan are granted at the discretion of the Board and are typically granted in such numbers as reflect the level of responsibility and participation of the particular optionee as determined over the course of the year. The terms of the Option Plan provide that the aggregate number of Common Shares issuable thereunder (and under any other employee stock option plans or other share compensation arrangements) cannot, at the time of the option grant, exceed 15% of the total number of Common Shares issued and outstanding.

A copy of the Option Plan is included as Exhibit 4.1 to this Annual Report and is available on SEDAR at www.sedar.com.

Share Unit Plan

The purpose of the share unit plan (the "SU Plan"), which includes the awarding of restricted share units ("RSU") and deferred share units ("DSU"), is to encourage selected eligible employees of the Company and its affiliates to acquire a proprietary interest in the growth and performance of the Company, generate an increased incentive to contribute to the Company's future success and prosperity and align the interests of such eligible employees with the Company's long-term strategy and with the interests of the Company's shareholders.

Regular full-time or part-time employees of the Company or of an affiliate of the Company are entitled to participate in the SU Plan. The maximum aggregate number of Common Shares that are reserved for issuance in aggregate under the Option Plan, SU Plan and DSU Plan (as defined below) is equal to 15% of the issued and outstanding Common Shares, from time to time.

A copy of the SU Plan is included as Exhibit 4.2 to this Annual Report and is available on SEDAR at www.sedar.com.

Deferred Share Unit Plan

The purpose of the DSU plan ("DSU Plan") is to provide directors of the Company with the opportunity to acquire DSUs in order to allow them to participate in the long-term success of the Company and to promote a greater alignment of their interests with the interests of the Company's shareholders.

Any director of the Company is eligible to participate in the DSU Plan. The maximum aggregate number of Common Shares that are reserved for issuance under the Option Plan, SU Plan and DSU Plan will be equal to 15% of the issued and outstanding Common Shares, from time to time.

A copy of the DSU Plan is included as Exhibit 4.3 to this Annual Report and is available on SEDAR at www.sedar.com.

Executive Officers

Summary Compensation Table

The following table and the notes thereto set forth information concerning annual total compensation for each Named Executive Officer in 2021, in respect of the fiscal years ended December 31, 2021, 2020, 2019. All amounts in the table below and the notes thereunder are stated in Titan's functional and presentation currency, which is U.S. dollars. For reporting purposes, any Canadian dollar amount is translated to U.S. dollars using the year end exchange rate, as quoted by the Bank of Canada, on December 31 of each year.

				Non-equity Incentive Plan Compensation			
			Share-				

Name and Principal Position	Year Ended Dec. 31	Salary	based Awards (RSUs)	Option-based Awards[1]	Annual Incentive Plans	Long-term Incentive Plans	Pension Value	All Other Compensation[2]	Total Compensation
Paul Cataford[3]	**2021**	25,000	25,000	-	-	-	-	-	50,000
Interim President and	**2020**	-	-	-	-	-	-	-	-
Chief Executive Officer	**2019**	-	-	-	-	-	-	-	-
David McNally[4]	**2021**	406,712	1,404,000	1,893,158	120,000	-	-	22,671	3,846,541
Former President and	**2020**	342,500	-	-	-	-	-	-	342,500
Chief Executive Officer	**2019**	330,000	-	-	-	-	-	165,000	495,000
Stephen Lemieux	**2021**	147,977	380,000	526,379	-	-	-	5,919	1,060,275
Chief Financial Officer	**2020**	-	-	-	-	-	-	-	-
	2019	-	-	-	-	-	-	-	-
Monique Delorme[5]	**2021**	191,401	585,000	473,227	47,525	-	-	13,753	1,310,905
Former Chief	**2020**	181,472	-	96,220	-	-	-	-	277,692
Financial Officer	**2019**	72,465	-	35,607	-	-	-	-	108,072
Perry Genova	**2021**	300,000	302,749	-	106,250	-	-	104,904	813,902
Senior Vice President	**2020**	264,583		962,200	-	-	-	68,750	1,295,533
Research and Development	**2019**	250,000		-	-	-	-	125,000	375,000
Jasminder Brar	**2021**	203,381	585,000	189,291	29,734	-	-	4,051	1,011,457
Vice President, Legal and	**2020**	203,190	-	240,550	-	-	-	-	443,740
IP, General Counsel	**2019**	129,883	-	-	-	-	-	37,429	167,312

Notes:

1. The fair value of options granted was estimated at the date of grant using the Black-Scholes option pricing model using assumptions based on expected life, risk free rate, expected dividend yield and expected volatility.
2. Represents cash bonus paid in the year for performance in the prior calendar year.
3. Mr. Cataford was appointed Interim President and CEO on December 1, 2021 and receives monthly compensation of $25,000 in cash and $25,000 in RSUs for such services. Mr. Cataford's compensation as Interim President and CEO is included in the table and does not include any compensation received as a member of the Board. Mr. Cataford remains a member of the Board and Chair of the Board.
4. Mr. McNally is the former President and Chief Executive Officer of Titan. Mr. McNally left Titan on December 1, 2021.
5. Ms. Delorme is the former Chief Financial Officer of Titan. Ms. Delorme left Titan on July 12, 2021.

Outstanding share-based awards and option-based awards

The following table shows all awards granted to Named Executive Officers and outstanding on December 31, 2021.

	Option based Awards					Share based Awards		
Name	Number of securities underlying unexercised options (#)	Option Exercise Price[1] (CDN$)	Option Exercise Price (US$)	Option Expiration Date (DD-M-YY)	Value of unexercised in-the- money options (US$)	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested (US$)	Market or payout value of vested share-based awards not paid out or distributed (US$)
Paul Cataford	-	-	-	-	-	-	-	25,000
David McNally[1]	270,833		2.21	03-Mar-28	-	300,000	189,000	-
	55,018	4.54	-	19-Jan-25		-		
	277,519	4.54	-	17-Jan-24	-	-	-	-
Stephen Lemieux	400,000	1.58	-	20-Aug-28	-	250,000	157,500	-
Monique Delorme[2]	250,000	-	2.21	03-Mar-28	-	-	-	36,667
	100,000	-	0.96	30-Jul-27				
	10,000	4.54	-	26-Jun-26	-	-	-	-
Perry Genova	1,000,000	-	0.96	30-Jul-27	-	131,108	82,598	-
	41,680	4.54	-	19-Jan-25	-	-	-	-
	33,333	4.54	-	17-Apr-24	-	-	-	-
	16,667	4.54	-	07-Feb-24	-	-	-	-
Jasminder Brar	100,000	-	2.21	03-Mar-28	-	250,000	157,500	-
	250,000	-	0.96	30-Jul-27	-	-	-	-
	22,978	4.54	-	19-Jan-25	-	-	-	-

Notes:

1. Mr. McNally is the former President and Chief Executive Officer of Titan. Mr. McNally left Titan on December 1, 2021.

2. Ms. Delorme is the former Chief Financial Officer of Titan. Ms. Delorme left Titan on July 12, 2021.

The following table shows the value from incentive plans vested by Named Executive Officers under the Company's incentive plans and the annual STIP bonus payout during the financial year ended December 31, 2021 for performance in the prior calendar year.

Name	Option-based awards - Value vested during the year (US$)	Share-based awards - Value vested during the year (US$)	Non-equity incentive plan compensation - Value earned during the year (US$)
Paul Cataford	-	25,000	-
David McNally	-	-	120,000
Stephen Lemieux	-	-	-
Monique L.Delorme	-	-	47,525
Perry Genova	-	-	106,250
Jasminder Brar	-	-	29,734

Securities Authorized for Issuance Under Equity Compensation Plan

The following table sets forth certain information as of December 31, 2021 with respect to compensation plans under which equity securities of the Company are authorized for issuance:

	Denominated in:	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted–average exercise price of outstanding options, warrants and rights	Number of securities remaining for future issuance under equity compensation plan
Equity compensation plan approved by security holders	CDN dollar	702,023	4.17	
	US dollar	4,555,066	1.49	
Total		5,257,089		9,841,708

Termination and Change of Control Benefits

The Company, directly or through Titan USA, has entered into agreements with the Company's current Named Executive Officers as outlined below. The Company believes these arrangements help the Named Executive Officers maintain continued focus and dedication to their responsibilities in the best interests of Titan.

Termination

Paul Cataford, Interim President and Chief Executive Officer

Effective December 1, 2021, the Company entered into an employment agreement with Mr. Cataford. Either Mr. Cataford or the Company may terminate the employment agreement with thirty days prior written notice and beyond any payments due to Mr. Cataford covering the thirty days, there would be no change of control benefits.

Stephen Lemieux, Chief Financial Officer

Effective June 1, 2020, the Company entered into an employment agreement with Mr. Lemieux. Mr. Lemieux's employment with the Company may be terminated either by the Company or by Mr. Lemieux. If Mr. Lemieux's employment is terminated by the Company without "cause" or by Mr. Lemieux for "good reason" (as such terms are defined in the employment agreement), he is entitled to the greater of (i) one month's notice or pay in lieu of notice (in the Company's discretion), plus all minimum statutory notice or statutory pay in lieu of notice therefor, and all other amounts required by the ESA Ontario; and (ii) six months of base salary and six months of the Company's contributions to extended health and dental benefits to Mr. Lemieux; and Mr. Lemieux will be relieved of any obligation to comply with the non-solicitation provisions of the agreement.

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

Effective October 1, 2020, the Company entered into a new employment agreement with Mr. Brar. Mr. Brar's employment with the Company may be terminated either by the Company or by Mr. Brar. If Mr. Brar's employment is terminated by the Company without "cause" or by Mr. Brar for "good reason" (as such terms are defined in the employment agreement), he is entitled to the greater of (i) one month's notice or pay in lieu of notice (in the Company's discretion), plus all minimum statutory notice or statutory pay in lieu of notice therefor, and all other amounts required by the ESA Ontario; and (ii) six months of base salary and six months of the Company's contributions to extended health and dental benefits to Mr. Brar; and Mr. Brar will be relieved of any obligation to comply with the non-solicitation provisions of the agreement.

Perry Genova, Ph.D., Senior Vice President, Research and Development

Effective June 1, 2020, Titan USA entered into a new employment agreement with Mr. Genova. Mr. Genova's employment is terminable at will, that is, at any time, for any reason or no reason, with or without cause. If Mr. Genova's employment is terminated by Titan USA without "cause" or by Mr. Genova for "good reason" (as such terms are defined in the employment agreement), he is entitled to: (a) a payment equivalent to six (6) months of his base salary and COBRA healthcare premiums, determined as of the date of termination; (b) where such termination occurs prior to the end of the fiscal year, the pro-rata portion (for the fiscal year) of any goal-based bonus in light of the

applicable goals shall be calculated in good faith for that fiscal year as if Mr. Genova were going to successfully achieve all of the goals for that fiscal year, provided that the severance conditions stipulated in the employment agreement have been satisfied and all provided that Titan USA has made a good faith determination that Mr. Genova would have met all of the goals in respect of that fiscal year if Mr. Genova had not been terminated or resigned , as the case may be; (c) be relieved of any obligation to comply with the non-solicitation and non-competition provisions of his employment agreement; and (d) all other goals-related or other bonus amounts and benefits earned up through the date of termination.

Change of Control

Under the Company's SU Plan, if the employment of a participant with the Company or with an affiliate of the Company is affected by a Change of Control Termination (as defined in the SU Plan), all unvested awards shall vest immediately upon the Change of Control Termination and the participant shall be entitled to the benefits of such awards as though the vesting date is the date of Change of Control Termination, provided however that the participant shall have the option of exercising his or her rights under the awards at any later date in the calendar year in which the Change of Control Termination occurs, subject to applicable law. For the purposes of this paragraph, all performance criteria with respect to any Performance Share Units shall be deemed to have been met at target on the relevant vesting date.

Under the Company's Stock Option Plan, if the employment of a participant with the Company or with an affiliate of the Company is affected by an event of a sale by the Company of all or substantially all of its assets or in the event of a change of control (as set forth in the Stock Option Plan) of the Company, the participant shall be entitled to exercise the stock options granted to the participant, either during the term of the respective stock option or within 90 days after the date of the sale or change of control, whichever first occurs.

The table below shows the incremental payments that would have been made to our current Named Executive Officers under the terms of their employment agreements upon the occurrence of certain events, had they occurred on December 31, 2021.

Name and Principal Position	Event	Severance (US$)	Options (US$)	Share-Based Awards (US$)	Total (US$)
Paul Cataford	Termination other				
Interim President and	than for cause	-	-	-	-
Chief Executive Officer	Change in Control	-	-	-	-
Stephen Lemieux	Termination other				
	than for cause	155,238	-	-	155,238
Chief Financial Officer	Change in Control	-	-	157,500	157,500
Perry Genova	Termination other				
Senior Vice-President,	than for cause	150,000	-	-	150,000
Research and Development	Change in Control	-	-	82,598	82,598
Jasminder Brar	Termination other				
Vice President, Legal and	than for cause	100,000	-	-	100,000
IP, General Counsel	Change in Control	-	-	157,500	157,500

Compensation of Directors

The Board of Directors determines the form of payment of the compensation paid to directors. All compensation to directors is paid through a combination of cash and equity-based compensation (RSUs), and is reviewed on an annual basis. Directors who are officers of the Company receive no additional remuneration for acting as directors. Until December 1, 2021, Mr. McNally was the only director who was also an officer of the Company. As of December 1, 2021, Paul Cataford became Interim President and CEO. Since he is serving on an interim basis, he is not receiving any cash retainer for his position as a director, although he will continue to be eligible to receive a share-based retainer. Furthermore, Mr. Cataford is not participating in the Company's STIP and LTIP programs for officers and is instead receiving monthly compensation of $25,000 in cash and $25,000 in RSUs. The annual retainer for independent directors for the year ended December 31, 2021 is outlined in the below chart:

Board/Committee	Role	Retainer Amount (US$)	Share-Based Retainer Amount (US$)[1]
Board	Member	40,000	60,000
	Chair	-	30,000
	Lead Independent[2]	25,000	-
Audit Committee	Member	10,000	-
	Chair[2]	10,000	-
Corporate Governance and Nominating Committee	Member	6,000	-
	Chair[2]	6,000	-
Compensation Committee	Member	7,500	-
	Chair[2]	7,500	-

The table below reflects the participation of each of the independent directors in the respective Committees of the Board as of December 31, 2021:

Name	Audit	Committee Memberships Compensation	Corporate Governance and Nominating
Anthony J. Giovinazzo	Member	-	Chair
Cary G. Vance	-	Chair	Member
Heather Knight	Member	Member	Member

Cathy Steiner	Chair	Member	-	

1 Share-based retainers in the form of RSUs were granted in 2021.
2 Retainer amount is in addition to the base Member retainer for the Board or respective Committee.

The table below reflects in detail the compensation earned by non-employee directors in the 12-month period ended December 31, 2021.

Name	Fees Earned (US$)	Share-based Awards (US$)	Option-based Awards (US$)	Non-equity Incentive Plan Compensation (US$)	Pension Value (US$)	All Other Compensation (US$)	Total (US$)
Paul Cataford[(1)]	70,508	61,656	-	-	-	-	132,164
Anthony J. Giovinazzo[(2)]	57,306	47,137	-	-	-	-	104,443
Cary G. Vance[(3)]	56,180	47,137	-	-	-	-	103,316
Heather L. Knight[(4)]	28,877	26,103	-	-	-	-	54,980
Cathy Steiner[(5)]	29,111	20,214	-	-	-	-	49,325

Notes:

1. Paul Cataford was elected as a director of the Company on September 30, 2020.
2. Anthony J. Giovinazzo was elected as a director of the Company on September 30, 2020.
3. Cary G. Vance was elected as a director of the Company on September 30, 2020.
4. Heather L. Knight was appointed as a director of the Company on May 13, 2021.
5. Cathy Steiner was elected as a director of the Company on June 9, 2021.

Independent Director Equity Ownership Requirement

On November 12, 2020, the Board of Directors adopted a policy requiring that within two years of election, all independent directors should hold equity in the Company, including Common Shares, RSUs and/or DSUs, with an aggregate value of not less than two times the amount of the annual cash retainer provided to each of the directors. The aim of the policy is to better align the interests of the independent directors with those of the Company's shareholders.

Directors' and Officers' Liability Insurance

The Company maintains insurance for the benefit of the Company and its directors and officers as a group, against liability in respect of the performance by them of duties of their office. For the period ended December 31, 2021, the aggregate limit of liability was $20,000,000 and the premiums for such directors' and officers' insurance was $1,387,330. There is a deductible amount on a per loss basis of up to $750,000 for a claim against the Company. The premium is paid by the Company without distinction as to directors as a group or officers as a group.

Indemnification of Directors and Officers

Under the OBCA, the Company may indemnify a director or officer against all costs, charges and expenses reasonably incurred by them in respect of any civil, criminal or administrative action where (i) the individual has acted honestly and in good faith with a view to the best interests of the Company, and (ii) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual had reasonable grounds for believing that his or her conduct was lawful. Further, pursuant to the Company's by-laws, the Company is required to indemnify its directors and officers if they satisfy the above-described conditions. Accordingly, as is customary for many public corporations, and in accordance with the OBCA, the Company has entered into indemnity agreements with its directors and officers whereby the Company has agreed, subject to applicable law and provided such director or officer complied with the above-mentioned conditions, to indemnify such individuals against all costs, charges and expenses which they may sustain or incur in third party actions.

Outstanding share-based awards and option-based awards

The following table shows all option-based and share-based awards granted to non-employee directors and outstanding on December 31, 2021.

	Option-based Awards					Share-based Awards		
Name	Number of securities underlying unexercised options (#)	Option Exercise Price (CDN$)	Option Exercise Price (US$)	Option Expiration Date (DD-M-YY)	Value of unexercised in-the-money options (US$)	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested (US$)	Market or payout value of vested share-based awards not paid out or distributed (US$)
Paul Cataford[(1)]	-	-	-	-	-	-	-	86,656
Anthony J. Giovinazzo[(2)]	-	-	-	-	-	-	-	47,137
Cary G. Vance[(3)]	-	-	-	-	-	-	-	47,137
Heather L. Knight[(4)]	-	-	-	-	-	-	-	26,103
Cathy Steiner[(5)]	-	-	-	-	-	-		20,214

Notes:

1. Paul Cataford was elected as a director of the Company on September 30, 2020.
2. Anthony J. Giovinazzo was elected as a director of the Company on September 30, 2020.
3. Cary G. Vance was elected as a director of the Company on September 30, 2020.
4. Heather L. Knight was appointed as a director of the Company on May 13, 2021.
5. Cathy Steiner was elected as a director of the Company on June 9, 2021.

Incentive Plan Awards – Value Vested or Earned During Fiscal Year and December 31, 2021

The following table shows the value from equity-based incentive plans vested or earned by non-employee directors under the Company's equity-based incentive plans and the annual incentive bonus payout during the financial year ended December 31, 2021.

Name	Option-based awards – Value vested during the year (US$)	Share-based awards – Value vested during the year (US$)	Non-equity incentive plan compensation – Value earned during the year (US$)
Paul Cataford[(1)]	-	86,656	-
Anthony J. Giovinazzo[(2)]	-	47,137	-
Cary G. Vance[(3)]	-	47,137	-
Heather L. Knight[(4)]	-	26,103	-
Cathy Steiner[(5)]	-	20,214	-

Notes:

1. Paul Cataford was elected as a director of the Company on September 30, 2020.
2. Anthony J. Giovinazzo was elected as a director of the Company on September 30, 2020.
3. Cary G. Vance was elected as a director of the Company on September 30, 2020.
4. Heather L. Knight was appointed as a director of the Company on May 13, 2021.
5. Cathy Steiner was elected as a director of the Company on June 9, 2021.

C. Board Practices

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

Board of Directors

As of December 31, 2021, four of the five members of the Board of Directors are independent directors. An independent director is defined as a director who has no direct or indirect material relationship with the Company, being a relationship which could be reasonably expected to interfere with the exercise of a director's independent judgement. As of December 31, 2021, Paul Cataford is considered to be non-independent by virtue of his interim management position with the Company and his interim employment relationships with the Company. The Board believes that his extensive knowledge of the Company's business and affairs is beneficial to the other directors and his participation as director contributes to the effectiveness of the Board. Anthony J. Giovinazzo, Cary G. Vance, Cathy Steiner, and Heather Knight are considered to be independent directors. These determinations were made by the Board based upon an examination of the factual circumstances of each director and consideration of any interests, business or relationships, which any director may have with the Company.

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

The Chairman of the Board of Directors, Paul Cataford, is a non-independent director. Anthony J. Giovinazzo is the designated lead independent director. The Board utilizes its own in-house expertise, and that of its legal counsel, to provide advice and consultation on current and anticipated matters of corporate governance.

Board Mandate

The Board of Directors is responsible for the overall stewardship of the Company and operates pursuant to a written mandate, which was updated and approved by the Board on February 3, 2022.

Position Descriptions

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

Orientation and Continuing Education

While the Company does not provide a formal orientation or education program for Board members, as it believes that such programs are not appropriate for a development stage company with an experienced Board, the members of which have been selected for their specific expertise, the Company encourages its Board members to remain current with best practices including corporate governance and offers a partial reimbursement for continuing education activities.

Our directors are highly experienced and knowledgeable, both individually and as a group. The directors have either a medical or business background and have long careers

in or related to the medical, health or financial industry and are intimately familiar with our project, through sufficient interactions with management and technology developers.

To ensure that the Board has and maintains the skill and knowledge necessary for them to meet their obligations as directors of the Company, each of the directors has observed the performance of the Enos System and/or been provided regular updates through summary technology presentations by management relating to various aspects of the system. The Board believes that discussion among the directors and management at these meetings provides a valuable learning resource for the directors with non-technical expertise in the subject matter presented, and that those directors provide management with valuable insights into broader issues facing the Company.

Ethical Business Conduct

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

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

Nomination of Directors

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

The Corporate Governance and Nominating Committee is composed entirely of independent directors, being Anthony J. Giovinazzo (chair), Cary G. Vance, and Heather Knight.

Audit Committee

The Board of Directors has established an Audit Committee which met seven times during the financial year ended December 31, 2021. The primary function of the Audit Committee is to assist the Board in fulfilling its oversight responsibilities by evaluating and making recommendations to the Board, as appropriate, with respect to: (a) financial reporting; (b) external auditors, including their performance, qualifications, independence and audit of Titan's financial statements; (c) internal controls and disclosure controls; (d) financial risk management; (e) Titan's Code; and (f) related party transactions.

To fulfill its duties and responsibilities, the Audit Committee evaluates and make recommendations to the Board, and has the authority to approve, as appropriate, matters relating to: (i) any general responsibilities, including, among other things, the creation and maintenance of an Audit Committee plan for the ensuing year and review and assessment of the Audit Committee charter; (ii) matters related to financial reporting, including an approval of Titan's annual and interim financial statements, any related management's discussion & analysis, financial statements to be used in prospectuses, other public disclosure documents or financial statements required by regulatory authorities and any financial information to be used in a press release; (iii) selection of the external auditors, considering both their independence and effectiveness, as well as the fees and other compensation to be paid to the external auditors; (iv) oversee the work of the external auditor engaged for the purposes of preparing or issuing an auditor's report or performing other audit, review or attest services for Titan; (v) monitor financial matters, internal controls, management systems and, in conjunction with the Corporate Governance and Nominating Committee, disclosure controls of Titan; (vi) review management's assessment and management of financial risk; (vii) 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; (viii) oversee procedures in the Code for: (a) the receipt, retention and treatment of complaints received by Titan regarding accounting, internal controls or auditing matters and (b) the confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters; (ix) 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 is not otherwise already required to be dealt with by an "independent committee"; and (x) oversee management's compliance with laws respecting its audit function and recommend to the Board any changes to Titan's practices in these areas.

The Audit Committee has direct communication channels with Titan's internal and external auditors to discuss and review specific issues and has the authority to engage, select, retain, terminate, set and approve the fees, other compensation and other retention terms of special or independent counsel, accountants or other advisors, as it deems appropriate.

A copy of the Audit Committee charter is available on our website at www.titanmedicalinc.com.

Composition of the Audit Committee

The table below sets out the members of the Audit Committee as of December 31, 2021 and states whether they are financially literate and/or independent.

Director	Independent	Financially Literate
Cathy Steiner (Chair)	Yes	Yes
Heather Knight	Yes	Yes
Anthony J. Giovinazzo	Yes	Yes

Relevant Education and Experience

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

Compensation Committee

Compensation matters are dealt with by the Compensation Committee of the Company. The function of the Compensation Committee is to assist the Board in discharging the Board's oversight responsibilities relating to the compensation and retention of key senior management employees with the skills and expertise needed to enable Titan to achieve its goals and strategies at fair and competitive compensation, including appropriate performance incentives. After considering inputs from senior management, the Compensation Committee makes a recommendation to the Board for approved compensation terms for each officer of the Company, including the chief executive officer.

The Compensation Committee reviews and assess the competitiveness and appropriateness of the compensation based on, among other things, (i) compensation in the prior year, (ii) an evaluation of officer performance, (iii) Titan's financial and operating performance, (iv) whether the compensation reflects an appropriate balance between short and long-term incentives and alignment with the interests of shareholders and (v) a total compensation and wealth accumulation analysis. The committee recommends the structure of such compensation in terms of the amount of cash, options or other form of security compensation. In addition, the Compensation Committee makes recommendations to the Board regarding director compensation and periodically reviews the alignment of Titan's compensation programs, including incentive compensation programs. It also periodically reviews successions plans for the Chair of the Board of Directors, the CEO and other senior positions and make recommendations to the Board with respect to the selection of individuals to occupy these positions.

The members of the Compensation Committee have several years of relevant experience, having served as officers and/or directors of other companies.

As of December 31, 2021, all three members of the Compensation Committee, namely, Cary G. Vance (chair), Cathy Steiner and Heather Knight are considered to be independent directors. The Compensation Committee met two times during the financial year ended December 31, 2021.

A copy of the Compensation Committee Mandate is available on our website at www.titanmedicalinc.com.

Other Board Committees

Other than the Audit Committee, the Compensation Committee and the Corporate Governance and Nominating Committee, the Board has no standing committee. From time to time, the Board may setup ad-hoc committees for specific items and has presently setup a CEO Search Committee. The Search Committee has engaged a top-tier search firm and will evaluate and recommend candidates to the Board.

Assessments

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

Directors' Service Contracts

The Company does not have any service contracts with its directors.

Director Tenure

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

D. Employees

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

Location	December 31, 2021	December 31, 2020	December 31, 2019
Canada	6	2	4
United States	42	13	6
Annual Total	48	15	10

E. Share Ownership

The following table and the notes thereto set out the names of all the directors and Named Executive Officers of Titan, the number of Common Shares beneficially owned, directly or indirectly, or over which control or direction is exercised by each of them, and information regarding options granted to them as at March 23, 2022. The percentage of common shares beneficially owned is computed on the basis of 111,202,690 Common Shares outstanding as of March 23, 2022.

Name and Title	Number of Common Shares Beneficially Held	Percentage of Common Shares Beneficially Held *
Paul Cataford Interim President & CEO, Chairman & Director	-	-
Anthony J. Giovinazzo Director (Lead Independent)	12,000	-
Gary G. Vance Director	15,000	-
Heather L. Knight	-	-

Director		
Cathy Steiner Director	-	-
Stephen Lemieux Chief Financial Officer	-	-
Perry Genova Senior Vice President, Research and Development	-	-
Jasminder Brar Vice President, Legal and IP, General Counsel	-	-

* Less than 1%.

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

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

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

Voting Rights

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

Shares Held in the United States

As of February 28, 2022, there were approximately 16 registered holders of the Company's Common Shares in the United States, with combined holdings of 247,662 Common Shares.

Change of Control

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

Control by Others

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

B. Related Party Transactions

Other than as set out below, since January 1, 2021, other than employment and executive compensation matters described under "*Compensation*", there have been no transactions or loans between us and:

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

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

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

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

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

C. Interests of Experts and Counsel

Not Applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

See "*Item 18 – Financial Statements*".

Legal Proceedings

There are currently no legal proceedings to which we are or were a party to, or that any of our property is or was the subject of, and we are not aware of any such proceedings that are contemplated. No penalties or sanctions were imposed against us by a court relating to securities legislation or by a securities regulatory authority during the years ended December 31, 2021 and 2020, nor have we entered into a settlement agreement with a securities regulatory authority, or been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Dividend Policy

We have not declared or paid dividends in the past. We presently intend to retain future earnings, if any, to finance the expansion and growth of our business. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial conditions, results of operations, capital requirements and other factors the board of directors deems relevant. We had negative cash flow from operating activities for our fiscal year ended December 31, 2021 and the negative cash flow is expected to continue.

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

B. Significant Changes

Not Applicable.

Item 9. The Offer and Listing

A. Offer and Listing

The Common Shares are listed for trading in Canada on the TSX under the symbol "TMD". The Common Shares are also traded on the Nasdaq in the United States under the symbol "TMDI".

B. Plan of Distribution

Not Applicable.

C. Markets

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

D. Selling Shareholders

Not Applicable.

E. Dilution

Not Applicable.

F. Expenses of the Issue

Not Applicable.

Item 10. Additional Information

A. Share Capital

Not Applicable.

B. Memorandum and Articles of Association

Incorporation

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

The following is a brief description of the Amalgamations.

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

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

Objects and Purposes of the Company

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

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

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

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

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

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

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

Borrowing Powers of Directors

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

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

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

Qualifications of Directors

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

Share Rights

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

Procedures to Change the Rights of Shareholders

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

Meetings

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

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

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

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

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

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

Limitations on Ownership of Securities

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

Change in Control

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

Ownership Threshold

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

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

C. Material Contracts

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

- the license agreement with Medtronic dated June 3, 2020 (which is described under "*Significant Transactions – Development Agreement & License Agreement with Medtronic*" in the management's discussion and analysis of the Company for the year ended December 31, 2021 and the year ended December 31, 2020 incorporated by reference into this Annual Report as Exhibit 15.1 and Exhibit 15.2, respectively);

- the development and license agreement with Medtronic dated June 3, 2020 (which is described under "*Significant Transactions – Development Agreement & License Agreement with Medtronic*" in the management's discussion and analysis of the Company for the year ended December 31, 2021 and the year ended December 31, 2020 incorporated by reference into this Annual Report as Exhibit 15.1 and Exhibit 15.2, respectively); and
- the Option Plan, SU Plan and DSU Plan (which are described under Item 6.B of this Annual Report).

D. Exchange Controls

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

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

E. Taxation

Canadian Federal Income Tax Consequences

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

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

This summary is based upon the provisions of the Tax Act (including the regulations ("***Regulations***") thereunder) in force as of the date hereof and our understanding of the

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

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

Currency Conversion

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

Dividends

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

Disposition of Common Shares

A Holder generally will not be subject to tax under the Tax Act in respect of a capital gain realized on the disposition or deemed disposition of a common share, unless the common share constitutes or is deemed to constitute "taxable Canadian property" to the Holder thereof for purposes of the Tax Act, and the gain is not exempt from tax pursuant to the terms of an applicable tax treaty or convention.

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

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

Certain United States Federal Income Tax Consequences

The following is a general summary of certain U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership and disposition of the Common Shares.

This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder as a result of the acquisition, ownership and disposition of the Common Shares. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences to such U.S. Holder, including specific tax consequences to a U.S. Holder under an applicable tax treaty. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any particular U.S. Holder. This summary does not address the U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences to U.S. Holders of the acquisition, ownership, and disposition of Common Shares. In addition, except as specifically set forth below, this summary does not discuss applicable tax reporting requirements. Each U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of Common Shares.

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

Scope of this Summary

Authorities

This summary is based on the Internal Revenue Code of 1986, as amended (the "**Code**"), Treasury Regulations (whether final, temporary, or proposed) promulgated under the Code, published rulings of the IRS, published administrative positions of the IRS, the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended, and U.S. court decisions, that are in effect and available, as of the date of this document. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied retroactively. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective

basis.

U.S. Holders

For purposes of this summary, the term "U.S. Holder" means a beneficial owner of Common Shares that is for U.S. federal income tax purposes:

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

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

This summary does not address the U.S. federal income tax considerations applicable to U.S. Holders that are subject to special provisions under the Code, including U.S. Holders that: (a) are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies; (c) are brokers or dealers in securities or currencies or U.S. Holders that are traders in securities that elect to apply a mark-to-market accounting method; (d) have a "functional currency" other than the U.S. dollar; (e) own Common Shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other integrated transaction; (f) acquired Common Shares in connection with the exercise of employee stock options or otherwise as compensation for services; (g) hold Common Shares other than as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment purposes); (h) are subject to the alternative minimum tax; (i) are partnerships and other pass-through entities (and investors in such partnerships and entities); (j) are S corporations; (k) are required to accelerate the recognition of any item of gross income with respect to Common Shares as a result of such income being recognized on an applicable financial statement; or (j) own, have owned or will own (directly, indirectly, or by attribution) 10% or more of the total combined voting power or value of the Company's outstanding shares. This summary also does not address the U.S. federal income tax considerations applicable to U.S. Holders who (a) are U.S. expatriates or former long-term residents of the U.S., or (b) hold Common Shares in connection with a trade or business, permanent establishment, or fixed base outside the United States or are otherwise subject to taxing jurisdictions other than, or in addition to, the United States. U.S. Holders that are subject to special provisions under the Code, including U.S. Holders described immediately above, should consult their own tax advisors regarding the U.S. federal, U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of Common Shares.

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

Passive Foreign Investment Company Rules

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

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

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

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

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

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

Default PFIC Rules Under Section 1291 of the Code

If we are a PFIC, the U.S. federal income tax consequences to a U.S. Holder of the purchase of Common Shares and the acquisition, ownership, and disposition of Common Shares will depend on whether such U.S. Holder makes a "qualified electing fund" or "**QEF**" election under Section 1295 of the Code (a "**QEF Election**") or makes a mark-to-market election under Section 1296 of the Code (a "**Mark-to-Market Election**") with respect to Common Shares. A U.S. Holder that does not make either a QEF Election or a Mark-to-Market Election (a "**Non-Electing U.S. Holder**") will be taxable as described below.

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

Under Section 1291 of the Code, any gain recognized on the sale or other taxable disposition of Common Shares of a PFIC (including an indirect disposition of shares of a Subsidiary PFIC), and any excess distribution received on such Common Shares (or a distribution by a Subsidiary PFIC to its shareholder that is deemed to be received by a U.S. Holder) must be ratably allocated to each day in a Non-Electing U.S. Holder's holding period for the Common Shares. The amount of any such gain or excess distribution allocated to the tax year of disposition or distribution of the excess distribution and to years before the entity became a PFIC, if any, would be taxed as ordinary income (and not eligible for certain preferential tax rates, as discussed below). The amounts allocated to any other tax year would be subject to U.S. federal income tax at the highest tax rate applicable to ordinary income in each such year, and an interest charge would be imposed on the tax liability for each such year, calculated as if such tax liability had been due in each such year. A Non-Electing U.S. Holder that is not a corporation must treat any such interest paid as "personal interest," which is not deductible.

If we are a PFIC for any tax year during which a Non-Electing U.S. Holder holds Common Shares, we will continue to be treated as a PFIC with respect to such Non-Electing U.S. Holder, regardless of whether we cease to be a PFIC in one or more subsequent tax years. If we cease to be a PFIC, a Non-Electing U.S. Holder may terminate this deemed PFIC status with respect to Common Shares by electing to recognize gain (which will be taxed under the rules of Section 1291 of the Code as discussed above) as if such Common Shares were sold on the last day of the last tax year for which we were a PFIC.

QEF Election

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

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

The procedure for making a QEF Election, and the U.S. federal income tax consequences of making a QEF Election, will depend on whether such QEF Election is timely. A QEF Election will be treated as "timely" for purposes of avoiding the default PFIC rules discussed above if such QEF Election is made for the first year in the U.S. Holder's holding period for the Common Shares in which we were a PFIC. A U.S. Holder may make a timely QEF Election by filing the appropriate QEF Election documents at the time such U.S. Holder files a U.S. federal income tax return for such year. If a U.S. Holder owns PFIC stock indirectly through another PFIC, separate QEF Elections must be made for the PFIC in which the U.S. Holder is a direct shareholder and the Subsidiary PFIC for the QEF rules to apply to both PFICs.

A QEF Election will apply to the tax year for which such QEF Election is made and to all subsequent tax years, unless such QEF Election is invalidated or terminated or the IRS consents to revocation of such QEF Election. If a U.S. Holder makes a QEF Election and, in a subsequent tax year, we cease to be a PFIC, the QEF Election will remain in effect (although it will not be applicable) during those tax years in which we were not a PFIC. Accordingly, if we become a PFIC in another subsequent tax year, the QEF Election will be effective and the U.S. Holder will be subject to the QEF rules described above during any subsequent tax year in which we qualify as a PFIC.

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

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

Mark-to-Market Election

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

traded" in the fourth calendar quarter of 2021 and expect that the Common Shares should be "regularly traded" in the first calendar quarter of 2022. However, there can be no assurance that the Common Shares will be "regularly traded" in the current or any subsequent calendar quarters. U.S. Holders should consult their own tax advisors regarding the marketable stock rules.

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

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

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

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

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

Other PFIC Rules

Under Section 1291(f) of the Code, the IRS has issued proposed Treasury Regulations that, subject to certain exceptions, would cause a U.S. Holder that had not made a timely QEF Election to recognize gain (but not loss) upon certain transfers of Common Shares that would otherwise be tax-deferred (e.g., gifts and exchanges pursuant to corporate reorganizations). However, the specific U.S. federal income tax consequences to a U.S. Holder may vary based on the manner in which Common Shares are transferred.

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

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

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

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

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

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

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

Distributions on Common Shares

A U.S. Holder that receives a distribution, including a constructive distribution, with respect to a Common Share will be required to include the amount of such distribution in gross income as a dividend (without reduction for any Canadian income tax withheld from such distribution) to the extent of our current and accumulated "earnings and profits", as computed under U.S. federal income tax principles. A dividend generally will be taxed to a U.S. Holder at ordinary income tax rates we are a PFIC for the tax year of such distribution or the preceding tax year. To the extent that a distribution exceeds the current and accumulated "earnings and profits" of the Company, such distribution will be treated first as a tax-free return of capital to the extent of a U.S. Holder's tax basis in the Common Shares and thereafter as gain from the sale or exchange of such Common Shares (see "*Sale or Other Taxable Disposition of Common Shares*" below). However, we may not maintain the calculations of earnings and profits in accordance

with U.S. federal income tax principles, and each U.S. Holder may be required to assume that any distribution by us with respect to the Common Shares will constitute ordinary dividend income. Dividends received on Common Shares generally will not be eligible for the "dividends received deduction" generally applicable to corporations. Subject to applicable limitations and provided we are eligible for the benefits of the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended, or the Common Shares are readily tradable on a United States securities market, dividends paid by us to non-corporate U.S. Holders, including individuals, generally will be eligible for the preferential tax rates applicable to long-term capital gains for dividends, provided certain holding period and other conditions are satisfied, including that we not be classified as a PFIC in the tax year of distribution or in the preceding tax year. The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the application of such rules.

Sale or Other Taxable Disposition of Common Shares

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

Additional Tax Considerations

Receipt of Foreign Currency

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

Foreign Tax Credit

Subject to the PFIC rules discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the Common Shares generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax paid. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid or accrued (whether directly or through withholding) by a U.S. Holder during a year. The foreign tax credit rules are complex and involve the application of rules that depend on a U.S. Holder's particular circumstances. Accordingly, each U.S. Holder should consult its own tax advisor regarding the foreign tax credit rules.

Information Reporting; Backup Withholding Tax

Under U.S. federal income tax laws certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, U.S. return disclosure obligations (and related penalties) are imposed on U.S. Holders that hold certain specified foreign financial assets in excess of certain threshold amounts. The definition of specified foreign financial assets includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person. U. S. Holders may be subject to these reporting requirements unless their Common Shares are held in an account at certain financial institutions. Penalties for failure to file certain of these information returns are substantial. U.S. Holders should consult their own tax advisors regarding the requirements of filing information returns, including the requirement to file IRS Form 8938.

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

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

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

F. Dividends and Paying Agents

Not Applicable.

G. Statement by Experts

Not Applicable.

H. Documents on Display

We are subject to the informational requirements of the U.S. Exchange Act and file reports and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC at http://www.sec.gov.

We are required to file reports and other information with the securities commissions in Canada. You are invited to read and copy any reports, statements or other information, other than confidential filings, that we file with the provincial securities commissions. These filings are also electronically available from the Canadian System for Electronic

Document Analysis and Retrieval ("**SEDAR**") (www.sedar.com), the Canadian equivalent of the SEC's electronic document gathering and retrieval system.

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

I. Subsidiary Information

On May 29, 2020, the Company established Titan USA, a Delaware corporation and a wholly-owned subsidiary of the Company. Titan USA's principal activity consists of research and development along with regulatory activities from its premises located in Chapel Hill, North Carolina, United States.

Item 11. Quantitative and Qualitative Disclosures about Market Risk

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

Credit risk

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

Liquidity risk

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

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

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

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. We hold our cash in bank accounts or high interest savings accounts which have a variable rate of interest. We manage our interest rate risk by holding highly liquid short-term instruments and by holding our investments to maturity, where possible.

Currency risk

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

A 5% strengthening of the U.S Dollar would not have a material impact on the business as the Company's cash is held in U.S. Dollars and the majority of expenditures are in U.S. dollars for fiscal 2021 or fiscal 2020.

Item 12. Description of Securities Other than Equity Securities

A. – C.

Not Applicable.

D. American Depository Receipts

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

PART II.

Item 13. Defaults, Dividend Arrearages and Delinquencies

Not Applicable.

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

Not Applicable.

Item 15. Controls and Procedures

(a) Disclosure Controls and Procedures

The Company's management, with the participation of the Company's chief executive officer ("CEO") and chief financial officer ("CFO"), evaluated the effectiveness of the Company's disclosure controls and procedures as of December 31, 2021. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of the Company's disclosure controls and procedures as of December 31, 2021, the company's CEO and CFO concluded that, as of such date, the Company's disclosure controls and procedures were effective to allow timely decisions regarding required disclosure.

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

The Company's management, including the CEO and the CFO, is responsible for establishing and maintaining adequate internal control over financial reporting, and evaluating the effectiveness of the Company's internal control over financial reporting as at each fiscal year end. The CEO and the CFO have evaluated the design and effectiveness of internal controls over financial reporting based on the framework in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission 2013 Framework. Based on this evaluation, as of December 31, 2021, the Company concluded that its internal controls over financial reporting was effective. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our Company have been detected.

Further, the design of a control system must reflect that there are resource constraints, and the benefits of controls must be considered relative to their costs. Inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of simple errors or mistakes. Controls can also be circumvented by individual acts of some persons, by collusion of two or more people or by management override of the controls. Due to the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. The design of any control system is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential conditions. Projections of any evaluations 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 the policies or procedures may deteriorate.

(c) Attestation Report of Registered Public Accounting Firm

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

(d) Changes in Internal Control over Financial Reporting

During the year ended December 31, 2021, the Company made changes to its internal control over financial reporting ("ICFR"). These changes are outlined in the table below and were implemented to remediate identified material weaknesses in its ICFR for the fiscal year ended December 31, 2020.

The Company's three identified material weaknesses at December 31, 2020 and the steps the Company has taken to remediate these weaknesses are:

	Material Weakness	Remediation Actions
1	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.	The Company enhanced its finance team to add more in-depth experience to support the growth and complexity of the business. The Company engaged the services of third party financial experts to assist in the preparation and review of more complex financial transactions.
2	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.	The Company enhanced its finance team to add more in-depth experience to support the growth and complexity of the business. The Company engaged the services of third party financial experts to assist in the preparation and review of more complex financial transactions. The Company purchased technology that will value the warrant liabilities as well as all equity compensation.
3	The Company did not sufficiently design internal controls to provide an appropriate level of oversight regarding the financial recordkeeping and review of the Company's cut-off procedures as they relate to the accounts payable and valuation of supplier liabilities.	The Company enhanced its finance team to add more in-depth experience to support the growth and complexity of the business. The Company engaged the services of third party financial experts to assist in the preparation and review of more complex financial transactions. The Company designed improved internal controls related to supplier liabilities, procurement and cut-off.

Item 16. [Reserved]

Item 16A. Audit Committee Financial Expert

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

Item 16B. Code of Ethics

The Company has adopted a Code of 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 Item 16B of the Form 20-F.

All waivers of the Code with respect to any of the employees, officers or directors covered by it will be promptly disclosed as required by applicable securities rules and regulations. During the fiscal year ended December 31, 2021, the Company did not waive or implicitly waive any provision of the Code with respect to any of the Company's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions.

Item 16C. Principal Accountant Fees and Services

The following table shows the aggregate fees billed to the Company by BDO Canada LLP, Chartered Professional Accountants and Licensed Public Accountants, located in Toronto, Ontario, PCAOB ID# 1227, the Company's independent registered public auditing firm, in each of the last two years.

Financial Year Ended	Audit Fees[(1)]	Audit-Related Fees[(2)]	Tax Fees[(3)]	All Other Fees[(4)]
December 31, 2021	$ 96,988	$ 22,832	$ 17,970	$ 11,081
December 31, 2020	$ 70,779	$ 37,064	$ 7,058	$ 47,855

Notes:

(1) "Audit Fees" are fees billed by the Company's external auditor for services provided in auditing the Company's financial statements for the financial year.
(2) "Audit-Related Fees" are fees not included in Audit Fees that are billed by the auditor for assurance and related services that are reasonably related to performing the audit or reviewing the Company's interim financial statements.
(3) "Tax Fees" are fees billed by the auditor for professional services rendered for tax compliance, tax advice and tax planning.
(4) "All Other Fees" were paid for audit related services including regulatory filings and comfort letters in connection with prospectus offerings completed during the calendar year.

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

The Audit Committee pre-approves all audit services to be provided to the Company by its independent auditors. Non-audit services that are prohibited to be provided to the Company by its independent auditors may not be pre-approved. In addition, prior to the granting of 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, 2021 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.

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

None.

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

None.

Item 16F. Changes in Registrant's Certifying Accountant

None.

Item 16G. Corporate Governance

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

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

The Company has elected to follow Canadian practices consistent with the requirements of the TSX and the 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.

Shareholder Approval Requirements – Equity Compensation: Nasdaq Stock Market Rule 5635(c) ("Rule 5635(c)") requires shareholder approval prior to the issuance of securities when a stock option or purchase plan is established or materially amended or other equity compensation arrangement are made or materially amended, pursuant to which stock may be acquired by officers, directors, employees, or consultants of the Company.

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

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

Item 16H. Mine Safety Disclosure

Pursuant to Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, issuers that are operators, or that have a subsidiary that is an operator, of a coal or other mine in the United States are required to disclose in their periodic reports filed with the SEC information regarding specified health and safety violations, orders and citations, related assessments and legal actions, and mining-related fatalities with respect to mining operations and properties in the United States that are subject to regulation by the Federal Mine Safety and Health Administration ("**MSHA**") under the Federal Mine Safety and Health Act of 1977 (the "**Mine Act**"). During the year ended December 31, 2021, the Company had no mines in the United States or elsewhere that were subject to regulation by the MSHA under the Mine Act.

Item 16I. Disclosure Regarding Foreign Jurisdictions That Prevent Inspections

Not Applicable.

PART III.

Item 17. Financial Statements

See "*Item 18 – Financial Statements*".

Item 18. Financial Statements

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

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

- Independent Auditor' Report dated March 23, 2022;
- Balance Sheets as at December 31, 2021 and 2020;
- Statements of Net and Comprehensive Loss for the years ended December 31, 2021, 2020 and 2019;
- Statement of Shareholders' Equity and Deficit for the years ended December 31, 2021, 2020 and 2019;
- Statements of Cash Flows for the years ended December 31, 2021, 2020 and 2019; and
- Notes to the Financial Statements;

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BDO Canada LLP
360 Oakville Place Drive, Suite 500
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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, 2021 and 2020, the related consolidated statements of net and comprehensive loss, shareholders' deficit, and cash flows for the years ended December 31, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for the years ended December 31, 2021, 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.

/s/ BDO Canada LLP

Chartered Professional Accountants, Licensed Public Accountants

Oakville, Canada
March 23, 2022

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

Consolidated Statements of Financial Position
(in thousands of US dollars)

	Notes	As at December 31, 2021 $	As at December 31, 2020 $
ASSETS			
CURRENT ASSETS			
Cash		**32,306**	25,469
Accounts receivable	*4*	**8,280**	-
Prepaid expenses, deposits and receivables		**3,076**	1,479
TOTAL CURRENT ASSETS		**43,662**	26,948
NON-CURRENT ASSETS			
Right-of-use assets, net	*5*	**1,177**	867
Property, plant and equipment, net	*6*	**464**	245
Patent rights, net	*7*	**1,919**	1,778
TOTAL NON-CURRENT ASSETS		**3,560**	2,890
TOTAL ASSETS		**47,222**	29,838
LIABILITIES			
CURRENT LIABILITIES			
Accounts payable and accrued liabilities		**5,616**	4,528
Current portion of lease obligations	*5*	**346**	166
Current portion of note payable	*8*	**-**	1,885
Warrant derivative liability	*9*	**4,930**	36,317
TOTAL CURRENT LIABILITIES		**10,892**	42,896
NON-CURRENT LIABILITIES			
Deferred income tax liabilities	*13*	**56**	-
Lease obligations	*5*	**981**	751
TOTAL LIABILITIES		**11,929**	43,647
SHAREHOLDERS' EQUITY (DEFICIT)			
Share capital	*10*	**263,364**	215,151
Contributed surplus – warrant reserve	*11*	**11,749**	668
Contributed surplus		**14,067**	9,401
Deficit		**(253,887)**	(239,029)
TOTAL SHAREHOLDERS' EQUITY (DEFICIT)		**35,293**	(13,809)
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**47,222**	29,838

See accompanying notes to these consolidated financial statements.

Consolidated Statements of Net Loss and Comprehensive Loss
(in thousands of US dollars, except share and per share amounts)

	Note	Year ended December 31		
		2021	**2020**	**2019**
		$	$	$
Revenues	4	**20,093**	20,000	-
Expenses				
Research and development		**37,955**	7,937	51,418
General and administrative		**12,426**	7,629	7,815
Depreciation and amortization		**699**	283	33
Total expenses		**51,080**	15,849	59,266
Net (loss) income from operations		**(30,987)**	4,151	(59,266)
Other (Income) Expenses				
Finance income		**(73)**	(29)	(116)
Finance expense		**125**	1,091	423
Foreign exchange loss		**76**	114	38
Other income	4	**(605)**	-	-
(Gain) loss on fair value of warrant	9	**(15,708)**	27,856	(19,801)
Warrant derivative issue cost		**-**	1,816	2,097
Gain on settlement		**-**	(2,513)	-
Total other (income) expenses		**(16,185)**	28,335	(17,359)
Income tax expense	13	**56**	-	-
Net and comprehensive loss		**(14,858)**	(24,184)	(41,907)
Basic and diluted loss per share	14	**(0.14)**	(0.36)	(1.37)

See accompanying notes to these consolidated financial statements.

Consolidated Statements of Cash Flows
(in thousands of US dollars)

	Note	Year ended December 31		
		2021	2020	2019
		$	$	$
OPERATING ACTIVITIES				
Net loss and comprehensive loss		**(14,858)**	(24,184)	(41,907)
Items not involving current cash flows:				
Depreciation and amortization		**699**	283	33
Interest expense on lease liabilities		**73**	36	-
Share-based compensation expense	12	**4,036**	1,097	1,651
(Gain) loss on change in fair value of warrants	9	**(15,708)**	27,856	(19,801)
Accrued interest on Note payable		**159**	385	-
Other income		**(605)**	-	-
Deferred income tax expense		**56**	-	-
Warrant liability-foreign exchange adjustment		**43**	95	17
Non-cash issue costs		**-**	764	745
Non-cash settlement included in payables		**25**	(2,262)	-
Changes in non-cash working capital balances				
Receivables		**(10,028)**	-	-
Prepaid expenses and deposits		**(1,597)**	(544)	8,336
Accounts payable and accrued liabilities		**1,088**	(4,371)	4,965
Cash used in operating activities		**(36,617)**	(845)	(45,961)
FINANCING ACTIVITIES				
Exercise of Derivative warrants	9	**8,000**	-	-
January 2021 Equity Offering, net of issuance costs	10 (a)	**10,375**	-	-
February 2021 Equity Offering, net of issuance costs	10 (b)	**21,093**	-	-
Exercise of Equity warrants	9 (c)	**1,985**	-	-
Exercise of stock options		**14**	-	-
Proceeds from issuance of common shares		**2,709**	24,689	35,767
Note payable		**309**	1,500	-
Repayment of lease obligations		**(276)**	(90)	(5)
Cash provided by financing activities		**44,209**	26,099	35,762
INVESTING ACTIVITIES				
Purchase of property, plant and equipment		**(370)**	(280)	-
Purchase of patents		**(385)**	(319)	(458)
Cash used in investing activities		**(755)**	(599)	(458)
Increase (decrease) in cash during the year		**6,837**	24,655	(10,657)
Cash, beginning of the year		**25,469**	814	11,471
Cash, end of the year		**32,306**	25,469	814

See accompanying notes to these consolidated financial statements.

Consolidated Statements of Shareholders' Equity
(in thousands of US dollars)

	Notes	Share Capital 000s	Share Capital $	Contributed Surplus - Warrant Reserve $	Contributed Surplus $	Deficit $	Total $
Balance, December 31, 2019		39,908	194,217	642	8,304	(214,845)	(11,682)
Issuance of common shares, net of issuance costs	*10(c)(d)*	23,924	12,819	-	-	-	12,819
Issuance of broker warrants			(1,029)	1,029	-	-	-
Common stock equivalents converted	*10(d)*	11,500	1	-	-	-	1
Share issue expense			(488)	-	-	-	(488)
Derivative warrants exercised		7,853	8,628				8,628
Stock-based compensation expense		-	-	-	1,097	-	1,097
Net loss and comprehensive loss		-	-	-	-	(24,184)	(24,184)
Balance, December 31, 2020		83,185	214,148	1,671	9,401	(239,029)	(13,809)
Derivative warrants exercised	*9*	8,000	8,000	-	-	-	8,000
Derivative warrants exercised– fair value adjustment	*9*	-	15,722	-	-	-	15,722
January 2021 equity offering, net of issuance costs	*10(a)*	7,419	7,211	3,164	-	-	10,375
January 2021 equity offering, broker warrants	*10(a)*	-	(1,384)	1,384	-	-	-
February 2021 equity offering, net of issuance costs	*10(b)*	9,585	15,165	5,928	-	-	21,093
February 2021 equity offering, broker warrants	*10(b)*	-	(1,238)	1,238	-	-	-
Equity warrants exercised	*11*	1,319	2,979	(994)	-	-	1,985
Equity warrants expired		-	-	(642)	642	-	-
Stock options exercised		20	27	-	(12)	-	15
Sale of common shares to Aspire	*10(c)*	1,600	2,709	-	-	-	2,709
Issuance of common shares to consultant		75	25	-	-	-	25
Stock-based compensation expense		-	-	-	4,036	-	4,036
Net loss and comprehensive loss		-	-	-	-	(14,858)	(14,858)
Balance, December 31, 2021		**111,203**	**263,364**	**11,749**	**14,067**	**(253,887)**	**35,293**

See accompanying notes to these consolidated financial statements.

1. NATURE OF BUSINESS

Titan Medical Inc. ("Titan" or the "Company") is a medical technology company focused on enhancing robotic assisted surgery using innovative technologies. The Enos™ robotic single access surgical system (the "Enos System") is being developed with an ergonomic focus to provide a surgical experience that imitates real-life movements that surgeons demand and includes multi-articulating instruments designed to allow surgeons an increased range of motion in a confined space, with dexterity and the ability to exert the forces necessary to complete common surgical tasks. With the Enos system, Titan intends to initially pursue gynecologic surgical indications. By focusing on a single access point, the Company believes that patient trauma, post-operative pain and scarring can be reduced, and patients may be able to recover from surgery faster.

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 76 Berkeley Street, Toronto, Ontario, Canada M5A 2W7. On May 29, 2020, the Company established Titan Medical USA Inc. ("Titan USA" or the "Subsidiary"), a Delaware corporation and a wholly owned subsidiary of the Company.

2. SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

Statement of compliance

These consolidated financial statements of the Company were prepared by management in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") in effect as at December 31, 2021.

These consolidated financial statements were authorized for issue by the Board of Directors on March 23, 2022.

Basis of measurement

These Consolidated Financial Statements have been prepared under the historical cost convention, except for the revaluation of certain financial liabilities to fair value. Items included in the financial statements of each consolidated entity in the Company are measured using the currency of the primary economic environment in which the entity operates (the functional currency). These Consolidated Financial Statements are presented in US dollars, which is the Company's functional currency.

Basis of consolidation

These consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated in these consolidated financial statements.

Estimates, assumptions, and judgments

The preparation of these consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets, liabilities and the disclosure of contingent assets and liabilities at the reporting date. Uncertainty about these assumptions and estimates could result in adjustments to the carrying amount of an asset or liability or the reported amount of revenue and expense in future periods. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Key areas of judgment and estimation are as follows:

Leases

The Company cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate ("IBR") to measure lease liabilities. The IBR is the rate of interest that the Company would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use ("ROU") asset. The IBR, therefore, requires estimation when no observable rates are available. The Company estimates the IBR using observable inputs such as market interest rates and is required to make certain entity-specific estimates such as the stand-alone credit rating.

Stock-based payments and warrants

The Company uses the Black-Scholes option pricing model to estimate the fair value of stock-based compensation and warrant reserves, which require the use of several input variables. Measurement date estimates include share price, expected volatility (based on weighted average historical volatility adjusted for changes expected due to publicly available information of a comparable peer group), weighted average expected life of the instruments, expected dividends and the risk-free interest rate (based on government bonds). The inputs to the model are subject to estimate and changes in these inputs can materially impact the estimated fair value of stock-based payments and warrants.

Asset impairments for non-financial assets and impairment reversals

The Company's estimate of the recoverable amount for the purpose of impairment testing requires management to make assumptions regarding estimates of the present value of future cash flows including growth opportunities, economic risk, and the discount rate.

Income taxes and deferred taxes

The Company is subject to income taxes in Canada and other foreign jurisdictions. The calculation of income taxes in many cases, however, requires significant judgment in interpreting tax rules and regulations. The Company's tax filings are subject to audits which could materially change the amount of current and deferred income taxes and liabilities.

Foreign Currency Transactions

Monetary assets and liabilities denominated in foreign currencies are translated into the applicable functional currency of the entity at exchange rates prevailing at the consolidated statement of financial position date. Revenue and expenses are translated at the average rate for the period. The gains and losses from foreign currency denominated transactions are included in foreign exchange gain/loss in the consolidated statement of loss and comprehensive loss.

Cash

Cash consist of cash in banks and highly liquid investments with original terms to maturity at the date of acquisition of less than three months.

Property and Equipment

Property and equipment are measured at cost less accumulated depreciation and accumulated impairment losses, if any. Costs include the purchase price and the directly attributable costs required to bring the asset to the condition necessary for the asset to be capable of operating in the manner intended by management. When components of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment and depreciated accordingly. The cost of replacing or repairing a component of an item is recognized in the carrying amount of the item if it is probable that future economic benefits will occur and the cost can be measured reliably. The costs of routine maintenance are recognized in profit or loss as incurred. Depreciation is calculated on the straight-line basis over the estimated useful lives of the assets as follows:

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

The Company reviews the residual value, useful lives and depreciation methods used on an annual basis and, where revisions are required, the Company applies such changes in estimates on a prospective basis.

Patent Rights

Patent rights are carried at cost less accumulated amortization. Amortization is calculated on a straight-line basis over the estimated useful lives of the patents, as prescribed by the grant body, which range up to 20 years. The Company continually evaluates the remaining estimated useful life of its patent rights to determine whether events and circumstances warrant a revision to the remaining period of amortization and are accounted for prospectively from the date of the change.

Deferred Income Taxes

Income taxes are accounted for using the liability method. Deferred tax assets and liabilities are recognized for the differences between the tax basis and carrying amounts of assets and liabilities, for operating losses and for tax credit carry-forwards. Deferred tax assets are recognized to the extent that it is probable that future taxable income will be available against which temporary differences can be utilized. Deferred tax assets and liabilities are measured using enacted or substantively enacted tax rates and laws.

Impairment testing of non-financial assets

Non-financial assets, other than Goodwill, are assessed for impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable. When testing for impairment, assets are group at the lowest levels for which there are largely independent cash inflows (cash-generating units). Some assets are tested individually for impairment and some are tested at a cash-generating unit level. An impairment loss is recognized for the amount by which an asset's or cash-generating unit's carrying amount exceeds its recoverable amount, which is the higher of fair value less costs of disposal and value in use.

Research and Development

Research and development ("R&D") expenses consist primarily of engineering, product development, clinical studies to develop and support the Enos System, regulatory expenses and other costs associated with products and technologies that are in development. These expenses include compensation, share-based compensation, supplies, consulting, prototyping, testing, materials. Additionally, R&D expenses include cost associated with our clinical studies, including clinical trial design, compliance and quality assurance functions. Development costs that meet specific criteria related to technical, market and financial feasibility will be capitalized. To date, all development costs have been expensed.

General and Administrative Expenses

General and administrative ("G&A") expenses consist primarily of compensation for personnel, including share-based compensation related to executives, finance and accounting, information technology and human resource functions. Other G&A expenses including public company costs, professional services, insurance costs and general corporate expenses.

Leases

At inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Company recognizes a ROU asset and a lease liability at the lease commencement date, which is the date the leased asset is available for use. The Company has elected not to separate lease and non- lease components and instead treats them all as lease payments and a single lease component.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. The incremental borrowing rate is the rate that the Company would have to pay to borrow the funds necessary to obtain an asset of similar value to the ROU asset in a similar economic environment with similar terms, security and conditions. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. The lease liability is measured at amortized cost using the effective interest method. The lease liability is remeasured when there is a change in future lease payments arising from a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the ROU asset unless it has been reduced to zero. Any further reduction in the lease liability is then recognized in profit or loss.

The ROU asset is initially measured based on the initial lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. The ROU assets are depreciated over the shorter of the lease term and the useful life of the underlying asset using the straight-line method as this most closely reflects the expected pattern of the consumption of the future economic benefits. In addition, the ROU asset can be periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liability.

The lease payments associated with short-term and low-value leases are recognized as an expense on a straight-line basis over the lease term as the Company has elected the relevant practical expedients.

Segment Reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker ("CODM"). The CODM is the person or persons who are responsible for allocating resources and assessing performance of the operating segments. The CODM has been identified as the President and Chief Executive Officer.

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.

Financial Instruments

Recognition and initial measurement

Financial assets and liabilities are recognized when the Company becomes a party to the contractual provisions of the financial instrument. With the exception of accounts receivable that do not have a significant financing component, all financial assets and liabilities are initially recognized at fair value plus or minus directly attributable transaction costs as appropriate, except for financial assets at fair value through profit and loss ("FVTPL"), for which transaction costs are expensed. Accounts receivable that do not have a significant financing component are initially measured at the transaction price determined in accordance with IFRS 15. Accounts receivable are recognized on the date that they originate and all other financial instruments are recognized when the Company becomes party to the contractual provisions of the instrument.

Financial assets

The classification of financial assets depends on the business model for managing the financial assets and the associated contractual cash flows. A financial asset is measured at amortized cost if it is held within a business model whose objective is to hold assets to collect contractual cash flows, and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Company's financial assets consist of cash and accounts receivable: all are classified as amortized cost.

Financial liabilities

The Company determines the classification of its financial liabilities at initial recognition. The Company's financial liabilities consist of accounts payable and accrued liabilities. Accounts payable and accrued liabilities are classified as amortized cost.

Subsequent measurement

Subsequent to initial recognition, financial assets and liabilities classified as amortized cost are measured using the effective interest method, less, in the case of financial assets, any impairment. Interest income and expense, foreign exchange gains and losses, impairment and any gain or loss on de-recognition are recognized in profit and loss.

De-recognition

The Company de-recognizes a financial asset when the rights to receive cash flows from the financial asset have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership.

The Company de-recognizes a financial liability when the contractual obligations are discharged, canceled or expire.

Fair Value Measurement of Financial Instruments

The Company uses various valuation techniques and assumptions when measuring fair value of its financial assets and financial liabilities. The Company utilizes market data or assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique.

The Company's fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value. The three levels of the fair value hierarchy are:

Level 1 – Inputs are based on quoted prices (unadjusted) in active markets that are accessible at the reporting date for identical assets or liabilities;

Level 2 – Inputs are based on quoted prices included in Level 1 that are observable for the asset or liability either directly (i.e., prices) or indirectly (i.e., derived from prices); and

Level 3 – Inputs are based on prices or valuation techniques that are both unobservable and significant to the overall fair value measurement.

Derivative financial instruments

The fair value of embedded derivatives is measured using a market approach, based on the difference between the quoted forward exchange rate as of the contract date and quoted forward exchange rate as of the reporting date. The fair value of forward exchange contracts is determined using the quoted forward exchange rates at the reporting date.

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 4). 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.

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. 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.

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.

3. NEW STANDARDS, INTERPRETATIONS AND AMENDMENTS ADOPTED BY THE COMPANY

Certain new standards, interpretations, amendments and improvements to existing standards were issued by the IASB or IFRS Interpretations Committee that are mandatory for fiscal periods beginning on or after January 1, 2022. None of these standards or amendments to existing standards have been early adopted by the Company, and the Company is in process of assessing their impact. The standards impacted that may be applicable to the Company are as follows:

Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2)

In February 2021, the IASB issued Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2). The amendments provide guidance to help entities disclose their material (previously "significant") accounting. The amendments are effective for annual reporting periods beginning on or after January 1, 2023. Earlier application is permitted.

Definition of Accounting Estimates (Amendments to IAS 8)

In February 2021, the IASB issued Definition of Accounting Estimates (Amendments to IAS 8 - Accounting Policies, Changes in Accounting Estimates and Errors). The amendments define accounting estimates and clarify the distinction between changes in accounting estimates and changes in accounting policies. The amendments are effective for annual reporting periods beginning on or after January 1, 2023. Earlier application is permitted.

Deferred Tax Related to Assets and Liabilities Arising From a Single Transaction (Amendments to IAS 12)

IAS 12, Income Taxes has been revised to incorporate amendments issued by the IASB in May 2021. The amendments clarify the accounting for deferred tax on transactions such as leases and decommissioning obligations. The scope of the recognition exemption no longer applies to transactions that, on initial recognition, give rise to equal taxable and deduction temporary differences. The amendments are effective for annual reporting periods beginning on or after January 1, 2023. Earlier application is permitted.

Amendments to IFRS 9, Financial Instruments, Fees in the '10 per cent' Test for Derecognition of Financial Liabilities

As part of its 2018 - 2020 annual improvements to the IFRS standards process, the IASB issued an amendment to IFRS 9. The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022, with earlier adoption permitted. The Company will apply the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

Amendments to IAS 1, Classification of Liabilities as Current or Non-Current

In January 2020, the IASB issued Classification of Liabilities as Current or Non-Current, amending IAS 1, Presentation of Financial Statements to improve the information provided about non-current liabilities with covenants. The proposed amendments address the classification, presentation and disclosure of liabilities for which an entity's right to defer settlement for at least 12 months is subject to compliance with conditions after the reporting period and are effective for annual reporting periods beginning on or after January 1, 2023, with earlier adoption permitted.

Other new and amended standards and interpretations issued by the IASB applicable for periods within the current annual reporting year did not impact Titan as they are either not relevant to Titan's activities or apply to accounting standards which are consistent with Titan's current accounting policies.

Other accounting standards or amendments to existing accounting standards that have been issued, but have future effective dates, are either not applicable or are not expected to have a significant impact on the Company's annual Consolidated Financial Statements.

4. RECEIVABLES AND REVENUES

On June 3, 2020, the Company entered into a development and license agreement with a U.S. affiliate of Medtronic plc ("Medtronic") in connection with the development of robotic assisted surgical technologies and a separate license agreement with Medtronic in respect of certain previously developed Company technologies. Total consideration for the development agreement was up to $31 million and total consideration for the licensing agreement was $10 million. The Company has received a total of $40.6 million from the licensing and development agreements.

In 2020, the Company received $10 million for the completion of the first milestone and an additional $10 million pursuant to the licensing agreement for intellectual property rights and know-how.

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

In Q2 2021, the Company received $10 million for the completion of the second milestone. On December 30, 2021, upon receiving written notice from Medtronic confirming that the final milestone was achieved, Titan accrued a receivable and recognized $10 million of revenue. Concurrent with the achievement of the final milestone, the Company is obligated under the development agreement to repay the senior secured note. The $10 million receivable is presented net of the $1.75 million balance remaining on the note payable (see Note 8).

5. RIGHT-OF-USE ASSETS AND LEASE LIABILITIES

The Company leases its facility in Chapel Hill, North Carolina. This lease has remaining lease terms of approximately3.5 years. The Company leased a facility in Toronto, Ontario for its corporate office. The lease expired in November 2021. The Company does not have leases with residual value guarantees, or leases not yet commenced to which we are committed. Lease liabilities have been measured by discounting future lease payments using the Company's incremental borrowing rate of 6.0% as rates implicit in the leases were not readily determinable.

The following table summarizes the Company's right-of-use assets outstanding at December 31:

	2021	2020
	$	$
Balance, January 1	**867**	31
Additions	**613**	941
Amortization expense	**(303)**	(105)
Balance, December 31	**1,177**	**867**

The following table summarizes the Company's lease liabilities outstanding at December 31:

	2021	2020
	$	$
Balance, January 1	**917**	30
Additions	**613**	941
Payment of lease liabilities	**(276)**	(90)
Interest expense on lease liabilities	**73**	36
Balance, December 31	**1,327**	**917**
Less than one year	**346**	166
One to five years	**981**	751
	1,327	917

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

6. PROPERTY, PLANT AND EQUIPMENT

	Machinery	Computer Equipment	Furniture & Fixtures	Leasehold Improvements	Total
	$	$	$	$	$
Cost					
As at December 31, 2019	--	--	--	--	--
Additions	153	49	54	24	280
As at December 31, 2020	153	49	54	24	280
Additions	134	173	18	45	370
As at December 31, 2021	287	222	72	69	650
Amortization					
As at December 31, 2019	--	--	--	--	--
Depreciation expense	-	13	20	2	35
As at December 31, 2020	--	13	20	2	35
Depreciation expense	72	49	15	15	151
As at December 31, 2021	72	62	35	17	186
Net Book Value					
As at December 31, 2020	153	36	34	22	245
As at December 31, 2021	215	160	37	52	464

7. PATENT RIGHTS

	Cost	Accumulated Amortization	Net Book Value
	$	$	$
As at December 31, 2019	1,857	(255)	1,602
Additions	319	-	319
Amortization expense	-	(97)	(97)
Impairment	(46)	-	(46)
As at December 31, 2020	2,130	(352)	1,778
Additions	385	-	385
Amortization expense	-	(244)	(244)
As at December 31, 2021	2,515	(596)	1,919

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

8. NOTE PAYABLE

On June 3, 2020, the Company entered into a development and license agreement with Medtronic in connection with the development of robotic assisted surgical technologies and a separate license agreement with Medtronic in respect of certain previously developed Company technologies. On the same date, Titan executed the Amended and Restated Promissory Note ("A&R Note") with Medtronic, whereby Titan borrowed an initial amount of $1.5 million from Medtronic. The A&R Note bears 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.

Under the agreement, the Company has a legally enforceable right for net settlement of the receivable related to the final milestone payment and the A&R Note payable. Therefore, the $10 million receivable related to the final milestone revenues from Medtronic (Note 4) is presented net of the $1.75 million remaining note payable.

Upon meeting the final milestone, Titan was also entitled to the reimbursement of legal and other transaction costs, up to a maximum of $1 million. These costs totaled $605 and were previously capitalized to the A&R Note as payable to Medtronic. As Medtronic will be assuming responsibility for these costs per the agreement, the $605 reduction to the A&R note was recorded as other income.

9. WARRANT DERIVATIVE LIABILITY

The warrant derivative liability arises from Company's common share purchase warrants in connection with historical equity offerings. These warrants are priced in non-functional currency which resulted in having exercise prices that are not fixed and include features that have a cashless exercise option or a ratchet down provision. Under IFRS 9 *Financial Instruments and IAS 32 Financial Instruments*: Presentation, warrants with an exercise price denominated in a currency that differs from the Company's functional currency are treated as a derivative measured at fair value with subsequent changes in fair value accounted for through Net Loss and Comprehensive Loss. There is no cash flow impact as a result of the accounting treatment for changes in the fair value of the warrant derivative or when warrants expired unexercised.

	Number of Warrants Outstanding	Fair Value of Warrant Derivative
		$
As at December 31, 2019	21,203,411	3,621
Issuance	15,257,252	10,692
Exercised	(7,257,252)	(5,948)
Items that were classified to net loss:		
Expired	(233,740)	(26)
Change in fair value	-	27,882
Foreign exchange impact	-	96
As at December 31, 2020	28,969,671	36,317
Exercised	(8,000,000)	(15,722)
Items that were classified to net loss:		
Expired	(2,014,390)	(274)
Change in fair value	-	(15,434)
Foreign exchange impact	-	43
As at December 31, 2021	**18,955,281**	**4,930**

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

As at December 31, 2021, the following derivative warrants were outstanding:

Issue Date	Expiry Date	Exercise Price	Currency	Number Issued	Number Outstanding
					$
29-Jun-17	29-Jun-22	6.00	CAD	1,612,955	75,810
21-Jul-17	29-Jun-22	6.00	CAD	370,567	370,567
24-Aug-17	24-Aug-22	6.00	CAD	563,067	563,067
5-Dec-17	5-Dec-22	18.00	CAD	1,533,333	1,533,333
10-Apr-18	10-Apr-23	10.50	CAD	1,126,665	1,126,665
10-May-18	10-Apr-23	10.50	CAD	168,889	168,889
10-Aug-18	10-Aug-23	2.92	USD	7,679,574	6,661,068
21-Mar-19	21-Mar-24	3.95	USD	8,455,882	8,445,882
Balance at December 31, 2021				**21,510,932**	**18,955,281**

10. SHARE CAPITAL

Authorized: Unlimited number of no par value common shares

		Share Capital Number	Share Capital Amount
			$
Balance - December 31, 2019		39,907,681	194,217
Issued pursuant to vendor		501,148	250
Issued pursuant to "At the Market" (ATM) equity agreement	(c)	4,408,048	2,072
Issued pursuant to agency agreements	(d)	19,014,504	10,497
Equity Offering-broker warrants		0	(1,029)
Common share equivalents converted	(d)	11,500,000	1
Share issue expense		0	(488)
Warrants exercised		7,853,462	8,628
Balance - December 31, 2020		83,184,843	214,148
Derivative warrants exercised		8,000,000	8,000
Derivative warrants exercised - fair value adjustment		0	15,722
January 2021 Equity Offering, net of issuance costs	(a)	7,419,354	7,211
January 2021 Equity Offering-broker warrants			(1,384)
February 2021 Equity Offering, net of issuance costs	(b)	9,585,250	15,165
February 2021 Equity Offering-broker warrants			(1,238)
Equity warrants exercised		1,318,675	2,979
Options exercised		19,568	27
Issued pursuant to ATM equity agreement	(c)	1,600,000	2,709
Issuance of common shares to consultant		75,000	25
Balance - December 31, 2021		**111,202,690**	**263,364**

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

(a) January 2021 Equity Offering

On January 26, 2021, the Company closed an offering of 7,419,354 units of the Company ("January 2021 Units) sold on a "bought deal" basis, at a price of $1.55 per January 2021 Unit for aggregate gross proceeds of $11,500 ($10,231 net of share issuance costs). 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 $2.00 per share until January 26, 2026. In connection with the January 2021 Offering, the Company issued 518,234 broker warrants, each exercisable at $1.9375 until January 26, 2023 and treated as share issuance costs. January 2021 Warrants and broker warrants associated with this raise qualified as equity classification.

(b) February 2021 Equity Offering

On February 24, 2021, the Company closed an offering of 9,585,250 units of the Company ("February 2021 Units") at a price of $2.40 per February 2021 Unit for aggregate gross proceeds of $23,005 ($21,093 net of share issuance costs). 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 is exercisable to acquire one Common Share at an exercise price of $3.00 per share until February 24, 2023. In connection with the February 2021 Offering, the Company issued 670,967 broker warrants exercisable at $3.00 until February 24, 2023 and treated as share issuance costs. February 2021 Warrants and broker warrants associated with this raise qualified as equity classification.

(c) Aspire "At the Market" (ATM) Common Share Purchase Agreement

On December 23, 2019, the Company entered into an agreement with Aspire Capital Fund, LLC ("Aspire"). Under the terms of this agreement, Aspire committed to purchase up to $35 million of Common Shares for a maximum of 9,729,777 Common Shares.

During 2021, the Company issued 1,600,000 Common Shares to Aspire for proceeds of $2,709. To date, the Company has issued 6,981,048 Common Shares of Titan for total proceeds of $5.2 million. The balance remaining on Aspire's commitment is 2,748,729 Common Shares (with a maximum value of $29.8 million), accessible at the Company's request from time to time, until June 23, 2022, subject to the terms and conditions of the agreement.

During 2020, the Company issued 4,408,048 Common Shares to Aspire for proceeds of $2,072.

(d) Agency Agreement

During 2020, the Company completed 3 separate offerings of securities pursuant to an agency agreement with H.C. Wainwright ("Wainwright") which are summarized below:

	Share Capital Number	Share Capital Amount	Common Share Equivalents	Common Share Purchase Warrants	Conversion price of the Warrants
		$			$
June, 2020 Offering	6,500,000	18,000	11,500,000	9,000,000	1.00
Allocation to warrant derivative liability		(9,709)			
May, 2020 Offering	5,514,504	2,000		2,757,252	0.30
Allocation to warrant derivative liability		(508)			
March, 2020 Offering	7,000,000	1,190		3,500,000	0.19
Allocation to warrant derivative liability		(476)			
	19,014,504	**10,497**	**11,500,000**	**15,257,252**	
Conversion price of Common Share Equivalents			$0.0001		

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

11. CONTRIBUTED SURPLUS-WARRANT RESERVE

The Company issued 9,691,503 warrants pursuant to the equity offerings closed in January and February of 2021. Each warrant entitled the holder to purchase one common share at a fixed price, these warrants were classified as equity under IAS 32. These equity warrants expire between January 26, 2023 and November 6, 2025 and are not revalued at each reporting period.

	Equity Warrants	Average exercise price	Warrant Reserve
		$	$
Balance at January 1, 2020	591,911	3.40	642
Issuance of broker warrants	1,539,805	1.08	1,029
Balance at January 1, 2021	2,131,716	1.72	1,671
January 2021 Equity Offering	3,709,677	2.00	3,164
January 2021 Equity Offering-broker warrants	518,234	1.94	1,384
February 2021 Equity Offering	4,792,625	3.00	5,928
February 2021 Equity Offering-broker warrants	670,967	3.00	1,238
Exercised	(1,318,675)	1.51	(994)
Expired	(591,911)	3.40	(642)
Balance at December 31, 2021	**9,912,633**	**2.47**	**11,749**

As at December 31, 2021, the following equity warrants were outstanding:

Issue Date	Expiry Date	Exercise Price	Currency	Number Issued	Number Outstanding
		$			
27-Mar-20	27-Mar-25	0.21	USD	154,350	93,100
06-May-20	06-Nov-25	0.45	USD	125,455	73,343
10-Jun-20	10-Jun-24	1.25	USD	1,260,000	643,387
26-Jan-21	26-Jan-23	1.94	USD	518,234	515,834
26-Jan-21	26-Jan-26	2.00	USD	3,709,677	3,123,377
24-Feb-21	24-Feb-23	3.00	USD	4,792,625	4,792,625
24-Feb-21	24-Feb-23	3.00	USD	670,967	670,967
Balance at December 31, 2021				**11,231,308**	**9,912,633**

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

12. SHARE-BASED COMPENSATION

The Company's share-based compensation plan includes stock options and Restricted Share Units ("RSU"). The Company has reserved up to 15% of the issued and outstanding Common Shares for the granting of stock options and RSU to eligible Employees, Officers, Directors and external consultants.

Common shares outstanding, Dec 31, 2021	111,202,690	
Share-based compensation available for issuance: 15%		16,680,404
Stock options outstanding, Dec 31, 2021		(5,257,089)
RSU outstanding, Dec 31, 2021		(1,581,607)
Share-based compensation available for future grants		**9,841,708**

(a) Stock Options

The Company granted stock options to acquire common stock through our stock option plan of which the following are outstanding as December 31:

	2021		2020		2019	
	Stock Options	Weighted Average Exercise Price	Stock Options	Weighted Average Exercise Price	Stock Options	Weighted Average Exercise Price
		$		$		$
Balance, January 1	2,923,770	1.76	1,714,421	3.60	925,782	12.70
Granted	3,725,845	1.87	2,076,785	0.95	879,412	2.75
Forfeited	(1,237,635)	2.11	(867,436)	3.10	(90,773)	15.04
Expired	(135,323)	2.83	-	-	-	-
Exercised	(19,568)	0.73	-	-	-	-
Balance, December 31	5,257,089	1.73	2,923,770	1.76	1,714,421	3.60
Exercisable, December 31	1,214,023	2.44	584,585	3.49	663,853	4.67

The following table summarizes the stock options outstanding and exercisable at December 31, 2021:

	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
		(years)	$		$
Range of Exercise Prices					
$0.52 - $1.00	1,839,867	5.9	0.90	417,717	0.90
$1.01 - $2.00	1,871,433	6.4	1.62	128,683	1.36
$2.01 - $3.00	910,758	6.1	2.22	35,925	2.55
$3.01 - $4.00	623,550	2.4	3.60	620,217	3.60
$4.01 - $7.12	11,481	3.5	7.12	11,481	7.12
Balance, December 31	5,257,089	5.7	1.73	1,214,023	2.44

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

The Company uses the Black-Scholes valuation model to estimate the fair value. The estimated fair value of stock options granted during the year was determined using the following weighted average assumptions:

	2021	**2020**	**2019**
Risk-free interest rate	0.48%	0.30%	1.44%
Expected hold period to exercise	3.4 years	4.0 years	3.5 years
Expected share price volatility	157.52%	149.61%	97.91%
Expected dividend yield	Nil	Nil	Nil
Weighted average of fair value of options	$1.59	$0.89	$1.49

(b) Restricted Share Units

The Company granted RSUs to Officers and Directors through our incentive share award plan. Grants of RSUs to Directors vest either immediately or on the date of the next Annual General Meeting. Grants of RSUs to Officers vest over a four-year period. The following RSUs are outstanding at December 31:

	Number of RSUs
Balance at January 1, 2021	--
Granted	2,291,815
Released	--
Cancelled	(710,208)
Balance at December 31, 2021	**1,581,607**

(c) Stock-Based Compensation

The following table shows the stock-based compensation expense.

	Year ended December 31		
	2021	2020	2019
	$	$	$
Stock options	**1,973**	1,097	1,651
RSUs	**1,695**	-	-
G&A - Stock options & RSUs	**3,668**	1,097	1,651
R&D - Stock options	**368**	-	-
Share-based compensation expense	**4,036**	1,097	1,651

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

13. TAXES

	Year ended December 31,		
	2021	2020	2019
	$	$	$
Net loss before income taxes	**(14,802)**	(24,185)	(41,907)
Statutory Canadian corporate tax rate	26.5%	26.5%	26.5%
Anticipated tax recovery	**(3,923)**	(6,409)	(11,105)
Share-base compensation	**972**	291	438
Change in fair value of warrant derivative	**(4,162)**	7,382	(5,247)
Other permanent differences	**102**	(153)	(617)
Foreign jurisdiction tax rate difference	**(16)**	(50)	94
Benefit from deductible temporary differences not recognized	**7,083**	(1,061)	16,437
Income tax expense	**56**	-	-
Current income tax expense	**-**	-	-
Deferred income tax expense	**56**	-	-

A deferred income tax asset has not been recognized for certain temporary differences that may be available to reduce income subject to tax in a taxation period subsequent to the year covered by these Consolidated Financial Statements. The temporary differences that have not been recognized in the Consolidated Statements of Financial Position or Consolidated Statements of Net Loss and Comprehensive Loss are identified below:

	December 31, 2021	December 31, 2020
	$	$
Non-capital loss carryforwards	**262,419**	236,883
Scientific Research Experimental Development ("SRED") credits	**5,635**	5,635
Share issuance cost	**3,579**	3,579
Excess carry value of capital assets over book	**3,570**	3,474
	275,203	249,571

As at December 31, 2021, the Company has non-capital losses of $262,419 for Canadian federal and Ontario provincial purposes that are available to offset future taxable income. These non-capital losses expire as follows:

Year of Expiry	Amount
	$
2031	6,534
2032	10,455
2033	10,210
2034	13,784
2035	43,935
2036	28,261
2037	19,604
2038	40,240
2039	60,719
2041	28,677
	262,419

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

14. LOSS PER SHARE

Basic income per share is calculated by dividing net income by the weighted average number of common shares outstanding during the year.

Diluted income per share is calculated by adjusting the weighted average number of common shares outstanding to assume conversion of all potential dilutive stock options to common shares.

	Year ended December 31,		
	2021	2020	2019
Numerator:			
Net income	**($14,858)**	($24,184)	($41,907)
Denominator:			
Weighted average number of common shares outstanding for basic EPS	**108,444,405**	67,008,897	30,689,545
Adjustment for stock options	**-**	-	-
Weighted average number of common shares outstanding for diluted EPS	**108,444,405**	67,008,897	30,689,545
Basic and diluted loss per share	**($0.14)**	($0.36)	($1.37)

15. FINANCIAL RISK MANAGEMENT

Credit Risk
Credit risk is the risk of financial loss to the Company if a licensee or counter party to a financial instrument failsto meet its contractual obligations. Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and accounts receivable.

The Company's cash consists primarily of deposit investments that are held primarily with Canadian chartered banks.

The Company's only customer is a large multinational company which do not have a history of non-payment. Credit risk from accounts receivable encompasses the default risk of the Company's customers.

Liquidity Risk
Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company's objective in managing liquidity risk is to ensure that it has sufficient liquidity available to meet its liabilities when due. The Company manages this risk by managing its capital structure through continuous monitoring of its actual and projected cash flows. At December 31, 2021, the Company had cash of $32.2 million.

Interest Rate Risk
The financial instruments that expose the Company to interest rate risk are its cash. The Company's objectives of managing its cash are to ensure sufficient funds are maintained on hand at all times to meet day-to-day requirements and to place any amounts that are considered in excess of day-to-day requirements on short-term deposit with the Company's banks so that they earn interest. When placing amounts of cash into short-term investments, the Company only places investments with Canadian chartered banks and ensures that access to the amounts placed can be obtained on short notice. A one percent increase/decrease in interest rates would not have resulted in a material increase/decrease in interest income/expense during the year ended December 31, 2021.

Currency Risk
The Company's operating results are subject to changes in the exchange rate of the foreign currencies (primarily Canadian dollar) relative to the US dollar. Any decrease in the value of the Canadian dollar relative to the US dollar has a favourable impact on Canadian dollar denominated operating expenses. A nominal amount of the Company's cash and short-term investments are denominated in Canadian dollars and are subject to changes in the exchange rate of the Canadian dollar relative to the US dollar.

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

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, quarantine periods and social distancing protocol, along with the uncertainty around the disease itself, have caused material disruption to businesses 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.

Russia – Ukraine Conflict

The Russian invasion of Ukraine and the responses by governments around the world raises the prospects of increased cybersecurity attacks, strains on global supply chains, increases in energy prices, chip shortages since Russia and Ukraine are critical suppliers of neon gas and palladium used in chip production and challenges in natural resource extraction, refinement and transportation, among other possible impacts. The conflict may have a direct or indirect material adverse impact on our business, financial condition, results of operations, or cash flows.

16. RELATED-PARTY TRANSACTIONS

Key management personnel are Titan Medical Inc.'s, President & Chief Executive Officer, Chief Financial Officer and Senior Vice-President R&D, General Counsel & Corporate Secretary.

The executive compensation expense to the key management personnel and the Board is as follows:

	Year ended December 31,		
	2021	2020	2019
	$	$	$
Salaries and Benefits	**1,570**	670	803
Board fees	**294**	132	199
Stock-based compensation	**3,093**	455	693
Balance at December 31, 2021	**4,957**	**1,257**	**1,695**

17. COMMITMENTS

As of December 31, 2021, the Company is committed to payments totaling $9.3 million (2020 - $10.7 million) for activities related to the development of the Enos system.

The Company has entered into an agreement with a consultant under which the Company has certain contractual obligations to grant up to 100,000 restricted Common Shares based on the consultant's achievement of multiple pre-determined performance criteria. To-date, the performance criteria have not been achieved and no restricted Common Shares have been granted to the consultant. The agreement expires on May 13, 2022.

The Company has entered into an agreement with a consultant under which the Company has certain contractual obligations to grant up to 125,000 restricted Common Shares based on the consultant's achievement of multiple pre-determined performance criteria. In Q4, 2021, 75,000 Common Shares was issued to the consultant and the agreement was terminated.

18. CAPITAL MANAGEMENT

The Company's objective when managing capital is to maintain a strong statement of financial position. We achieve our objective by obtaining adequate cash resources to support planned activities which include manufacturing the Enos System, filing an IDE with the FDA, clinical studies, filing the De Novo application, administrative costs, and intellectual property expansion and protection. The Company defines its capital as cash and shareholders' equity, which as at December 31, 2021 totaled $67.6 million [December 31, 2020 - $11.7 million].

The Company does not have any debt other than accounts payable and accrued liabilities and lease liabilities. The Company does have commitments related to the Enos System.

In managing its capital, the Company estimates future cash requirements by preparing an annual budget for review and approval by its Board. The budget establishes the approved activities for the upcoming year and estimates the costs associated with these activities.

Historically, the Company has funded its operations through the issuance of additional common shares and common share purchase warrants that upon exercise are converted to common shares and through license revenue received under licensing agreements. While management regularly monitors the capital markets, general market conditions, and the availability of capital, there are no assurances that funds will be made available to the Company in the required amounts or when required. The Company has the ability to sell approximately 2.7 million shares under the terms of the Aspire Agreement, which will expire in June 2022.

On July 30, 2019, the Company filed a Form F-3 registration statement (the "Base Shelf") that qualifies for distribution of up to $125,000,000 of common shares, warrants, or units (the "Securities") in either Canada, the U.S. or both.

Under the Base Shelf, the Company may sell Securities to or through underwriters, dealers, and also may sell Securities directly to purchasers or through agents, subject to obtaining any applicable exemption from registration requirements. The distribution of Securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be subject to change, at market prices prevailing at the time of sale, or at prices related to such prevailing market prices to be negotiated with purchasers and as set forth in an accompanying Prospectus Supplement.

The Base Shelf provides the Company with additional flexibility when managing its cash resources as, under certain circumstances, it can shorten the time period required to close a financing and is expected to increase the number of potential investors that may be prepared to invest in the Company. Funds received as a result of using the Base Shelf would be used in line with the Board approved budget. The Base Shelf is effective until July 30, 2022.

(in thousands of US dollars, except share and per share amounts, unless otherwise stated)

19. EXPENSES BY NATURE

	Year ended December 31,		
	2021	2020	2019
	$	$	$
R&D	**32,197**	7,937	51,418
Personnel costs	**7,616**	2,550	2,547
Professional and consulting	**2,988**	2,829	2,369
Share-based compensation	**4,036**	1,097	1,651
Public company and administrative	**2,866**	1,153	1,248
Severance charges	**678**	-	-
Total of R&D and G&A	**50,381**	15,566	59,233
Depreciation of right-of-use assets	**304**	105	4
Depreciation of property and equipment	**152**	35	-
Amortization of patent rights	**243**	143	29
Depreciation and amortization	**699**	283	33
Total expenses	**51,080**	15,849	59,266

Item 19. Exhibits

Exhibit Number	Name
1.1	Articles of Amalgamation dated July 28, 2008 (incorporated by reference from Exhibit 3.1 to the Company's Form F-3 filed on July 30, 2019)
1.2	Articles of Amendment dated June 19, 2018 (incorporated by reference from Exhibit 3.2 to the Company's Form F-3 filed on July 30, 2019)
1.3	Amended and Restated By-Law No. 1 dated June 9, 2015 (incorporated by reference from Exhibit 3.3 to the Company's Form F-3 filed on July 30, 2019)
2.1	Description of the Company's Securities Registered Under Section 12 of the Securities Exchange Act of 1934
4.1	Stock Option Plan
4.2	Share Unit Plan (incorporated by reference from Exhibit 99.2 to the Company's Form 6-K filed on April 16, 2021)
4.3	Deferred Share Unit Plan (incorporated by reference from Exhibit 99.3 to the Company's Form 6-K filed on April 16, 2021)
4.4	License Agreement (incorporated by reference from Exhibit 99.4 to the Company's Form 6-K filed on June 4, 2020)
4.5	Development Agreement (incorporated by reference from Exhibit 99.2 to the Company's Form 6-K filed on June 4, 2020)
8.1	List of Subsidiaries
12.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a)
12.2	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a)
13.1	Certificate of Principal Executive Officer pursuant to 18 U.S.C. Section 1350
13.2	Certificate of Principal Financial Officer pursuant to 18 U.S.C. Section 1350
15.1	Management's discussion and analysis of the Company for the year ended December 31, 2021
15.2	Management's discussion and analysis of the Company for the year ended December 31, 2020 (incorporated by reference from Exhibit 99.3 to the Company's Form 40-F filed on April 1, 2021)
15.3	Consent of BDO Canada LLP, Chartered Professional Accountants and Licensed Public Accountants
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatting as Inline XBRL and contained in Exhibit 101)

SIGNATURES

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

Titan Medical Inc.

By: /s/ Stephen Lemieux
Name: Stephen Lemieux
Title: Chief Financial Officer

Date: March 24, 2022

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

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

Description of Common Shares

*The following description of our Common Shares is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our articles (the "**Articles**"), as amended, which are incorporated by reference as an exhibit to the Annual Report on Form 20-F of which this Exhibit 2.1 is a part.*

We have 111,202,690 Common Shares outstanding as of December 31, 2021, and we are authorized to issue an unlimited number of Common Shares, without par value.

Basic Rights of our Common Shares

The holders of Common Shares are entitled to receive notice of and to attend all annual and special meetings of the Company's shareholders and to one vote in respect of each Common Share held at the record date for each such meeting. The holders of Common Shares are entitled, at the discretion of our board of directors, to receive out of any or all of the Company's profits or surplus properly available for the payment of dividends, any dividend declared by our board of directors and payable by the Company on the Common Shares. The holders of the Common Shares will participate pro rata in any distribution of the assets of the Company upon liquidation, dissolution or winding-up or other distribution of the assets of the Company. Such participation will be subject to the rights, privileges, restrictions and conditions attached to any of the Company's securities issued and outstanding at such time ranking in priority to the Common Shares upon the liquidation, dissolution or winding-up of the Company. Common Shares are issued only as fully paid and are non-assessable.

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

Election of Directors

Each director holds office until our next annual general meeting or until his office is earlier vacated in accordance with our articles, corporate by-laws or with the provisions of the underlying corporate statute. There are no staggered terms for director elections and nor is cumulative voting for directors permitted.

Pre-emptive Rights

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

Transferability of Common Shares

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

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

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

Change of Control restrictions for our Common Shares

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

Ownership disclosure threshold for our Common Shares

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

Exhibit 4.1

TITAN MEDICAL INC.

STOCK OPTION PLAN

(Amended and Restated effective as of June 9, 2021)

1. The Plan and Definitions

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

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

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

(a) "**Affiliate**" shall have the meaning ascribed thereto in the *Securities Act* (Ontario) and regulations and instruments published and adopted pursuant thereunder;

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

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

(d) "**Code**" means the United States Internal Revenue Code of 1986, as amended;

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

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

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

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

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

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

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

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

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

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

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

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

(o) "**Incentive Stock Option**" means an Option that qualifies an Incentive Stock Option under section 422 of the Code;

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

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

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

(ii) issuable to Insiders, at any time,

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

(r) "**Nonqualified Stock Option**" means an Option that is not an Incentive Stock Option;

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

(t) "**Options**" shall mean options to purchase Common Shares granted under this Plan and includes Incentive Stock Options and Nonqualified Stock Options;

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

(v) "**Service Providers**" shall mean persons engaged by the Corporation or by any Affiliate of the Corporation to provide services (i) where the person is in the United States, on a continuous basis for an initial, renewable or extended period of twelve months or more and, in the United States, shall only include those persons who may participate in an "Employee Benefit Plan" as set forth in Rule 405 of the U.S. Securities Act, or (ii) where the person is outside the United States, the said person meets the definition of a "consultant" as such term is defined in National Instrument 45-106 – *Prospectus Exemptions*; provided that such persons are natural persons, provide bona fide services to the Corporation and such services are not in connection with the offer or sale of securities in a capital-raising transaction and do not directly or indirectly promote or maintain a market for the Corporation's securities;

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

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

(y) "**U.S. Participant**" means a Participant who is a citizen of the United States or a resident of the United States, in each case as defined in section 7701(a)(30)(A) and section 7701(b)(1) of the Code, and such other Participant to the extent their Options awarded under the Plan are subject to U.S. federal income tax under the Code; and

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

2. Purpose

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

3. Administration

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

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

(c) The Board's authority to make amendments to this Plan without shareholder approval shall be in accordance with Section 19 below.

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

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

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

4. Shares Subject to Plan

(a) Subject to Section 16 below, the securities that may be acquired by Participants upon the exercise of Options shall be deemed to be fully authorized and issued Common Shares. Whenever used herein, the term "Common Shares" shall be deemed to include any other securities that may be acquired by a Participant upon the exercise of an Option the terms of which have been modified in accordance with Section 16 below.

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

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

5. Maintenance Of Sufficient Capital

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

6. Eligibility And Participation

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

(i) directors of the Corporation and of any Affiliate of the Corporation;

(ii) officers of the Corporation and of any Affiliate of the Corporation;

(iii) employees of the Corporation and of any Affiliate of the Corporation; and

(iv) Service Providers;

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

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

7. Exercise Price

The Board shall, at the time an Option is granted under this Plan, fix the exercise price at which Common Shares may be acquired upon the exercise of such Option provided that such exercise price may not be lower than the greater of (i) the VWAP of the Common Shares on the Exchange over the period of five days immediately preceding the date of the grant, and (ii) the closing price of the Common Shares on the Exchange on the last trading day preceding the date of grant. In addition, the exercise price of an Option must be paid in cash. Disinterested shareholder approval shall be obtained by the Corporation prior to any reduction to the exercise price if the affected Participant is an Insider.

8. Number Of Optioned Shares

The number of Common Shares that may be acquired under an Option granted to a Participant shall be determined by the Board as at the time the Option is granted, provided that the aggregate number of Shares reserved for issuance to any one Participant under this Plan or any other plan of the Corporation, shall not exceed five percent (5%) of the total number of issued and outstanding Common Shares (calculated on a non-diluted basis) in any 12-month period.

This Plan limits the number of Options which may be granted to Insiders to the Insider Participation Limit except in circumstances where the Corporation has obtained disinterested shareholder approval for grants of Options to Participants who are Insiders where any such grant or grants would result in the Insider Participation Limit being exceeded.

9. Term

The Option Period shall be determined by the Board at the time that the Option is granted, subject to any vesting limitations which may be imposed by the Board in its sole and unfettered discretion at the time that such Option is granted and Sections 11, 12 and 17 below, provided that:

(a) no Option shall be exercisable for a period exceeding ten (10) years from the date that the Option is granted unless the Corporation receives the required approval of the stock exchange or exchanges on which the Common Shares are then listed and as specifically provided by the Board and as permitted under the rules of any stock exchange or exchanges on which the Shares are then listed;

(b) no Option in respect of which shareholder approval is required under the rules of any stock exchange or exchanges on which the Common Shares are then listed shall be exercisable until such time as the Option has been approved by the shareholders of the Corporation;

(c) the Board may, subject to the receipt of any necessary regulatory approvals, in its sole discretion, accelerate the time at which any Option may be exercised, in whole or in part; and

(d) notwithstanding the expiration date applicable to any Option, if an Option would otherwise expire during a Black Out Period or during the period of ten business days immediately following the last day of a Black Out Period, the expiration date of such Option shall be the tenth business day following the expiration of the Black Out Period, provided that in no event shall the period during which said Option is exercisable be extended beyond 10 years from the date such Option is granted to the Participant.

10. Method of Exercise of Option

(a) Except as set forth in Sections 11 and 12 below or as otherwise determined by the Board, no Option may be exercised unless the holder of such Option is, at the time the Option is exercised, a director, officer, employee or Service Provider of the Corporation or an Eligible Assignee.

(b) Options that are otherwise exercisable in accordance with the terms thereof may be exercised in whole or in part from time to time.

(c) Any Participant (or his legal, personal representative) or Eligible Assignee wishing to exercise an Option shall deliver to the Corporation, at its principal office in the City of Toronto, Ontario:

(i) a written notice expressing the intention of such Participant (or his legal, personal representative) or Eligible Assignee to exercise the Option and specifying the number of Common Shares in respect of which the Option is exercised; and

(ii) a cash payment, certified cheque or bank draft, representing the full purchase price of the Common Shares in respect of which the Option is exercised.

(d) Upon the exercise of an Option as aforesaid, the Corporation shall use reasonable efforts to forthwith deliver, or cause the registrar and transfer agent of the Common Shares to deliver, to the relevant Participant (or his legal, personal representative) or to the order thereof, a certificate representing the aggregate number of fully paid and non-assessable Common Shares in respect of which the Option has been duly exercised.

(e) No Option holder who is resident in the United States may exercise Options unless the Common Shares to be issued upon exercise are registered under the U.S. Securities Act or are issued in compliance with an available exemption from the registration requirements of the U.S. Securities Act.

(f) The Corporation shall be entitled to take all steps necessary to ensure that sufficient funds are provided to the Corporation by the Participant or Eligible Assignee to enable the Corporation to satisfy all withholding tax and other source deduction requirements in respect of the exercise of an Option by the Participant or Eligible Assignee that are imposed by any applicable law, including:

(i) deducting and withholding any amount from any payments made to the Participant or Eligible Assignee, whether hereunder or otherwise;

(ii) requiring from the Participant or Eligible Assignee a cash payment, certified cheque or bank draft in the amount specified by the Corporation; and

(iii) requiring that the Participant or Eligible Assignee enter into a same-day sale in respect of some or all of the Common Shares received on the exercise of an Option, with a portion of the sale proceeds being remitted directly to the Corporation.

11. Ceasing To Be a Director, Officer, Employee or Service Provider

Unless the Board otherwise determines:

(a) if a Participant is dismissed for cause as a director, officer or employee of, or Service Provider to, the Corporation or one of its subsidiaries, all unexercised Option rights of that Participant or such Participant's Eligible Assignee (where the Participant has assigned the Option to such Eligible Assignee) under this Plan shall immediately become terminated and shall lapse notwithstanding the original term of the Option granted to such Participant under this Plan; and

(b) if any Participant shall cease to hold the position or positions of director, officer, employee or Service Provider of the Corporation (as the case may be) as a result of (i) retirement at the normal retirement age prescribed by the Corporation, if any; (ii) resignation; or (iii) termination other than for cause; such Participant or such Participant's Eligible Assignee (where the Participant has assigned the Option to such Eligible Assignee) shall have the right for a period to be determined by the Board not exceeding 90 days, or such longer period determined by the Board at its discretion in respect of a specific Option on a date after such Option is granted notwithstanding an earlier determination by the Board, from the date of the Participant ceasing to be a director, officer, employee or Service Provider to exercise his Options under this Plan with respect to all Common Shares issuable thereunder to the extent that the Options were exercisable on the date of such Participant ceasing to hold any such position with the Corporation, or until the normal expiry date of the Option, whichever is earlier. Upon the expiration of such period, all unexercised Option rights of that Participant and any Eligible Assignee thereof under this Plan shall immediately become terminated and shall lapse notwithstanding the original term of the Option granted to such Participant under this Plan.

For greater certainty, the termination of any Options held by the Participant or his Eligible Assignee, and the period during which the Participant or his Eligible Assignee may exercise any Options, shall be without regard to any notice period arising from the Participant's ceasing to hold the position or positions of director, officer, employee or Service Provider of the Corporation (as the case may be).

Neither the selection of any person as a Participant nor the granting of an Option to any Participant under this Plan shall: (i) confer upon such Participant any right to continue as a director, officer, employee or Service Provider of the Corporation, as the case may be; or (ii) be construed as a guarantee that the Participant will continue as a director, officer, employee or Service Provider of the Corporation, as the case may be.

12. Death or Disability of a Participant

In the event of the death of a Participant, any Option previously granted to him shall be exercisable until the end of the Option Period or until the expiration of 12 months after the date of death of such Participant, whichever is earlier, and then only:

(a) by the person or persons to whom the Participant's rights under the Option shall pass by the Participant's will or applicable law; and

(b) to the extent that he was entitled to exercise the Option as at the date of his death.

Notwithstanding Section 11, in the event of the Disability of a Participant, any Option previously granted to him shall be exercisable until the end of the Option Period or until the expiration of 12 months after the determination by the Board of the Disability, whichever is earlier.

13. Incentive Stock Options Awarded to U.S. Participants

U.S. Participants may be awarded Incentive Stock Options or Nonqualified Stock Options, provided that an Incentive Stock Option may be granted only to employees of the Corporation or employees of a Subsidiary of the Corporation as defined in Code Section 424(f). Notwithstanding anything to the contrary in this Plan, the following provisions in this Section 13 will apply to Incentive Stock Options.

(a) Each agreement or notice evidencing the grant of an Option as contemplated by Section 3(e) of the Plan shall specify whether the related Option is an Incentive Stock Option or a Nonqualified Stock Option. If no such specification is made, the Option will be a Nonqualified Stock Option.

(b) Notwithstanding any other provision of this Plan to the contrary, the aggregate number of Common Shares available for Incentive Stock Options is 10,164,544 subject to adjustment pursuant to Section 16 of this Plan and subject to the provisions of Sections 422 and 424 of the Code. For clarity, the foregoing sentence in this sub-Section 13(b) shall not be interpreted to limit the number of Nonqualified Stock Options that the Corporation may grant (and the number of Common Shares that may be issuable thereunder), at the discretion of the Board, pursuant to this Plan.

(c) The exercise price per Common Share payable upon exercise of an Incentive Stock Option will be not less than one hundred percent (100%) of the fair market value of a Common Share on the applicable grant date; provided, however, that the exercise price per common Share payable upon exercise of an Incentive Stock Option granted to a U.S. Participant who is a 10% Shareholder (within the meaning of Code Sections 422 and 424) on the applicable grant date will be not less than one hundred ten percent (110%) of the fair market value of a Common Share on the applicable grant date.

(d) No Incentive Stock Option may be granted more than ten (10) years after the earlier of (i) the date on which this Plan is adopted by the Board or (ii) the date on which this Plan is approved by the shareholders of the Corporation.

(e) An Incentive Stock Option will terminate and no longer be exercisable no later than ten (10) years after the applicable grant date*provided, however*, that an Incentive Stock Option granted to a U.S. Participant who is a 10% Shareholder (within the meaning of Code Sections 422 and 424) on the applicable grant date will terminate and no longer be exercisable no later than five (5) years after the applicable grant date.

(f) The aggregate fair market value of the Common Shares (determined as of the applicable grant date) with respect to which Incentive Stock Options are exercisable for the first time by any U.S. Participant during any calendar year (pursuant to this Plan and all other plans of the Corporation and of any parent or subsidiary of the Corporation, as defined under Code Section 424(e) and (f)) will not exceed one hundred thousand United States dollars (US$100,000) or any other limitation subsequently set forth in Section 422(d) of the Code. To the extent that an Option that is designated as an Incentive Stock Option becomes exercisable for the first time during any calendar year for Common Shares having a fair market value greater than US$100,000, the portion that exceeds such amount will be treated as a Nonqualified Stock Option.

(g) An Incentive Stock Option granted to a U.S. Participant may be exercised during such U.S. Participant's lifetime only by such U.S. Participant.

(h) An Incentive Stock Option granted to a U.S. Participant may not be transferred, assigned, pledged, hypothecated or otherwise disposed of by such U.S. Participant, except by will or by the laws of descent and distribution.

(i) In the event the Plan is not approved by the shareholders of the Corporation in accordance with the requirements of Section 422 of the Code within twelve (12) months of the date of adoption of the Plan, Options otherwise designated as Incentive Stock Options will be Nonqualified Stock Options.

(j) The Corporation shall have no liability to a U.S. Participant or any other party if any Option (or any part thereof) intended to be an Incentive Stock Option is not an Incentive Stock Option.

(k) An Incentive Stock Options shall be exercisable in accordance with its terms under the Plan and the applicable agreement or certificate awarding the Option and related exhibits and appendices thereto, if any. However, in order to retain its treatment as an Incentive Stock Option for United States federal income tax purposes, the Incentive Stock Option must be exercised within the following time periods (to the extent it otherwise is exercisable during such period pursuant to the terms of the Option):

(i) For Incentive Stock Option treatment, if a U.S. Participant who has been granted an Incentive Stock Option ceases to be an Employee due to the disability of such U.S. Participant (within the meaning of Code Section 22(e)), such Incentive Stock Option must be exercised (to the extent such Incentive Stock Option was exercisable on the date of disability) by the date that is one year following the date of such disability (but in no event beyond the end of the Option Period of such Option).

(ii) For Incentive Stock Option treatment, if a U.S. Participant who has been granted an Incentive Stock Option ceases to be an employee for any reason other than the death or disability(within the meaning of Code Section 22(e)) of such U.S. Participant, such Incentive Stock Option must be exercised (to the extent such Incentive Stock Option was exercisable on the date of termination) by such U.S. Participant within three months following the date of termination (but in no event beyond the end of the Option Period of such Option).

(iii) For the purposes of this Section 13(k), the employment of a U.S. Participant who has been granted an Incentive Stock Option will not be considered interrupted or terminated upon (a) sick leave, military leave or any other leave of absence approved by the Corporation that does not exceed ninety (90) days in the aggregate; provided, however, that if reemployment upon the expiration of any such leave is guaranteed by contract or applicable law, such ninety (90) day limitation will not apply, or (b) a transfer from one office of the Corporation (or of any parent or subsidiary of the Corporation as defined in Code Sections 424(e) and (f)) to another office of the Corporation (or of any such parent or subsidiary) or a transfer between the Corporation and any such parent or subsidiary.

14. Rights of Participants

No person entitled to exercise any Option granted under this Plan shall have any of the rights or privileges of a shareholder of the Corporation in respect of any Common Shares issuable upon exercise of such Option until such Common Shares have been paid for in full and issued to such person.

15. Proceeds from Exercise of Options

The proceeds from any issuance of Common Shares upon the exercise of Options shall be added to the general funds of the Corporation and shall thereafter be used from time to time for such corporate purposes as the Board may determine and direct.

16. Adjustments

(a) The number of Common Shares subject to the Plan shall be increased or decreased proportionately in the event of the subdivision or consolidation of the outstanding Common Shares of the Corporation, and in any such event a corresponding adjustment shall be made to the number of Common Shares deliverable upon the exercise of any Option granted prior to such event without any change in the total price applicable to the unexercised portion of the Option, but with a corresponding adjustment in the price for each Common Share that may be acquired upon the exercise of the Option. In case the Corporation is reorganized or merged or consolidated or amalgamated with another corporation, appropriate provisions shall be made for the continuance of the Options outstanding under this Plan and to prevent any dilution or enlargement of the same.

(b) Adjustments under this Section 16 shall be made by the Board, whose determination as to what adjustments shall be made, and the extent thereof, shall be final, binding and conclusive. No fractional Common Shares shall be issued upon the exercise of an Option following the making of any such adjustment.

17. Change of Control

Notwithstanding any vesting restrictions otherwise applicable to the relevant Options, in the event of a sale by the Corporation of all or substantially all of its assets or in the event of a change of control of the Corporation, each Participant or his Eligible Assignee shall be entitled to exercise, in whole or in part, the Options granted to such Participant hereunder, either during the term of the Option or within 90 days after the date of the sale or change of control, whichever first occurs.

For the purpose of this Plan, "change of control of the Corporation" means and shall be deemed to have occurred upon:

(a) the acceptance by the holders of Common Shares of the Corporation, representing in the aggregate, more than 50 percent (50%) of all issued Common Shares of the Corporation, of any offer, whether by way of a takeover bid or otherwise, for all or any of the outstanding Common Shares of the Corporation; or

(b) the acquisition, by whatever means, by a person (or two or more persons who, in such acquisition, have acted jointly or in concert or intend to exercise jointly or in concert any voting rights attaching to the Common Shares acquired), directly or indirectly, of beneficial ownership of such number of Common Shares or rights to Common Shares of the Corporation, which together with such person's then owned Common Shares and rights to Common Shares, if any, represent (assuming the full exercise of such rights to voting securities) more than fifty percent (50%) of the combined voting rights of the Corporation's then outstanding Common Shares; or

(c) the entering into of any agreement by the Corporation to merge, consolidate, amalgamate, initiate an arrangement or be absorbed by or into another corporation; or

(d) the passing of a resolution by the Board or shareholders of the Corporation to substantially liquidate the assets or wind-up the Corporation's business or significantly rearrange its affairs in one or more transactions or series of transactions or the commencement of proceedings for such a liquidation, winding-up or re-arrangement (except where such re-arrangement is part of a bona fide reorganization of the Corporation in circumstances where the business of the Corporation is continued and where the shareholdings remain substantially the same following the re-arrangement); or

(e) individuals who were members of the Board immediately prior to a meeting of the shareholders of the Corporation involving a contest for or an item of business relating to the election of directors, not constituting a majority of the Board following such election.

18. Transferability

(a) Subject to sub-Section 18(b), all Options and all benefits, interests and rights accruing to any Participant (or such Participant's Eligible Assignee) in accordance with the terms and conditions of this Plan may only be exercised by the Participant (or such Participant's Eligible Assignee) during the lifetime of a Participant and shall be non-transferrable and non-assignable and may not be made subject to execution, attachment or similar process, save and except with the prior written permission of the Board, or in the event of the death of a Participant, by the person or persons to whom the Participant's rights under the Option pass by the Participant's will or applicable laws of descent and distribution.

(b) Notwithstanding sub-Section 18(a) but subject to obtaining any necessary approvals in advance from the Corporation and from each Exchange on which the Common Shares are listed and which reserves the right to approve such assignments, a Participant may assign Options granted to him under the Plan to Eligible Assignees and Eligible Assignees may, in turn, assign such Options to the original Participant or to other Eligible Assignees of the original Participant. Notwithstanding any such assignment, (i) all Options granted under the Plan shall be deemed to be the Option of the original Participant for the purposes of applying the rules and policies of the Exchange on which the Common Shares are listed and (ii) the Corporation shall continue to treat the original Participant as the holder of the assigned Options unless and until such time as the Corporation is provided with notice in writing from the original Participant or its legal representative and the Eligible Assignee, together with such other documentation as the Corporation may require, confirming that the assignee is an Eligible Assignee.

19. Amendment and Termination of Plan

The Board may also, at any time, amend or revise the terms of this Plan, subject to the receipt of all necessary shareholder, Exchange and regulatory approvals, and any such amendment or revision shall apply to any Options theretofore granted under this Plan.

The Board has the discretion to make amendments to this Plan which it may deem necessary, without having to obtain shareholder approval including, without limitation:

(a) minor changes of a "housekeeping nature";

(b) amending Options under this Plan, including with respect to the Option Period (provided that the period during which an Option is exercisable does not exceed 10 years from the date the Option is granted and that such Option is not held by an Insider), vesting period, exercise method and frequency, subscription price (provided that such Option is not held by an Insider) and method of determining the subscription price, assignability and effect of termination of a Participant's employment or cessation of the Participant's directorship;

(c) changing the class of Participants eligible to participate under this Plan;

(d) accelerating the vesting of any Option;

(e) extending the expiration date of any Option provided that the period during which an option is exercisable does not exceed 10 years from the date the Option is granted and provided that such Option is not held by an Insider, and where such Option is held by an Insider in such case, shareholder approval shall be obtained in connection with the extension;

(f) changing the terms and conditions of any financial assistance which may be provided by the Corporation to Participants to facilitate the purchase of Common Shares under this Plan; and

(g) adding a cashless exercise feature, payable in cash or securities, which provides for a full deduction of the number of underlying Common Shares from this Plan reserve.

Shareholder approval will be required in the case of: (i) any amendment to the amendment provisions of this Plan; (ii) any increase in the maximum number of Common Shares issuable under this Plan; (iii) any reduction in the exercise price or extension of the Option Period benefiting an insider of the Corporation; and (iv) any amendment to remove or exceed the Insider Participation Limit, in addition to such other matters that may require shareholder approval under the rules and policies of the Exchange.

20. Necessary Approvals

The obligation of the Corporation to issue and deliver Common Shares in accordance with this Plan and Options granted hereunder is subject to applicable securities legislation and to the receipt of any approvals that may be required from any regulatory authority or stock exchange having jurisdiction over the securities of the Corporation. If Common Shares cannot be issued to a Participant upon the exercise of an Option for any reason whatsoever, the obligation of the Corporation to issue such Common Shares shall terminate and any funds paid to the Corporation in connection with the exercise of such Option will be returned to the relevant Participant (or

his Eligible Assignee) as soon as practicable.

21. Stock Exchange Rules

This Plan and any option agreements entered into hereunder shall comply with the requirements from time to time of the Exchange.

22. Market Fluctuations

No amount will be paid to, or in respect of, a Participant (or any Eligible Assignee) under the Plan to compensate for a downward fluctuation in the price of Common Shares, nor will any other form of benefit be conferred upon, or in respect of, a Participant (or any Eligible Assignee) for such purpose.The Corporation makes no representations or warranties to Participants (or any Eligible Assignee) with respect to the Plan or the Options whatsoever. Participants (and any Eligible Assignees) are expressly advised that the value of any Options in the Plan will fluctuate as the trading price of Common Shares fluctuates.

In seeking the benefits of participation in the Plan, a Participant (and each Eligible Assignee) agrees to exclusively accept all risks associated with a decline in the market price of Common Shares whether before or after the exercise of Options and all other risks associated with participation in the Plan.

23. Right To Issue Other Shares

The Corporation shall not by virtue of this Plan be in any way restricted from declaring and paying stock dividends, issuing further Common Shares, varying or amending its share capital or corporate structure or conducting its business in any way whatsoever.

24. Notice

Any notice required to be given by this Plan shall be in writing and shall be given by registered mail, postage prepaid or delivered by courier or by facsimile transmission addressed, if to the Corporation, at its principal address in Toronto, Ontario (Attention: Chief Financial Officer); or if to a Participant (or to an Eligible Assignee), to such Participant at his address as it appears on the books of the Corporation or in the event of the address of any such Participant not so appearing then to the last known address of such Participant; or if to any other person, to the last known address of such person.

25. Gender

Whenever used herein words importing the masculine gender shall include the feminine and neuter genders and vice versa.

26. Interpretation

This Plan will be governed by and construed in accordance with the laws of the Province of Ontario.

This Plan is subject to the approval of the stock exchange or exchanges on which the Common Shares are listed and, if applicable, of the shareholders of the Corporation.

27. Effective Date of Plan

This amended and restated Plan became effective upon approval by shareholders of the Corporation on June 9, 2021, with prior approval by the Board on May 9, 2021.

Exhibit 8.1

List of Subsidiaries

Entity	Jurisdiction
Titan Medical USA Inc.	Delaware

Exhibit 12.1

CERTIFICATION REQUIRED BY RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Paul Cataford, certify that:

1. I have reviewed this annual report on Form 20-F of Titan Medical Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditor and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: March 24, 2022

By: /s/ Paul Cataford
Paul Cataford
Interim President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 12.2

CERTIFICATION REQUIRED BY RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Stephen Lemieux, certify that:

1. I have reviewed this annual report on Form 20-F of Titan Medical Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditor and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: March 24, 2022

By: /s/ Stephen Lemieux
Stephen Lemieux
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 13.1

CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Titan Medical Inc. (the "Company") on Form 20-F for the period ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Paul Cataford, Interim 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 24, 2022

/s/ Paul Cataford
Paul Cataford
Interim President and Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to Titan Medical Inc. and will be retained by Titan Medical Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 13.2

CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Titan Medical Inc. (the "Company") on Form 20-F for the period ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Stephen Lemieux, 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 24, 2022

/s/ Stephen Lemieux
Stephen Lemieux
Chief Financial Officer
(Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to Titan Medical Inc. and will be retained by Titan Medical Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

TITAN MEDICAL

TITAN MEDICAL INC.

Management's Discussion and Analysis for the year ended December 31, 2021

March 23, 2022

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INTRODUCTION

The following Management's Discussion and Analysis ("MD&A") is prepared as of March 23, 2022 and should be read in conjunction with the audited consolidated statements of financial position and the related notes thereto for the year ended December 31, 2021 (the "**Annual Financial Statements**") of Titan Medical Inc. (referred to hereinafter as "**Titan**", the "**Company**", "**we**", "**us**" and "**our**").

Unless otherwise indicated, all financial information in this MD&A is reported in thousands of US dollars except for share and earnings (loss) per share data which is reported in number of shares and US dollars respectively. The tables and charts included in this document form an integral part of this MD&A.

The common shares of the Company (the "**Common Shares**") are listed under the symbol "**TMDI**" on The Nasdaq Capital Market (the "**Nasdaq**") and "**TMD**" on the Toronto Stock Exchange (the "**TSX**").

This MD&A has been prepared with reference to National Instrument 51-102 – Continuous Disclosure Obligations. Additional information related to Titan, including our Annual Report ("**Annual Report**") on Form 20-F for the year ended December 31, 2021, is available via our website at www.titanmedicalinc.com, on SEDAR at www.sedar.com, and on the EDGAR section of the SEC's website at www.sec.gov.

This MD&A includes references to the Company's trade-marks and trade names, such as Titan, Titan Medical, and Enos, some of which may be protected under applicable intellectual property laws of one or more countries and which the Company believes is its property. Solely for convenience, the Company's trade-marks referred to in this MD&A may appear without the TM or ® symbols, but such references are not intended to indicate, in any way, that the Company will not assert, to the fullest extent under applicable law, its rights to these trade-marks and trade names.

CAUTIONARY NOTE REGARDING 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, although these words may not be present in all forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, but are not limited to, the factors discussed in the section entitled "*Risk Factors*" in the Annual Report. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward-looking statements contained herein are made as of the date of this MD&A and, other than as required by law, the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Forward-looking statements are based on a number of assumptions, which may prove to be incorrect, including but not limited to the assumptions discussed in the section entitled "Cautionary Note Regarding Forward Looking Statements" in the Company's Annual Report. Accordingly, readers should not place undue reliance on forward-looking statements.

This MD&A also includes market data and forecasts. Although the Company is responsible for all of the disclosure contained in this MD&A, in some cases the Company relies on and refers to market data and certain industry forecasts that were obtained from third party surveys, market research, consultant surveys, publicly available information and industry publications and surveys that it believes to be reliable. Unless otherwise indicated, all market and industry data and other statistical information and forecasts contained in this MD&A are based on independent industry publications, reports by market research firms or other published independent sources and other externally obtained data that the Company believes to be reliable. Any such market data, information or forecast may prove to be inaccurate because of the method by which it was obtained or because it cannot always be verified with complete certainty given the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties, including those discussed in the Annual Report under the heading "*Risk Factors*". As a result, although the Company believes that these sources are reliable, it has not independently verified the information.

The sections of the Annual Report titled "*Cautionary Note Regarding Forward-Looking Statements*" and "*Risk Factors*" are expressly incorporated by reference into this MD&A. The Annual Report is available on the EDGAR section of the SEC's website at www.sec.gov and on SEDAR at www.sedar.com.

OVERVIEW

Titan is a medical technology company headquartered in Toronto, Ontario with operations in Chapel Hill, North Carolina. Titan is focused on enhancing robotic assisted surgery ("**RAS**") using innovative technology through a single access point. The Enos™ system, a single access robotic-assisted surgical platform (the "**Enos System**") is being developed with an ergonomic focus to provide a surgical experience that imitates real-life movements that surgeons demand. The platform includes multi-articulating instruments designed to allow surgeons an increased range of motion in a confined space, with dexterity and the ability to exert the forces necessary to complete common surgical tasks. With the Enos System, Titan intends to initially pursue gynecologic surgical indications. By focusing on a single access point, the Company believes that patient trauma, post-operative pain and scarring can be reduced, and patients may be able to recover from surgery faster.

The Company's innovations in RAS, including those directed at the Enos System, are protected by a growing patent portfolio that includes more than 200 patents and patent applications. Certain of Titan's RAS technologies and related intellectual property have been licensed to Medtronic plc ("**Medtronic**"), while retaining world-wide rights to commercialize the technologies for use with the Enos System.

The Enos System is under development and has not been authorized for marketing by the U.S. Food and Drug Administration ("**FDA**") or approved by any other regulatory authority in any other jurisdiction and until such authorizations or approvals are obtained, is not yet commercially available.

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 76 Berkeley Street, Toronto, Ontario, Canada M5A 2W7. On May 29, 2020, the Company established Titan Medical USA Inc. ("**Titan USA**" or the "**Subsidiary**"), a Delaware corporation and a wholly owned subsidiary of the Company. Titan USA's principal activity consists of R&D as well as the manufacturing of instruments and camera systems for the Enos System from its leased premises located in Chapel Hill, North Carolina.

In addition to leveraging in-house R&D capabilities, including for activities related to the Enos System and the development work performed pursuant to the agreement with Medtronic (see "*Significant Transactions - Development Agreement & License Agreement with Medtronic*"), the Company engages subcontractors and consultants to perform certain design and development, prototyping, and assembly and manufacturing activities.

SIGNIFICANT TRANSACTIONS

February 2021 Equity Offering

On February 24, 2021, the Company closed an offering of 9,585,250 units of the Company ("**February 2021 Units**") sold on a "bought deal" basis, at a price of $2.40 per February 2021 Unit for aggregate gross proceeds of $23 million. 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 is exercisable to acquire one Common Share at an exercise price of $3.00 per Common Share until February 24, 2023. In connection with the February 2021 offering, the Company issued 670,967 broker warrants, each exercisable at $3.00 until February 24, 2023 for one Common Share.

Anticipated use of proceeds from the offering is for general corporate purposes and funding working capital and capital expenditures. As previously disclosed, general corporate purposes includes the development of the Enos System (see "*Enos Single Access Robotic Assisted Surgical System - Development Plan*") and there have been no variations in the proposed use of proceeds to date.

January 2021 Equity Offering

On January 26, 2021, the Company closed an offering of 7,419,354 units of the Company ("**January 2021 Units**") sold on a "bought deal" basis, at a price of $1.55 per January 2021 Unit for aggregate gross proceeds of $11.5 million. 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. In connection with the January 2021 offering, the Company issued 518,234 broker warrants, each exercisable at $1.9375 until January 26, 2023 for one Common Share.

Anticipated use of proceeds from the offering is for general corporate purposes and funding working capital and capital expenditures. As previously disclosed, general corporate purposes includes the development of the Enos System (see "*Enos Single Access Robotic Assisted Surgical System - Development Plan*") and there have been no variations in the proposed use of proceeds to date.

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 RAS technologies and a separate license agreement (the "**License Agreement**", and together with the Development Agreement, the "**Medtronic Agreements**") with Medtronic with respect to certain previously developed Company technologies.

Under the terms of the License Agreement, Titan granted Medtronic an exclusive license with regard to certain RAS technologies, including patents and know-how, for a one-time upfront royalty payment of $10 million received on June 10, 2020 with no further royalty payments due thereunder. Under the terms of the Development Agreement, Titan granted Medtronic an exclusive license with regard to the technologies developed under the Development Agreement in exchange for license fees totaling up to $31 million (the exact amount dependent on certain legal, transaction and intellectual property costs under the Medtronic Agreements). The total payments received under the Development Agreement were $30.6 million as described below, with no further royalty payments due thereunder. While the intellectual property licensed to Medtronic under the Medtronic Agreements may not be licensed to a third party, Titan has retained rights to continue to develop, commercialize and use the licensed intellectual property and the licensed technologies for the Company's own business in single access RAS, including the Enos System. Furthermore, in connection with the sale of all or substantially all of the assets of the Company or a "change of control" (as such term is defined in the Medtronic Agreements), the Company may assign and transfer all of its rights under the Medtronic Agreements, allowing an acquirer to use the licensed intellectual property and technologies, as otherwise permitted under the Medtronic Agreements, for their own purposes.

As of the date of this MD&A, all of the milestones under the Development Agreement have been completed and the associated payments were received from Medtronic. The milestones and associated payments were as follows:

Medtronic Milestone[1]	Deadline[2]	Payment (US $ 000's)	Milestone Achieved
Medtronic Milestone 1	Four (4) months from Development Start Date[3]	10,000	Q4 2020[5]
Medtronic Milestone 2[4]	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	Q2 2021[6]
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	10,600	Q4 2021[7]

Notes:
1. Medtronic Milestone 1, Medtronic Milestone 3 and Medtronic Milestone 4 are each technology milestones as defined in the Development Agreement and consist of the completion of the development of certain RAS technologies as described in the Development Agreement.
2. All as further described and qualified in the Development Agreement.
3. "Development Start Date" has the meaning ascribed to it in the Development Agreement and was June 12, 2020.

4. Medtronic Milestone 2 was a non-technology milestone defined in the Development Agreement having Titan raise at least $18.0 million 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 in June 2020.
5. On October 28, 2020, the Company received a $10 million license payment for completion of Medtronic Milestone 1.
6. On May 28, 2021, the Company received a $10 million license payment for completion of Medtronic Milestone 3.
7. On January 26, 2022, the Company received a $10 million license payment for completion of Medtronic Milestone 4 and a $0.6 million payment related to certain legal, transaction and intellectual property costs. As described below, a portion of the gross amount of $10.6 million was used to retire the $2.3 million Medtronic Loan (as defined below), resulting in a net payment of $8.3 million.

Senior Secured Loan from Medtronic

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 ("**Medtronic Lender**"). The Medtronic Loan was 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 ("**Legal Expenses**") incurred by Medtronic in connection with the License Agreement and Development Agreement with an interest charge at a 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, was scheduled to be due and payable in full on the earliest to occur of: (i) June 3, 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 had the option of having one non-voting observer attend meetings of Titan's Board of Directors (the "**Board**").

The $2.3 million Note was retired on the completion of Medtronic Milestone 4 under the Development Agreement. Payments in respect of the Note retirement included the original amount of $1.5 million plus $0.6 million in legal, transaction and intellectual property costs and $0.2 million in interest.

Titan entered into a security agreement dated April 28, 2020 in favor of the Medtronic Lender (the "**Security Agreement**") pursuant to which Titan granted to the Medtronic Lender a security interest in all of the Company's present and future property including all personal property, inventory, equipment and intellectual property. On January 31, 2022, the security interest established under the Security Agreement was removed as a result of the repayment of the Medtronic Loan.

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 Warrant**") for total gross proceeds of approximately $18,000,000. Under the offering, the Common Shares, June 2020 Common Share Equivalent and June 2020 Warrants were sold in fixed combinations at an offering price of $1.00, consisting of one Common Share and one-half June 2020 Warrant or one June 2020 Common Share Equivalent and one-half June 2020 Warrant. Each June 2020 Warrant is exercisable to acquire one Common Share at an exercise price of $1.00 per Common Share until 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. All 11,500,000 June 2020 Common Share Equivalents have been converted to Common Shares at various dates from June 10, 2020 to September 30, 2020.
In connection with the June 2020 offering, broker warrants were issued to the placement agent entitling 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 5,514,500 Common Shares at an offering price of $0.36268 per share and 2,757,252 unregistered Common Share purchase warrants (each, a "**May 2020 Warrant**") for gross proceeds of $2,000,000. Each May 2020 Warrant is exercisable to purchase one Common Share at an exercise price of $0.3002 per Common Shares until November 6, 2025.

In connection with the May 2020 offering, broker warrants were issued to the placement agent entitling the holder to purchase 386,015 Common Shares at an exercise price of $0.45335 per share prior to expiry on November 6, 2025.

March 2020 Financing

On March 25, 2020, the Company completed a registered offering of 7,000,000 Common Shares and 3,500,000 Common Share purchase warrants (each, a "**March 2020 Warrant**") for 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 share until March 25, 2025.

In connection with the March 2020 offering, broker warrants were issued to the placement agent entitling the holder to purchase 490,000 Common Shares at an exercise price of $0.2125 per share prior to expiry on March 25, 2025.

Aspire Common Share Purchase Agreement

On December 23, 2019, the Company entered into an agreement (the "**Aspire Agreement**") with Aspire Capital Fund, LLC ("**Aspire**"). Under the terms of the Aspire Agreement, Aspire committed to purchase up to $35 million of Common Shares for a maximum of 9,729,777 Common Shares. To date, the Company has issued 6,981,048 Common Shares of Titan for total proceeds of $5.2 million ($2.7 million for the year ended December 31, 2021 and $2.1 million for the year ended December 31, 2020). The balance remaining on Aspire's commitment is 2,748,729 Common Shares (with a maximum value of $29.8 million), accessible at the Company's request from time to time, until June 23, 2022, subject to the terms and conditions of the Aspire Agreement.

ENOS SINGLE ACCESS ROBOTIC ASSISTED SURGICAL SYSTEM

Development

The Company's business is focused on the development and commercialization of innovative surgical technologies for single access RAS requiring only a single port. The Company is presently focused on the development of the Enos System, which comprises a surgeon-controlled patient cart with a 3D high-definition vision system and multi-articulating instruments for performing surgical 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 surgical 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 various stakeholders including surgeons and operating room staff experienced in RAS, specialized medical technology development firms and from the Company's surgeon advisory board. This approach has positioned the Company to design a robotic surgical system intended to include the traditional advantages of RAS, 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 surgical site for optimal surgical positioning of the patient cart. 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 surgeon workstation. The reusable multi-articulating instruments provide for highly dexterous movement in use and are designed to facilitate an assortment of permanent and detachable single patient use end effectors. The use of reusable robotic instruments for a specific number of uses 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 for surgical positioning 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 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 has worked to deepen its intellectual capital through the recruitment of an in-house technical team and continuously evaluates its technologies under development for intellectual property protection through a combination of trade secrets and patent application filings. The Company continues to focus on the filing and prosecution of patents that management believes validate the novelty of its unique technology.

Regulatory Overview

RAS systems are highly regulated, complex medical devices. The Company has used a combination of internal and external resources 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 US, followed by 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 US, the regulatory clearance process includes a Q-Submission 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 Investigational Device Exemption ("**IDE**") applications, 510(k) applications and De Novo classification requests. Certain Q-Submissions, termed Pre-Submissions, typically include a request for written feedback, and if desired, 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 marketing authorization, nor does it preclude any identified future changes in regulatory pathways.

The Company has filed a number of Q-Submissions and based on ongoing communications with the FDA, expects that the Enos System will be classified as a Class II device and accordingly plans to obtain marketing authorization through a classification request for novel devices in accordance with section 513(f)(2) of the U.S. Federal Food, Drug and Cosmetic Act (the "**FD&C Act**"), commonly known as a De Novo classification submission. In 2020, the Company filed a Request for Information in response to communications the Company had with the FDA, in which the FDA raised the question of whether RAS devices would generally continue to be eligible for classification as Class II devices and the 510(k) submission pathway, or whether a De Novo submission would be more appropriate for such devices. While the Company had previously confirmed with the FDA that the Enos System would be suitable for marketing authorization through a 510(k) submission, in December 2020, it received 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 indicated that the FDA believes, based on information provided to it, that the Enos System is appropriate for classification through the De Novo submission pathway. The FDA stated that the technological differences between the Enos System and RAS devices previously cleared for marketing by the FDA raise new questions of safety and effectiveness, and that a 510(k) application submitted by the Company claiming substantial equivalence to any previously marketed RAS device would most likely be determined to be not substantially equivalent. In view of the Written Response and additional guidance provided by the FDA to the Company, the Company plans to proceed with a De Novo classification request for the Enos System following successful completion of the IDE clinical study as described below.

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 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 review days) is made to either grant or decline the request. Review days are calculated as the number of calendar days between the date the De Novo request was received by the FDA and the date of the FDA's decision, excluding the days a request was on hold for an additional information 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 applications for marketing authorization, 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 marketing authorization is not quantifiable at this time. The FDA's recent review and response to the Company's proposed IDE clinical study general design and planning occurred during a video conference call held in September 2021. While the general design of the Company's planned IDE clinical study was confirmed, more detailed communication will be required to reach agreement on the content of a complete IDE application, including the final clinical design, risk analyses, safety testing, human factors testing, and preclinical data. Accordingly, the Company plans on further communications and submissions with the FDA to clarify the requirements for the IDE application and to understand any special controls which the FDA may apply to the IDE clinical study. Additional Pre-Submissions will 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 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. An IDE allows the investigational device to be used in a clinical study in order to collect safety and effectiveness data. Further, the recruitment of surgeons from multiple hospital sites will be necessary to perform the surgeries as well as the recruitment of patients willing to participate in the IDE study. 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 De Novo classification for marketing authorization.

Previous results achieved by surgeons in operating prototypes in numerous 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 Practices ("**GLP**") and subsequently, on July 18, 2019, announced the successful completion of those studies. Following the completion of the GLP procedures, the Company proceeded to perform human factors evaluation ("**HFE**") studies, which included verification of production system operation with clinical experts under simulated robotic manipulation exercises. However, during the GLP and HFE studies, the Company identified opportunities to improve the performance of instruments, camera systems and sterile interfaces before proceeding further, which may require repeating those studies with enhanced designs.

During the third quarter of 2021, the Company completed additional pre-clinical GLP studies. The pre-clinical studies involved utilizing the Enos System to perform hysterectomies in porcine subjects. The subjects successfully completed the survival period in the study. With the completion of these studies, surgeons have now performed over 70 pre-clinical procedures representing multiple subspecialties with Titan's Enos System.

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 2021, a surveillance audit of the Company's quality system was successfully completed by the Company's Notified Body.

Development Plan

For the purposes of this section, the description and milestone chart with respect to the Company's development plan should be read in conjunction with the "*Risk Factors*" section of the Annual Report.

The Company is focused on the development and commercialization of the Enos System. The following chart and narrative are provided to outline the significant development and regulatory milestones required to achieve the overall goal of commercializing the Enos System in the United States.

While the milestone chart is based on information currently available to the Company, there is no assurance that the development, regulatory and commercialization milestones set forth above will be completed within the timeframes forecasted, if at all, and are based upon the following key assumptions:

1. The Company will complete each milestone within the projected timeframe and at the estimated cost.

2. The Company will receive on a timely basis all applicable regulatory authorizations, approvals or clearances including without limitation the planned IDE application and the planned De Novo application to the FDA.

3. There will be no significant changes to the regulatory authorization process in the United States.

4. The Company will be able to secure a sufficient number of hospital sites, surgeons and patients as part of the IDE clinical study.

5. The costs of materials and components required by the Company, availability of sufficiently qualified personnel and the wages and salaries of such personnel and the costs and timing of engaging third parties in respect of the Company's clinical study and the manufacturing of its Enos System will remain stable.

6. Despite global supply chain challenges, the Company and the manufacturing firms it engages will be able to secure components and subsystems for the Enos System on a timely basis, and no unforeseen shortages or shipping delays will arise.

7. The Company will be able to raise required financing on a timely basis to support its development program, manufacturing, human clinical study and operations.

8. The design of the Enos System and related platforms and equipment will not be required to materially change for any reasons (including without limitation due to results of safety and verification testing, market demands, intellectual property or regulatory issues).

9. The Company will be able to engage, retain and recruit, as necessary, technical personnel, contractors and third parties (such as development firms and manufacturers) with the type of specialized skill and knowledge required to develop, manufacture and test the Enos System.

The foregoing list of assumptions is not exhaustive. Although the Company has attempted to identify on a reasonable basis the key assumptions related to forward-looking statements in the development milestone table above, there can be no assurance that the 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.

The Company plans to file the IDE application for the Enos System with the FDA in the first quarter of 2023 and anticipates receiving a response on the IDE application from the FDA in the first half of 2023. Associated milestones as set forth in the chart above are described in additional detail below.

- *Completion of Product Development and Transfer to Manufacturing* – The Company is presently working to complete product development to accommodate the transfer of the Enos System to manufacturing, including the areas of supply chain management, product assembly and testing, and implementation of software updates related to safety controls. Completion of product development is anticipated to be completed by mid-2022. The Company relies on its employees as well as engagements with consultants, development firms and manufacturers to complete product development. Any interruptions in the engagement of the forgoing or from other interruptions related thereto, such as supply chain interruptions, will impact the Company's ability to complete product development.

- *Manufactured Units Safety and Verification Testing* – Upon completion of product development and the delivery of manufactured units of the Enos patient cart and surgeon workstation, the Company anticipates completing system verification and validation and safety testing in support of the planned IDE submission to the FDA.

- *IDE Application, FDA Review, IDE Study* – Upon successful completion of safety and verification testing of the Enos patient cart and surgeon workstation as well as the biocompatibility testing of instruments, cameras and accessories, the Company expects it will have the requisite information necessary to submit a complete IDE application to the FDA in the first quarter of 2023. Upon receiving approval of the IDE application by the FDA, the Company plans to commence human clinical studies to validate the safety and effectiveness of the Enos System. With the feedback from the FDA during the second half of 2021, it is anticipated that the IDE clinical study will include total laparoscopic hysterectomies performed on 30 to 40 patients at 3 to 4 clinical sites. The Company has already begun IRB site preparation for the selected clinical sites. Based on the expected timing of filing the IDE application and the FDA review and approval process, the Company anticipates that the surgical procedures associated with the IDE, and the associated follow-up, can be completed in early 2024.

- *De Novo Application and FDA Review* – Assuming the successful completion of the IDE study, including follow-up data, the Company expects to submit its De Novo application to the FDA and receive the FDA's response in 2024.

- *Commercialization* – The Company anticipates a commercial launch of the Enos System in early 2025 upon receipt of marketing authorization from the FDA. Commercial manufacturing of the Enos System is expected to be an extremely detailed and complex process with the potential for delays, interruptions (including supply chain interruptions) or cost overruns.

The total costs to complete the development of the Enos System cannot yet be determined with a high degree of certainty, and the costs may be substantially higher than any estimated by the Company. Please see "*Special Note Regarding Forward-Looking Statements*" and "*Risk Factors*" in the Annual Report.

The Company anticipates that its cash balance of $32.3 million at December 31, 2021, the $8.3 million license fee net of the Note retirement that the Company received on January 26, 2022 upon completion of Medtronic Milestone 4 under the Development Agreement and the ability to raise additional capital that is available under the Aspire Agreement will be sufficient to fund the development of the Enos System and operational expenses into the first quarter of 2023. However, unexpected increases in costs and expenses due to operational decisions made by the Company and/or factors beyond the Company's control, such as pandemics including COVID-19 or any variants and international conflicts including the Russian invasion of Ukraine, or any delays related to sourcing of parts and materials or higher than expected inflation rates impacting pricing of parts and materials could cause a material impact on working capital resources of the Company.

Due to the nature of technology development and the related medical device regulatory pathway in the United States, there is no assurance that the development, regulatory and commercialization milestones set forth above will be completed within the timeframes forecasted, if at all, and there can be no assurance with respect to the resources that may be required to achieve these milestones, including both internal resources with respect to the availability to the Company of qualified technical personnel and third party development and manufacturing firms. Furthermore, additional required development or regulatory tasks could be identified in the course of the development, manufacturing and testing of the Enos System which may elongate the forecast timeline. The review times for IDE applications as well as De Novo applications with the FDA can vary greatly, and there can be no assurance as to the time it will take for the Company to receive FDA marketing authorization for the Enos System, or whether such authorization will be obtained at all.

INTELLECTUAL PROPERTY AND LICENSING

The Company's patent portfolio includes over 200 patents and patent applications as of March 23, 2022. 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 (see "*Significant Transactions - Development Agreement & License Agreement with Medtronic*"), the Company exclusively licensed to Medtronic a portion of its portfolio related to certain aspects of instruments and cameras, while retaining the world-wide rights to commercialize the licensed technologies for the Company's own business in single access RAS. Furthermore, pursuant to the Development Agreement with Medtronic, the Company developed certain RAS technologies, that were completed and exclusively licensed by Medtronic for license payments of $30.6 million. The Company retains the world-wide rights to commercialize any developed technology in its own business (see "*Significant Transactions - Development Agreement & License Agreement with Medtronic*").

IP Exclusivity and Independence

Under each of the Medtronic Agreements, while Titan granted an exclusive license to Medtronic, Titan retained world-wide ownership rights to independently commercialize the licensed technologies in single access RAS, including with the Enos System and enhancements thereof. Under each of the Medtronic Agreements Titan may assign its intellectual property rights thereunder in connection with the sale of all or substantially all of the assets of Titan or in connection with a "change of control" (as such term is defined therein).

RESULTS OF OPERATIONS

	Year Ended December 31,		
	2021	2020	2019
	$	$	$
Revenue	**20,093**	20,000	-
Expenses			
Research and development	**37,955**	7,937	51,418
General and administrative	**12,426**	7,629	7,815
Depreciation and amortization	**699**	283	33
	51,080	15,849	59,266
Net (loss) income from operations	**(30,987)**	4,151	(59,266)
Finance income	**(73)**	(29)	(116)
Finance expenses	**125**	1,091	423
Foreign exchange loss	**76**	114	38
Other income	**(605)**	-	-
(Gain) loss on fair value of warrant derivative	**(15,708)**	27,856	(19,801)
Warrant derivative liability issue cost	**-**	1,816	2,097
Gain on settlement	**-**	(2,513)	-
Total other expenses (income)	**(16,185)**	28,335	(17,359)
Income tax expense	**56**	-	-
Net and comprehensive loss	**(14,858)**	(24,184)	(41,907)
Basic and diluted loss per share	**(0.14)**	(0.36)	(1.37)

Financial Position *(As at December 31)*			
Cash	**32,306**	25,469	814
Total assets	**47,222**	29,838	3,382
Total non-current liabilities	**1,037**	751	8
Total equity	**35,293**	(13,809)	(11,682)

Revenue

Revenue was $20.1 million for the year ended December 30, 2021 compared to $20.0 million and nil for the years ended December 31, 2020 and December 31, 2019, respectively.

Revenue in 2021 and 2020 was entirely related to license payments earned from Medtronic. In 2021, the Company earned license revenue from achieving two defined milestones in the Development Agreement. In 2020, the Company earned $10.0 million in revenue related to an upfront license payment pursuant to the License Agreement and $10.0 million from achieving a defined milestone in the Development Agreement. The Company did not earn any revenue in 2019.

The Company has completed all of the milestones under the Development Agreement and the License Agreement with Medtronic and has earned $40.6 million of the maximum amount of $41 million. See "*Significant Transactions - Development Agreement & License Agreement with Medtronic*".

Research and Development

Research and development ("**R&D**") expenses were $38.0 million for the year ended December 31, 2021 compared to $7.9 million for the year ended December 31, 2020 and $51.4 million for the year ended December 31, 2019.

In 2021, R&D expenses were related to the development of the Enos System and the development work required to achieve the milestones under the Development Agreement with Medtronic. The Company continues to establish its team in Chapel Hill that has grown significantly in 2021 to over 35 employees at December 31, 2021, comprised of engineers, quality and regulatory staff focused on the development of the Enos System.

In 2020, the Company temporarily suspended R&D activities in the first half of 2020, and following execution of the Medtronic Agreements in June 2020, the Company made the strategic decision to move a significant portion of its R&D in-house at its new facility in Chapel Hill, North Carolina to advance both the development of the Enos System and complete the development work required to achieve the Medtronic Milestones. See "*Significant Transactions - Development Agreement & License Agreement with Medtronic*".

In 2019, R&D expenses were $51.4 million related to the development of the Enos System. In 2019, the Company outsourced all development work.

General and Administrative

General and administrative ("**G&A**") expenses were $12.4 million for the year ended December 31, 2021 compared to $7.6 million for the year ended December 31, 2020 and $7.8 million for the year ended December 31, 2019.

The increase in G&A expenses in 2021 compared to 2020 is related to an increase in stock-based compensation of $2.6 million, $0.7 million in severance costs, expansion of the senior leadership team to support the development of the Enos system and professional fees related to market research.

The decrease in G&A expenses in 2020 compared to 2019 is primarily related to a decrease in stock-based compensation of $0.6 million.

Depreciation and Amortization

Depreciation and amortization expenses consists of depreciation of right of use assets, property plant and equipment and amortization of patent rights.

Depreciation and amortization expenses were $0.7 million for the year ended December 31, 2021 compared to $0.3 million for the year ended December 31, 2020 and $33,000 for the year ended December 31, 2019.

The increase in depreciation and amortization expenses in 2021 compared to 2020 is related to the expansion of the lease at the Company's facility in Chapel Hill, equipment purchased to support R&D and manufacturing, and amortization of the Company's patents.

The increase in depreciation and amortization expenses in 2020 compared to 2019 is related to the lease costs from establishing the Company's facility in Chapel Hill, equipment purchased to support R&D and manufacturing, and amortization of the Company's patents.

Net (Loss) Income from Operations

Net loss from operations was $31.0 million for the year ended December 31, 2021 compared to net income from operations of $4.2 million for the year ended December 31, 2020 and a net loss from operations of $59.3 million for the year ended December 31, 2019.

The increase in net loss from operations in 2021 compared to 2020 is primarily related to R&D costs to advance the development of the Enos System and the costs incurred related to the Development Agreement and an increase in stock based compensation, partially offset by the revenue from the Development Agreement.

In 2020, net income from operations was related to $20 million in license revenue from the License Agreement with Medtronic, partially offset by G&A expenses and limited R&D expenses as the Company temporarily suspended R&D activities in the first half of 2020.

In 2019, net loss from operations of $59.3 million was primarily related to R&D costs to advance the development of the Enos System.

Other (income) expenses

During the year ended December 31, 2021, the Company recognized other income of $16.2 million compared to other expenses of $28.4 million for the year ended December 31, 2020 and other income of $17.4 million for the year ended December 31, 2019.

	Year Ended December 31,		
	2021	2020	2019
	$	$	$
Finance income	**(73)**	(29)	(116)
Finance expenses	**125**	1,091	423
Foreign exchange loss	**76**	114	38
Other income	**(605)**	-	-
(Gain) loss on fair value of warrant derivative	**(15,708)**	27,856	(19,801)
Warrant derivative liability issue cost	**-**	1,816	2,097
Gain on settlement	**-**	(2,513)	-
Total other (income) expenses	**(16,185)**	28,335	(17,359)

Finance income

Finance income was $73,000 for the year ended December 31, 2021 compared to $29,000 for the year ended December 31, 2020 and $116,000 for the year ended December 31, 2019.

The increase in finance income in 2021 compared to 2020 is related to interest income earned on the Company's cash balances that were significantly higher in 2021 than 2020.

The decrease in finance income in 2020 compared to 2019 is related to interest income earned on the Company's cash balances that were lower in 2020 than 2019.

Finance expenses

Finance expenses were $0.1 million for the year ended December 31, 2021 compared to $1.1 million for the year ended December 31, 2020 and $0.4 million for the year ended December 31, 2019.

Finance expenses in 2021 were related to interest on the Medtronic Loan. In 2020, the finance expenses related to interest on the Medtronic Loan and interest charges from an agreement with a product development supplier on outstanding payables. In 2019, the finance expenses related to interest charges from an agreement with a product development supplier on outstanding payables.

Foreign exchange loss

Foreign exchange loss was $76,000 for the year ended December 31, 2021 compared to $114,000 for the year ended December 31, 2020 and $38,000 for the year ended December 31, 2019. Foreign exchange loss in all years is related to the revaluation of the Canadian dollar non-monetary assets.

Other income

Other income was $0.6 million for the year ended December 31, 2021 compared to $nil for the years ended December 31, 2020 and December 31, 2019, respectively. Other income of $0.6 million in 2021 is related to certain legal, transaction and intellectual property costs that were previously capitalized in the Medtronic Loan and subsequently reimbursed by Medtronic.

(Gain) Loss on Fair Value of Warrant Derivative

For the year ended December 31, 2021, the gain on the fair value of the warrant derivative was $15.8 million compared to a loss of $27.9 million for the year ended December 31, 2020 and a gain of $19.8 million for the year ended December 31, 2019.

The warrant derivative is marked to market at each reporting period and the gain or loss represents the change in valuation of the warrant derivative liability and can fluctuate significantly based on the market price of the Company's Common Shares.

Warrant Derivative Liability Issue Cost

The warrant derivative liability issue cost was $nil for the year ended December 31, 2021, compared to $1.8 million for the year ended December 31, 2020 and $nil for the year ended December 31, 2019.

The warrant derivative liability issue cost is related to the proportional amount of issuance costs associated with the purchase warrants pursuant to the June 2020 equity offering.

Gain on Settlement

The gain on settlement was $nil for the year ended December 31, 2021, compared to $2.5 million for the year ended December 31, 2020 and $nil for the year ended December 31, 2019.

In 2020, the Company settled a legal claim with a supplier for a payment to the supplier of $1.1 million and in exchange the supplier returned certain personal property and related electronic data to the Company.

Income tax expense

Income tax expense was $56,000 for the year ended December 31, 2021, compared to $nil for the years ended December 31, 2020 and December 31, 2019, respectively.

Net and Comprehensive Loss

Net and comprehensive loss was $14.9 million for the year ended December 31, 2021, compared to $24.2 million for the year ended December 31, 2020 and $41.9 million for the year ended December 31, 2019.

The decrease in net loss in 2021 compared to 2020 was due to a $35.1 million increase in loss from operations related to the development of the Enos System and an increase in stock based compensation, offset by the $43.6 million difference in the fair value of the warrant derivative.

The decrease in net loss in 2020 compared to 2019 was due to a $63.4 million improvement in loss from operations related to $20.0 million in revenue from the Medtronic Agreements and a significant decrease in R&D expenses as the Company temporarily suspended R&D activities in the first half of 2020 and then subsequently in June 2020, moved a significant portion of its R&D in-house to its new R&D center in Chapel Hill to advance both the development of the Enos System and complete the development work required to achieve the Medtronic Milestones. See "*Results of Operations – Research and Development*" and "*Significant Transactions - Development Agreement & License Agreement with Medtronic*".

LIQUIDITY AND CAPITAL RESOURCES

	Year Ended December 31,		
	2021	2020	2019
	$	$	$
Cash used in operating activities	**(36,617)**	(845)	(45,961)
Cash provided by financing activities	**44,209**	26,099	35,762
Cash used in investing activities	**(755)**	(599)	(458)
Net change in cash during the period	**6,837**	24,655	(10,657)
Cash, beginning of period	**25,469**	814	11,471
Cash, end of period	**32,306**	25,469	814

The Company had cash of $32.3 million at December 31, 2021, compared to $25.5 million at December 31, 2020 and $0.8 million at December 31, 2019.

Operating Activities

Cash used in operating activities was $36.6 million for year ended December 31, 2021 compared $0.8 million for year ended December 31, 2020 and $46.0 million for year ended December 31, 2019.

Cash used in operating activities in 2021, was primarily related to the costs associated with the development of the Enos System and the development work under the Development Agreement with Medtronic.

In 2020, cash used in operating activities was significantly lower as the Company temporarily suspended R&D activities in the first half of 2020 before moving a significant portion of its R&D in-house. See "*Results of Operations – Research and Development*" and "*Significant Transactions - Development Agreement & License Agreement with Medtronic*".

In 2019, cash used in operating activities of $46.0 million was primarily related to the costs associated with the development of the Enos System.

Financing Activities

Cash provided by financing activities was $44.2 million for year ended December 31, 2021 compared $26.1 million for year ended December 31, 2020 and $35.8 million for year ended December 31, 2019.

In 2021, the Company raised $31.3 million from the issuance of Common Shares and warrants in two separate financings (see "*Significant Transactions – February 2021 Equity Offering and January 2021 Equity Offering*"). In addition, the Company received proceeds of $10.0 million related to the exercise of warrants and $2.7 million from the issuance of Common Shares to Aspire.

In 2020, the Company raised $21.2 million from three separate financings (see "*Significant Transactions – June 2020 Financing, May 2020 Financing and March 2020 Financing*"); $2.0 million from the issuance of Common Shares to Aspire and received $1.5 million under the Note from Medtronic (see "*Significant Transactions – Senior Secured Loan from Medtronic*").

In 2019, the Company received gross proceeds of $28.8 million from the issuance of Common Shares and warrants in an equity financing. In addition, the Company received proceeds of $5.3 million from the issuance of Common Shares to Aspire and $3.3 million related to the exercise of warrants.

Investing Activities

Cash used in investing activities was $0.8 million for year ended December 31, 2021 compared $0.6 million for year ended December 31, 2020 and $0.5 million for year ended December 31, 2019.

In 2021 and 2020, cash used in investing activities related to the purchase of equipment for the development of the Enos System and patent costs.

In 2019, cash used in investing activities related to patent costs.

Working Capital

The Company defines working capital as current assets less current liabilities. Working capital was $32.7 million at December 31, 2021. Working capital includes the non-cash warrant derivative liability of $4.9 million. The Company anticipates that its working capital will be sufficient to continue to fund the development of its Enos System and operational expenses through the first quarter of 2023.

However, unexpected increases in costs and expenses due to operational decisions made by the Company and/or factors beyond the Company's control, such as pandemics including COVID-19 or any variants and international conflicts including the Russian invasion of Ukraine, could cause a material impact on working capital resources of the Company.

SELECTED QUARTERLY INFORMATION

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) / income figures include the non-cash effects of adjustments in the valuation of outstanding warrant liability.

	Revenue	**Net and comprehensive (loss) income**	**Basic and diluted (loss) earnings per share**
	$	**$**	**$**
December 31, 2021	10,000	9,431	0.08
September 30, 2021	-	(8,555)	(0.08)
June 30, 2021	10,043	(940)	(0.01)
March 31, 2021	50	(14,794)	(0.15)
December 31, 2020	10,000	(20,633)	(0.25)
September 30, 2020	-	(1,641)	(0.02)
June 30, 2020	10,000	(1,143)	(0.02)
March 31, 2020	-	(768)	(0.02)

Significant changes in key financial data from January 1, 2020 through December 31, 2021 reflect the following:

- the revenue recognition of the payments received pursuant to the Medtronic Agreements;
- the resumption of product development following receipt of license fees earned pursuant to the Medtronic License Agreement and Development Agreement;
- the equity capital raises in the capital markets, all since the first quarter of 2020;
- the Company established in-house R&D capabilities in Q3 2020 that increased staffing costs; and
- the ongoing non-cash impact associated with the requirement to revalue the Company's warrant derivative liability at fair value, with subsequent changes recorded through net and comprehensive loss for the period.

Historically, operating results have fluctuated on a quarterly basis and the Company expects that quarterly results will continue to fluctuate in the future. Operating results for interim periods should not be relied upon as an indication of the results to be expected or achieved in any future period or any fiscal year as a whole. Risk factors affecting revenue and results are discussed in the section entitled "*Risk Factors*" in the Annual Report.

FOURTH QUARTER RESULTS

	Three months ended December 31,	
	2021	2020
	$	$
Revenue	**10,000**	10,000
Expenses		

Research and development	**10,805**	5,503
General and administrative	**1,984**	1,352
Depreciation and amortization	**296**	194
	13,085	7,049
Net (loss) income from operations	**(3,085)**	2,951
Finance income	**(20)**	(11)
Finance expenses	**125**	1,091
Foreign exchange loss	**76**	114
Other income	**(605)**	-
(Gain) loss on fair value of warrant derivative	**(12,148)**	23,062
Gain on settlement	**-**	(673)
Total other expenses (income)	**(12,572)**	23,583
Income tax expense	**56**	-
Net and comprehensive (income) loss	**9,431**	(20,632)
Basic and diluted loss per share	**0.08**	(0.25)

Operating Results

Total revenue for the three months ended December 31, 2021 was $10.0 million compared to $10.0 million for the three months ended December 31, 2020. Revenue is entirely related to license payments earned from Medtronic. In the three months ended December 31, 2021, the Company earned license revenue from achieving the final milestones in the Development Agreement. In the three months ended December 31, 2020, the Company earned $10.0 million from achieving a defined milestone in the Development Agreement.

For the three months ended December 31, 2021, R&D expenses increased to $10.8 million compared to $5.5 million for the for the three months ended December 31, 2020. In the quarter, R&D expenses related to the development of the Enos System and the development work required to achieve the final milestone under the Development Agreement with Medtronic. In the comparative period, the R&D expenses related to establishing a new facility in Chapel Hill, North Carolina to focus on the development of the Enos System and development work required to complete the milestone under the Development Agreement with Medtronic.

G&A expenses increased to $2.0 million for the three months ended December 31, 2020 compared to $1.4 million for the three months ended December 31, 2019. The increase in G&A expenses is related to $0.5 million in severance costs and an increase in stock-based compensation.

Depreciation and amortization expenses were $0.3 million for the three months ended December 31, 2021 compared to $0.2 million for the year ended December 31, 2020. The increase in depreciation is related to expansion of the lease at the Company's facility in Chapel Hill.

Net loss from operations was $3.1 million for the three months ended December 31, 2021 compared to net income of $3.0 million for the three months ended December 31, 2020. The $6.1 million change is related to R&D expenses related to the development of the Enos System.

Other expenses (income) primarily consists of the change in the fair value of warrant derivative due to the decrease in the share price in the current quarter.

Net and comprehensive income was $9.4 million for the three months ended December 31, 2021 compared to a net and comprehensive loss of $20.6 million for the three months ended December 31, 2020. In 2021, the net loss from operations of $3.1 million was offset by other income of $12.6 million primarily related to $12.1 million gain on the fair value of the warrant derivative. In 2020, the net income from operations of $3.0 million was reduced by the other expenses of $23.6 million primarily related to $23.0 million loss on the fair value of the warrant derivative.

LIQUIDITY AND CAPITAL RESOURCES

	Three Months Ended, December 31	
	2021	2020
	$	$
Cash used in operating activities	**(12,295)**	(4)
Cash provided by financing activities	**78**	1,143
Cash used in investing activities	**(154)**	(345)
Net change in cash during the period	**(12,371)**	794
Cash, beginning of period	**44,677**	24,675
Cash, end of period	**32,306**	25,469

Cash was $32.3 million as at December 31, 2021, an increase of $6.8 million compared to $25.5 million as at December 31, 2020. In the current quarter, cash decreased due to cash used in operating activities.

Cash used in operating activities was $12.3 million for the three months ended December 31, 2021 compared to $4,000 for the three months ended December 31, 2020. In the current quarter, cash was used to fund the development of the Enos System. In the comparative period, cash used to fund the development of the Enos System was offset by the receipt of a licensing payment from Medtronic.

Net cash provided by financing activities was $78,000 for the three months ended December 31, 2021 compared to $1.1 million for the three months ended December 31, 2020. In the current quarter, the Company increased the Medtronic Loan by $174,000, partially offset by the lease payments. In the comparative quarter, the Company received $1.2 million from the issuance of Common Shares to Aspire.

Net cash used in investing activities was $0.2 million for the three months ended December 31, 2021 compared to net cash used in investing activities of $0.3 million for the three months ended December 31, 2020. In the current and comparative quarters, the Company's net cash used in investing activities included the purchase of R&D equipment and fees related to patents.

CAPITAL MANAGEMENT

The Company's objective when managing capital is to maintain a strong statement of financial position. We achieve our objective by obtaining adequate cash resources to support planned activities which include manufacturing the Enos System, filing an IDE with the FDA, clinical studies, filing the De Novo application, administrative costs, and intellectual property expansion and protection. The Company defines its capital as cash and shareholders' equity, which as at December 31, 2021 totaled $67.6 million [December 31, 2020 - $11.7 million].

The Company does not have any debt other than accounts payable and accrued liabilities and lease liabilities. The Company does have commitments related to the Enos System.

In managing its capital, the Company estimates future cash requirements by preparing an annual budget for review and approval by its Board. The budget establishes the approved activities for the upcoming year and estimates the costs associated with these activities.

Historically, the Company has funded its operations through the issuance of additional Common Shares and common share purchase warrants that upon exercise are converted to Common Shares and through license revenue received under licensing agreements. While management regularly monitors the capital markets, general market conditions, and the availability of capital, there are no assurances that funds will be made available to the Company in the required amounts or when required. The Company has the ability to sell approximately 2.7 million shares under the terms of the Aspire Agreement, which will expire in June 2022.

On July 30, 2019, the Company filed a Form F-3 registration statement (the "**Base Shelf**") that qualifies for distribution of up to $125,000,000 of Common Shares, warrants, or units (the "**Securities**") in either Canada, the U.S. or both.

Under the Base Shelf, the Company may sell Securities to or through underwriters, dealers, and also may sell Securities directly to purchasers or through agents, subject to obtaining any applicable exemption from registration requirements. The distribution of Securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be subject to change, at market prices prevailing at the time of sale, or at prices related to such prevailing market prices to be negotiated with purchasers and as set forth in an accompanying Prospectus Supplement.

The Base Shelf provides the Company with additional flexibility when managing its cash resources as, under certain circumstances, it can shorten the time period required to close a financing and is expected to increase the number of potential investors that may be prepared to invest in the Company. Funds received as a result of using the Base Shelf would be used in line with the Board approved budget. The Base Shelf is effective until July 30, 2022.

CONTRACTUAL OBLIGATIONS

Contractual obligations relating to accounts payable and accrued liabilities, long-term debt, and lease liabilities and purchase order commitments as at December 31, 2021, are as follows:

	Total	Less than 1 year	2 – 3 years	4 – 5 years	Greater than 5 years
	$	$	$	$	$
Accounts payable and accrued liabilities	5,616	5,616	-	-	-
Lease liabilities	1,327	346	981	-	-
Purchase order commitments[1]	9,313	9,313	-	-	-
TOTAL	**16,256**	**15,275**	**981**	**-**	**-**

Note:

1. Purchase order commitments are obligations that are not reflected on the balance sheet. These are contracts with suppliers not yet fulfilled. These commitments are with engineering consulting firms to support the development of the Enos System and suppliers for parts to manufacture the Enos System.

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 2021 fiscal year.

Date of Financing	Anticipated Use of Proceeds	Actual Use of Proceeds
February 24, 2021	The Company intends to use the net proceeds from the offering to continue development of its Enos System; complete system verification testing; complete HFE summative testing; update application for planned IDE clinical studies as additional testing lab data is received and continue preparation for human confirmatory studies; submit an IDE application to FDA; and complete secondary build of Enos system IDE units including instruments and accessories.	As anticipated
January 26, 2021	The Company intends to use the net proceeds from the offering to continue development of its Enos System	As anticipated

OFF-BALANCE SHEET ARRANGEMENTS

As of the date of this report, the Company had no off-balance sheet arrangements.

OUTSTANDING COMMON SHARE DATA

The following table summarizes the outstanding share capital as of March 23, 2022:

Type of Securities	Number of Common Shares issued or issuable upon conversion
Common Shares [1, 2]	111,202,690
Stock options[3]	5,257,089
Restricted share units[4]	1,581,607
Derivative warrant units	18,955,281
Equity warrants	9,912,633

Notes:

1. The Company has entered into an agreement with a consultant under which the Company has certain contractual obligations to grant up to 100,000 restricted Common Shares based on the consultant's achievement of multiple pre-determined performance criteria. To date, the performance criteria have not been achieved and no restricted Common Shares have been granted to the consultant. The agreement expires on May 13, 2022.
2. The Company entered into an agreement with a consultant under which the Company has certain contractual obligations to grant up to 125,000 restricted Common Shares based on the consultant's achievement of multiple pre-determined performance criteria. The consultant achieved certain performance criteria and earned 75,000 restricted Common Shares. The other performance criteria have not been achieved. The agreement with the consultant was terminated on December 15, 2021.
3. The Company has outstanding stock options enabling certain employees, directors, officers and consultants to purchase Common Shares. On March 3, 2021, the Company issued 1,801,262 stock options with an exercise price of $2.21. On June 10, 2021, the Company issued 821,124 stock options with an exercise price of $1.87. On August 20, 2021, the Company issued 693,809 stock options with an exercise price of $1.58. On November 22, 2021, the Company issued 409,650 stock options with an exercise price of $0.90.
4. Pursuant to the Company's Share Unit Plan, the Company granted 38,775 RSUs to certain directors during the three months ended December 31, 2021 (2,291,815 RSUs were granted to certain directors and officers during the year ended December 31, 2021).

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

A description of the Company's significant accounting policies are included in Note 2 of the Company's audited consolidated financial statements for the year ended December 31, 2021.

The preparation of the Consolidated Financial Statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the Consolidated Financial Statements and the reported amounts of revenue and expenses during the reporting periods. Management has identified accounting estimates that it believes are most critical to understanding the Consolidated Financial Statements and those that require the application of management's most subjective judgments, often requiring the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. The Company's actual results could differ from these estimates and such differences could be material.

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 derivative liabilities and the 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.

RELATED PARTY TRANSACTIONS

During the years ended December 31, 2021, December 31, 2020 and December 31, 2019, transactions between the Company and directors, officers and other related parties were related to compensation matters in the normal course of operations and are measured at the 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, accounts payable and accrued liabilities and the warrant derivative liability. The fair value of these financial instruments approximates their carrying values, unless otherwise noted, due to the short-term maturities of these instruments, the discount rate applied or in the case of the warrant liability, due to the application of mark-to-market policy.

INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for the design of internal controls over financial reporting ("**ICFR**") within the Company, in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

National Instrument 52-109 – *Certification of Disclsoure in Issuers' Annual and Interim Filings* requires the Chief Executive Officer and Chief Financial Officer to certify that they are responsible for establishing and maintaining ICFR for the Company and that those internal controls have been designed and are effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The Chief Executive Officer and Chief Financial Officer are also responsible for disclosing any changes to the internal controls for the Company that have materially affected, or are reasonably likely to materially affect, the Company's ICFR.

Management, including the Chief Executive Officer and Chief Financial Officer, does not expect that the internal controls over financial reporting of the Company will prevent or detect all errors and all fraud or will be effective under all potential future conditions. A control system is subject to inherent limitations and, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control systems objectives will be met.

Further, the design of a control system must reflect that there are resource constraints, and the benefits of controls must be considered relative to their costs. Inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of simple errors or mistakes. Controls can also be circumvented by individual acts of some persons, by collusion of two or more people or by management override of the controls. Due to the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. The design of any control system is also based in part upon certain assumptions about the likelihood

of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential conditions. Projections of any evaluations 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 the policies or procedures may deteriorate.

The Chief Executive Officer and Chief Financial Officer have evaluated the design and operating effectiveness of the internal controls over financial reporting of the Company and concluded that, as of December 31, 2021, and subject to the inherent limitations described above, internal controls over financial reporting were appropriately designed and were operating effectively in accordance with the framework and criteria used by the Company.

There have been changes in the ICFR of the Company during the period of this MD&A that have materially affected, or are reasonably likely to materially affect, the Company's ICFR. These changes are outlined in the table and were implemented to remediate identified material weaknesses in its ICFR for the fiscal year ended December 31, 2020.

The Company's three identified material weaknesses at December 31, 2020 and the steps the Company has taken to remediate these weaknesses are:

	Material Weakness	**Remediation Actions**
1	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.	The Company has enhanced its finance team to add more in-depth experience to support the growth and complexity of the business. The Company has engaged the services of third party financial experts to assist in the preparation and review of more complex financial transactions.
2	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.	The Company has enhanced its finance team to add more in-depth experience to support the growth and complexity of the business. The Company has engaged the services of third party financial experts to assist in the preparation and review of more complex financial transactions. The Company has purchased technology that will value the warrant liabilities as well as all equity compensation.
3	The Company did not sufficiently design internal controls to provide an appropriate level of oversight regarding the financial recordkeeping and review of the Company's cut-off procedures as they relate to the accounts payable and valuation of supplier liabilities.	The Company has enhanced its finance team to add more in-depth experience to support the growth and complexity of the business. The Company has engaged the services of third party financial experts to assist in the preparation and review of more complex financial transactions. The Company has designed improved internal controls related to supplier liabilities, procurement and cut-off.

Exhibit 15.3

Consent of Independent Registered Public Accounting Firm

Titan Medical Inc.
Toronto, Canada

We hereby consent to the use of our report dated March 23, 2022, relating to the financial statements of Titan Medical Inc. (the "Company") included in this Annual Report on Form 20-F for the year ended December 31, 2021.

We also consent to the incorporation by reference of such reports into the Company's Registration Statement on Form F-3 (File Nos. 333-232898 and 333-238830), and Registration Statements on Form S-8 (File Nos. 333-229612, 333-240018 and 333-255497).

/s/ BDO Canada LLP
BDO Canada LLP
Toronto, Canada

March 23, 2022