UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of August, 2021.

Commission File Number: **001-38524**

Titan Medical Inc.

(Exact Name of Registrant as Specified in Charter)

155 University Avenue, Suite 750
Toronto, OntarioM5H 3B7
Canada
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.
Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ____

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ____

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Exhibit 99.2 and Exhibit 99.3 on this Report on Form 6-K will be deemed to be incorporated by reference into the Registrant'sForm F-3 registration statements filed on July 30, 2019 and March 13, 2021 (File Nos. 333-232898 and 333-238830) and Form S-8 registration statements filed on February 12, 2019, July 20, 2020 and April 26, 2021 (File Nos. 333-229612, 333-240018 and 333-255497).

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TITAN MEDICAL INC.
(Registrant)

Date: August 11, 2021

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

EXHIBIT INDEX

99.1	News Release dated August 11, 2021
99.2	Interim Financial Statements – June 30, 2021
99.3	MD&A – June 30, 2021
99.4	Certification of interim filings - CEO
99.5	Certification of interim filings - CFO

TITAN MEDICAL

Titan Medical Reports Second Quarter 2021 Financial Results

Achievement of milestone and receipt of $10 million license payment from Medtronic
Augmented Board of Directors and strengthened leadership team
Progress on development activities to support submission of IDE application to FDA

TORONTO, August 11, 2021 - Titan Medical Inc. (Nasdaq: TMDI; TSX: TMD), a medical device company focused on the development and commercialization of its innovative surgical technologies for robotic single access surgery, today announced financial results for the three and six months ended June 30, 2021.

During the second quarter of 2021, the company made solid progress under the development and license agreement with Medtronic plc, strengthened its leadership team, expanded and diversified its Board of Directors, increased its cash position, secured additional intellectual property, and progressed activities toward filing an IDE (Investigational Device Exemption) application with the FDA, currently anticipated in the first quarter of 2022.

“Among our accomplishments during a highly productive second quarter is the progress achieved by our rapidly growing engineering team in Chapel Hill, recently evidenced by the successful completion of a porcine hysterectomy and simulated hernia repair using our Enos™ robotic single access surgical system. With this foundational work competed, along with cash on hand to fund us through 2022, and the recent additions to our Board of Directors and leadership team, we are well positioned to execute on our plans toward regulatory clearance and commercialization of our Enos system,” stated David McNally, President and Chief Executive Officer of Titan. “Additionally, the company enhanced its development and manufacturing capabilities and expanded its intellectual capital, adding to a growing patent portfolio, which now comprises over 175 patents and patent applications. We believe that our intellectual property portfolio, a subset of which we share with Medtronic under a development and license agreement, positions us as an innovation leader in robotic single access surgery.”

“Looking forward, we are focused on clarifying expectations with the FDA for human clinical studies, currently planned to commence in the first half of 2022, and on the completion of the final milestone associated with the Medtronic development and license agreement, anticipated by year-end,” McNally explained. “Our vision of commercializing a leading edge innovative robotic single access surgical system in an underserved market is closer to being achieved through recent progress and planned actions,” McNally added.

Recent Company Progress and Future Activities

- *Continued progression of milestone achievements with Medtronic*
  - Successful completion of the third milestone under the development and license agreement.
  - Final milestone is expected for completion by year-end 2021.

- *Advanced product development in preparation of an IDE Application with the FDA*
  - Expanded intellectual capital through the recruitment of engineering talent and lease expansion to facilitate continued innovation and in-house manufacturing of instruments and cameras.
  - Ricardo Estape, MD successfully completed an animal lab hysterectomy and simulated hernia repair using the Enos system. Dr. Estape’s interview can be viewed on the Titan Living Labs section of Titan’s website here.
  - Commenced biocompatibility testing of instruments, camera systems and accessories.
  - Planned commencement of Good Laboratory Practice studies in September 2021 in support of the upcoming IDE application.

- *Expansion of leadership team*
  - Stephen Lemieux joined Titan as Chief Financial Officer with experience leading successful company financings, licensing and M&A transactions valued at over $400 million.
  - Tammy Carrea joined Titan as Vice President, Quality and Regulatory Affairs having developed and implemented clinical and regulatory strategies and successfully registering medical devices including FDA De Novo applications.
  - Deepak Basra joined Titan as Vice President, Strategy and Business Development bringing his strategic and business development expertise gained from multiple global firms including Covidien’s vascular therapies division.
  - Paul Cataford was named Chairman of the Board, from his previous role as Lead Independent Director of Titan’s Board of Directors.
  - All existing board members and additional nominees were elected as directors of the company at the Annual and Special Meeting of Shareholders. New directors include Cathy Steiner, an experienced investment banker and financial and capital markets advisor for healthcare companies, and Heather Knight, a dynamic sales and marketing executive with proven healthcare commercial experience, including her current post with Baxter Healthcare and prior position with Medtronic with the multi-billion dollar Surgical Innovations business group.

- *Strengthened financials*
  - Cash increased to $55.0 million in the quarter from the receipt of the $10.0 million license payment from Medtronic and from the receipt of $2.5 million from the issuance of common shares to Aspire Capital Fund, LLC.

- *Expanded R&D capabilities and intellectual property*
  - Increased footprint in Chapel Hill to support the expansion of development and manufacturing activities.
  - As of June 30, 2021, Titan holds 82 issued patents and 95 patent applications, with a growing portfolio in single access robotic assisted surgery.

- *Recent investor events* (investor presentation can be viewed here)
  - David McNally and Stephen Lemieux participated in investor meetings at A.G.P.'s Virtual MedTech Summer Conference.
  - David McNally presented at the Oppenheimer MedTech Summit Investor Conference.

Upcoming Virtual Investor Events

- H.C. Wainwright 23rd Annual Global Investment Conference, September 13-15, 2021
- Oppenheimer Fall Healthcare Life Sciences & MedTech Summit, September 20-23, 2021
- Cantor Global Healthcare Conference, September 27-30, 2021

Financial Highlights

As of June 30, 2021, Titan had cash and cash equivalents of $55.0 million, compared to $25.5 million at December 31, 2020 and $53.4 million at March 31, 2021.

Research and development ("R&D") expenses increased to $7.1 million in the quarter compared to $0.1 million in the second quarter of 2020. R&D is focused on the development of the Enos system and development activities under the development and license agreement with Medtronic. In the comparative period, the Company temporarily suspended R&D activities. For the six-months ended June 30, 2021, R&D expenses were $14.7 million compared to $0.2 million in the comparative period.

General and administrative ("G&A") expenses were $4.8 million in the quarter compared to $2.4 million in the comparative period. The Company adjusts G&A for non-cash and one-time items such as stock-based compensation ("SBC") and severance. Adjusted G&A was $3.2 million for the quarter compared to $2.2 million in the three-month period ending June 30, 2020. The increase is primarily related to the expansion of the leadership team to support the development of the Enos system and advancement of the Company's strategic initiatives. For the six-months ended June 30, 2021, Adjusted G&A expenses were $6.5 million compared to $3.6 million in the comparative period.

The Company's interim financial statements and MD&A are available at www.sedar.com and at www.sec.gov.

Investor Audio Webcast Information

Titan Medical will host an investor audio webcast at 8:30 a.m. ET today (August 11, 2021) to discuss the company's financial results for the second quarter ended June 30, 2021, and recent business highlights. The webcast can be accessed via the Investor Relations section of the company's website www.titanmedicalinc.com.

Non-IFRS Measures

The Company discloses non-IFRS measures (such as adjusted G&A expenses) that do not have standardized meanings prescribed by IFRS. The Company believes that shareholders, investment analysts and other readers find such measures helpful in understanding the Company's financial performance. Non-IFRS financial measures do not have any standardized meaning prescribed by IFRS and may not have been calculated in the same way as similarly named financial measures presented by other reporting issuers and therefore unlikely to be comparable to similar measures presented by other companies. Furthermore, these non-IFRS measures should not be considered in isolation or as a substitute for measures of performance or cash flows as prepared in accordance with IFRS. These measures should be considered as supplemental in nature and not as a substitute for related financial information prepared in accordance with IFRS.

Adjusted G&A

G&A refers to expenses determined in accordance with IFRS. The Company defines adjusted G&A as G&A excluding SBC expense and severance costs. Management believes adjusted G&A is a useful supplemental measure to determine the Company's cash burn rate related to G&A so investors can understand the cash that is available for research and development.

	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	**June 30, 2021**	June 30, 2020
	$	$	**$**	$
General and administrative expense	**4,837**	2,389	**8,903**	4,059
Stock-based compensation expense	**(1,429)**	(206)	**(2,197)**	(435)

Severance provision	**(171)**	-	**(171)**	-
Adjusted general and administrative expense	**3,237**	2,183	**6,535**	3,624

About Titan Medical

Titan Medical Inc. (Nasdaq: TMDI; TSX: TMD), a medical device company headquartered in Toronto, Ontario and with R&D facilities in Chapel Hill, North Carolina, is focused on enhancing robotic assisted surgery using innovative technology through a single access point. The Enos™ robotic single access surgical 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.

Certain aspects of Titan's robotic assisted surgical technologies and related intellectual property have been licensed to Medtronic plc, while retaining world-wide rights to commercialize the technologies for use with the Enos system.

Enos™ is a trademark of Titan Medical Inc.

For more information, visit www.titanmedicalinc.com.

Forward-Looking Statements

This news release contains "forward-looking statements" within the meaning of applicable Canadian and U.S. securities laws, which reflect the current expectations of management of the company's future growth, results of operations, performance, and business prospects and opportunities. Forward-looking statements are frequently, but not always, identified by words such as "may", "would", "could", "will", "anticipate", "believe", "plan", "expect", "intend", "estimate", "potential for" and similar expressions, although these words may not be present in all forward-looking statements. Forward-looking statements that appear in this release may include, without limitation, references to: the company's focus on the design and development of surgical technologies for robotic single access surgery; the company's anticipated filing of an IDE application with the FDA; the company's planned commence of Good Laboratory Practice studies; the company's focus on clarifying expectations for human clinical studies and the commencement thereof; the company's work under the development and license agreement with Medtronic and the anticipated completion of the final milestone under the agreement; the company's vision of providing an innovative robotic single access surgical system in an underserved market; the company's intention to host an upcoming investor audio webcast; the company's focus on enhancing robotic assisted surgery using innovative technology through a single access point; the Enos robotic single access surgical system being developed with an ergonomic focus to provide a surgical experience that imitates real-life movements that surgeons demand; and that Titan intends to initially pursue gynecologic surgical indications. These statements reflect management's current beliefs and are based on information currently available to management. Forward-looking statements involve significant risks, uncertainties, and assumptions. Many factors could cause the company's actual results, performance, or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements, including, without limitation, those listed in the "Risk Factors" section of the company's Annual Information Form and Form 40-F for the fiscal year ended December 31, 2020 (which may be viewed at www.sedar.com and at www.sec.gov). Should one or more of these risks or uncertainties

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materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results, performance, or achievements may vary materially from those expressed or implied by the forward-looking statements contained in this news release. These factors should be considered carefully, and prospective investors should not place undue reliance on the forward-looking statements. Although the forward-looking statements contained in the news release are based upon what management currently believes to be reasonable assumptions, the company cannot assure prospective investors that actual results, performance or achievements will be consistent with these forward-looking statements. Except as required by law, the company expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

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TITAN MEDICAL

TITAN MEDICAL INC.

2021 Second Quarter
Condensed Interim Consolidated
Financial Statements
(Unaudited)

TITAN MEDICAL INC.
Condensed Interim Consolidated Statements of Financial Position
(Unaudited)
(In thousands of US Dollars)

	Note	June 30, 2021	December 31, 2020
Assets		see Note 1(b)	
Current assets:			
Cash		**$ 55,005**	$ 25,469
Prepaid expenses, deposits and receivables		**1,905**	1,479
		56,910	26,948
Non-current assets:			
Property, plant and equipment, net		**336**	245
Right-of-use assets, net	3	**1,194**	867
Patent rights, net	4	**1,920**	1,778
		3,450	2,890
Total assets		**$ 60,360**	$ 29,838
Liabilities			
Current liabilities:			
Accounts payable and accrued liabilities		**$ 2,104**	$ 4,528
Current portion of lease liabilities		**283**	166
Note payable	5	**2,135**	1,885
Warrant derivative liability	6	**22,589**	36,317
		27,111	42,896
Long-term lease liabilities		**1,025**	751
Total Liabilities		**28,136**	43,647
Shareholders' equity (deficit)			
Share capital	9	**262,016**	214,148
	9		
Contributed surplus-Warrant reserve	(c)	**13,385**	1,671
Contributed surplus		**11,586**	9,401
Deficit		**(254,763)**	(239,029)
Shareholders' equity (deficit)		**32,224**	(13,809)
Total liabilities and Shareholders' equity (deficit)		**$ 60,360**	$ 29,838

Commitments (Note 11)

Approved on behalf of the Board:

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

The accompanying notes form an integral part of these unaudited condensed consolidated interim financial statements.

TITAN MEDICAL INC.
Condensed Interim Consolidated Statements of Net and Comprehensive Loss
(Unaudited)
(In thousands of US Dollars, except per share amounts.)

	Note	Three Months Ended		Six Months Ended	
		June 30, 2021	June 30, 2020	**June 30, 2021**	June 30, 2020
Revenue	7	**$ 10,043**	10,000	**$ 10,093**	10,000
Expenses					
Research and development		**7,088**	121	**14,728**	168
General and administrative		**4,837**	2,389	**8,903**	4,059
Depreciation and amortization	8	**138**	35	**235**	49
		12,063	2,545	**23,866**	4,276
Net (loss) income from operations		**(2,020)**	7,455	**(13,773)**	5,724
Finance income		**(20)**	(5)	**(33)**	(6)
Gain on settlement		**-**	(1,840)	**-**	(1,840)
(Gain) loss on fair value of warrant derivative	9	**(1,060)**	8,784	**1,994**	7,665
Warrant derivative liability issue cost		**-**	1,659	**-**	1,816
		(1,080)	8,598	**1,961**	7,635
Net and comprehensive loss		**$ (940)**	$ (1,143)	**$ (15,734)**	$ (1,911)
Basic and diluted loss per share	10	**$ (0.01)**	$ (0.02)	**$ (0.16)**	$ (0.04)

The accompanying notes form an integral part of these unaudited condensed consolidated interim financial statements.

TITAN MEDICAL INC.
Condensed Interim Consolidated Statements of Shareholders' Equity (Deficit)
(Unaudited)
(In thousands of US Dollars, except shares)

	Share Capital Number	Share Capital Amount	Contributed Surplus-Warrant Reserve	Contributed Surplus	Deficit	Shareholders' Equity (Deficit)
Balance - December 31, 2019	39,907,681	$ 194,217	$ 642	$ 8,304	$ (214,845)	$ (11,682)
Issued pursuant to agency agreement	23,923,700	12,819	-	-	-	12,819
March 2020 Equity Offering-broker warrants	-	(26)	26	-	-	-
Common stock equivalents converted	8,000,000	1	-	-	-	1
Share issue expense	-	(488)	-	-	-	(488)
Warrants exercised	3,750,000	2,911	-	-	-	2,911
Stock-based compensation expense	-	-	-	435	-	435
Net loss	-	-	-	-	(1,911)	(1,911)
Balance - June 30, 2020	**75,581,381**	**$ 209,434**	**$ 668**	**$ 8,739**	**$ (216,756)**	**$ 2,085**

	Note	Share Capital Number	Share Capital Amount	Contributed Surplus-Warrant Reserve	Contributed Surplus	Deficit	Shareholders' Equity (Deficit)
Balance - December 31, 2020 - see Note 1(b)		83,184,843	$ 214,148	$ 1,671	$ 9,401	$ (239,029)	$ (13,809)
Derivative warrants exercised	6	8,000,000	8,000	-	-	-	8,000
Derivative warrants exercised - fair value adjustment	6	-	15,722	-	-	-	15,722
January 2021 Equity Offering, net of issuance costs	9 (a)	7,419,354	7,067	3,164	-	-	10,231
January 2021 Equity Offering-broker warrants			(1,384)	1,384	-	-	-
February 2021 Equity Offering, net of issuance costs	9 (a)	9,585,250	15,165	5,928	-	-	21,093
February 2021 Equity Offering-broker warrants			(1,238)	1,238	-	-	-
Equity warrants exercised	9 (c)	1,318,675	1,985	-	-	-	1,985
Options exercised		19,568	27	-	(13)	-	14
Issuance of common shares		1,400,000	2,524	-	-	-	2,524
Stock-based compensation expense	9 (b)	-	-	-	2,198	-	2,198
Net loss		-	-	-	-	(15,734)	(15,734)
Balance - June 30, 2021		**110,927,690**	**$ 262,016**	**$ 13,385**	**$ 11,586**	**$ (254,763)**	**$ 32,224**

The accompanying notes form an integral part of these unaudited condensed consolidated interim financial statements.

TITAN MEDICAL INC.
Condensed Interim Consolidated Statements of Cash Flows
(Unaudited)
(In thousands of US Dollars)

	Note	For the Six Months Ended **June 30, 2021**	June 30, 2020
Cash (used in) provided by:			
Operating			
Net loss		**$ (15,734)**	$ (1,911)
Non-cash items			
Depreciation and amortization	8	**235**	49
Interest expense on lease liabilities		**33**	-
Stock-based compensation expense	9 (b)	**2,198**	435
Loss on change in fair value of warrants	6	**1,994**	7,629
Non-cash issue costs		**-**	764
Non-cash settlement included in payables		**-**	2,090
Accrued interest on Note payable		**76**	154
Changes in non-cash working capital balances			
Prepaid expenses and deposits		**(426)**	(594)
Accounts payable and accrued liabilities		**(2,424)**	(4,876)
Cash (used in) provided by operating activities		**(14,048)**	3,740
Financing			
Exercise of Derivative warrants	6	**8,000**	-
January 2021 Equity Offering, net of issuance costs	9 (a)	**10,231**	-
February 2021 Equity Offering, net of issuance costs	9 (a)	**21,093**	-
Exercise of Equity warrants	9 (c)	**1,985**	-
Exercise of stock options		**14**	-
Net proceeds from issuance of common shares		**2,524**	22,749
Note payable		**174**	1,500
Repayment of lease liabilities		**(102)**	(10)
Cash provided by financing activities		**43,919**	24,239
Investing			
Purchase of property, plant and equipment		**(152)**	-
Purchase of patents		**(183)**	(103)
Cash used in investing activities		**(335)**	(103)
Increase in cash and cash equivalents		**29,536**	27,876
Cash and cash equivalents, beginning of the period		**25,469**	814
Cash and cash equivalents, end of the period		**$ 55,005**	$ 28,690

 The accompanying notes form an integral part of these unaudited condensed interim consolidated financial statements.

1. DESCRIPTION OF BUSINESS

Nature of Operations:

Titan Medical Inc.'s ("Titan" or the "Company") business is in the research and development stage and is focused on the continued research and development of robotic assisted technologies for application in single access surgery, including the development of the Enos ^{TM} robotic single access surgical system (the "Enos system"). In the near term, the Company plans to continue efforts to complete product development and proceed to pre-clinical and confirmatory human studies and satisfaction of appropriate regulatory requirements. Upon receipt of regulatory approvals, the Company will transition from the research and development stage to the commercialization stage. The completion of the later stage will be subject to the Company receiving additional funding in the future.

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

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

Basis of Presentation:

(a) Statement of Compliance

These unaudited condensed interim consolidated financial statements (the "Interim Financial Statements") for the three months ended June 30, 2021, and June 30, 2020, have been prepared in accordance with *International Accounting Standards 34 – Interim Financial Reporting* ("IAS 34" or "*IAS 34 – Interim Financial Reporting*"). The unaudited condensed consolidated interim financial statements should be read in conjunction with the annual audited consolidated financial statements for the years ended December 31, 2020.

The Interim Financial Statements were authorized for issue by the Board of Directors on August 10, 2021.

(b) Basis of Presentation

The Company changed the presentation of the condensed interim consolidated statements of shareholders' equity (deficit) to present separately the warrant reserve previously included in share capital. The Company further changed the presentation of condensed interim consolidated statements of net and comprehensive loss to present expenses by function. Certain comparative figures have been reclassified to conform with the current period presentation.

(c) Presentation Currency

These Interim Financial Statements are presented in United States dollars ("US"), which is the Company's functional and presentation currency, and are rounded to the nearest thousands of dollars.

(d) Restricted Share Units

Pursuant to the Company's share unit plan ("SU Plan"), the Company issued restricted share units ("RSU") to certain employees and directors in Q2, 2021. Under the SU Plan, each RSU, once vested, is exchangeable for one common share in the capital of the Company (each a "Common Share").

1. DESCRIPTION OF BUSINESS (continued)

(e) 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.

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

The significant accounting policies used in preparing these Interim Financial Statements are consistent with the accounting policies and computation methods applied in the audited consolidated financial statements for the year ended December 31, 2020.

Other new and amended standards and interpretations issued by the IASB applicable for periods within the current annual reporting year are not expected to 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.

(In thousands of US dollars except per share amounts and as otherwise indicated.)

3. RIGHT-OF-USE ASSETS AND LEASE LIABILITIES

Right-of-use assets	Cost	Accumulated amortization	Net Book Value
Balance at January 1, 2021	$ 975	$ (108)	$ 867
Additions	460	(133)	327
Balance at June 30, 2021	**$ 1,435**	**$ (241)**	**$ 1,194**

Lease liabilities	Net Book Value
Balance at January 1, 2021	$ 917
Additions	460
Repayments	(102)
Interest expense	33
Balance at June 30, 2021	**$ 1,308**

4. PATENT RIGHTS

	Cost	Accumulated Amortization	Net Book Value
Balance at January 1, 2021	$ 2,130	$ (352)	$ 1,778
Additions	183	(41)	142
Balance at June 30, 2021	**$ 2,313**	**$ (393)**	**$ 1,920**

5. NOTE PAYABLE

Balance at January 1, 2021	$ 1,885
Additions	174
Accrued interest	76
Balance at June 30, 2021	**$ 2,135**

In 2020, the Company entered into an agreement with Medtronic for a note payable (the "Note"). In connection with the Note, the Company executed and delivered a security agreement in favour of Medtronic. Under the Note agreement, the Company received $1.5 million in cash and owes an additional $559 related to certain legal, transaction and intellectual property related expenses incurred by Medtronic pursuant to the Medtronic agreements and will bear interest at the rate of 8% per annum. The unpaid principal balance owing under the Note, together with any accrued and unpaid interest and all other unpaid obligations under the Note, shall be due and payable in full on the earliest to occur of: (i) June 3, 2023, (ii) a Change of Control (as defined in the Note), or (iii) the completion of the last milestone under the Development Agreement.

(In thousands of US dollars except per share amounts and as otherwise indicated.)

6. 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. The warrants are fair valued as a non-cash financial liability using the Black-Scholes model and subsequent changes in the fair value are recorded through Net and Comprehensive Loss.

	Three Months Ended June 30, 2021		Six Months Ended June 30, 2021	
	Number of Warrants	Fair value	Number of Warrants	Fair value
Balance, Opening	19,592,392	$ 23,649	28,969,670	$ 36,317
Exercised	-		(8,000,000)	(15,722)
Items that were classified to net loss				
Expired	-	-	(1,377,278)	(120)
Foreign exchange adjustment	-	-	-	43
Fair value adjustment	-	(1,060)	-	2,071
(Gain) loss on fair value of warrant derivative		(1,060)		1,994
Balance, June 30, 2021	**19,592,392**	$ 22,589	**19,592,392**	$ 22,589

7. REVENUES

On June 3, 2020, the Company entered into a License Agreement with a U.S. affiliate of Medtronic, whereby the Company is providing exclusive access to certain intellectual property rights relating to robotic assisted surgical technologies. 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. Revenue from the License Agreement for intellectual property rights and know-how 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 License Payment and will be recognized at the time the service is performed.

The Company earns license revenue from achieving defined milestones in the Development Agreement. During Q2, 2021, the Company recognized and received $10 million upon successful completion of the third milestone (Q2, 2020 - $10 million pursuant to license agreement for intellectual property rights and know-how).

To date the Company has earned $30 million of the maximum amount of $41 million that could be payable by Medtronic under the Development Agreement and the License Agreement if all of the Medtronic Milestones are completed.

8. DEPRECIATION AND AMORTIZATION

		Three Months Ended		Six Months Ended	
	Note	**June 30, 2021**	June 30, 2020	**June 30, 2021**	June 30, 2020
Depreciation of right-of-use assets	3	**$ 79**	$ 27	**$ 133**	$ 32
Depreciation of property, plant, and equipment		**30**	-	**61**	-
Amortization of patent rights	4	**29**	8	**41**	17
Depreciation and Amortization		**$ 138**	$ 35	**$ 235**	$ 49

(In thousands of US dollars except per share amounts and as otherwise indicated.)

9. SHARE CAPITAL

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

Issued: 110,927,690 (December 31, 2020: 83,184,843)

Exercise prices of units, warrants, options and RSUs, are presented in US dollars unless otherwise noted.

Aspire Agreement

During Q2, 2021, the Company issued 1,400,000 Common Shares to Aspire Capital Fund, LLC for proceeds of $2,524 pursuant to the December 23, 2019 common share purchase agreement.

January 2021 Equity Offering

On January 26, 2021, the Company closed an offering of7,419,354 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 z13637share 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 treated as share issuance costs. January 2021 Warrants and broker warrants associated with this raise qualified as equity classification – see Note 9(c).

February 2021 Equity Offering

On February 24, 2021, the Company closed an offering of9,585,250 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 issued670,967 broker warrants exercisable at $3.00 until February 24, 2023 treated as share issuance costs. February 2021 Warrants and broker warrants associated with this raise qualified as equity classification – see Note 9(c).

(b) Stock-Based Compensation

Titan has reserved and set aside up to 15% of the issued and outstanding Common Shares for the granting of stock options and restricted share units to eligible employees, officers, consultants, and advisors. The Company's compensation plan includes the Share Unit Plan (the "SU Plan"), the Deferred Unit Plan (the "DSU Plan"), the Stock Option Plan (the "Option Plan"), collectively the "Compensation Plan". At June 30, 2021, 9,328,028 Common Shares were remaining available to issue under the Compensation Plan.

Common shares outstanding	110,927,690
Available for issuance – 15% of common share outstanding	16,639,154
Reserved for stock options	(5,396,145)
Reserved for RSUs	(1,914,981)
Remainder available to reserve for future grants	**9,328,028**

(In thousands of US dollars except per share amounts and as otherwise indicated.)

During Q2, 2021, the Company granted 821,124 stock options and 387,121 RSUs to Directors, Officers and Employees. The stock-based compensation expense is presented in the General and administrative expense as follows:

	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	**June 30, 2021**	June 30, 2020
Options	**$ 775**	$ 206	**$ 1,202**	$ 435
RSUs	**654**	-	**996**	-
Stock-based compensation expense	**$ 1,429**	$ 206	**$ 2,198**	$ 435

(i) Options

A summary of the status of the Company's outstanding stock options as of June 30, 2021, is presented in the following table:

	Three Months Ended June 30, 2021		Six Months Ended June 30, 2021	
Stock options outstanding	**Number stock options**	**Weighted Average Exercise Price**	**Number of stock options**	**Weighted Average Exercise Price**
Balance, Opening	4,685,021	$ 1.94	2,923,770	$ 1.77
Granted	821,124	1.87	2,622,386	2.10
Exercised	-	-	(19,568)	0.73
Expired	-	-	(9,810)	3.66
Cancelled/ forfeited	(110,000)	1.31	(120,633)	1.44
Balance, June 30, 2021	**5,396,145**	**$ 1.94**	**5,396,145**	**$ 1.94**

(In thousands of US dollars except per share amounts and as otherwise indicated.)

During Q2, 2021, the company granted 821,124 stock options with the terms outlined below:

Grant date / recipient	Number of options	Exercise price	Vesting conditions	Contractual life of options
June 10, 2021, options A	340,000	$1.87	Options vest as to ¼ of the total number of options granted on the first anniversary of the grant date, and monthly for the remaining ¾ in equal amounts	7 years
June 10, 2021, options B	471,500	$1.87	Options vest as to ¼ of the total number of options granted on each annual anniversary of the grant date, beginning on the first year anniversary of the grant date	7 years
June 10, 2021, options C	9,624	$1.87	Options vest immediately	7 years
Total options granted in Q2, 2021	821,124			

(ii) Restricted Share Units

A summary of the status of the Company's outstanding RSUs as of June 30, 2021, is presented in the following table:

	Three Months Ended June 30, 2021		Six Months Ended June 30, 2021	
	Number of RSUs	**Weighted Average Exercise Price**	**Number of RSUs**	**Weighted Average Exercise Price**
Balance, Opening	1,527,860	$ 2.34	-	$ -
Granted	387,121	1.87	1,914,981	2.24
Balance, June 30, 2021	**1,914,981**	**$ 2.24**	**1,914,981**	**$ 2.24**

During the quarter, the Company granted 387,121 RSUs pursuant to its Share Unit Plan. RSUs are notional share units exchangeable for common shares of the Company upon vesting.

(In thousands of US dollars except per share amounts and as otherwise indicated.)

Grant date / recipient	Vesting conditions	Number of RSUs
June 10, 2021 RSUs A	RSUs vest as to ¼ of the total number of units granted, on each of four anniversaries from the grant date	210,000
June 10, 2021 RSUs B	RSUs vest on the earliest of the Company's next annual general meeting of the shareholder's and 12 months from the grant date	176,468
June 10 2021 RSUs C	RSUs vested immediately	653
Total RSUs granted in Q2, 2021		**387,121**

The RSU grants were fair valued using the closing share price of the trading date prior to the June 10, 2021 grant date.

(c) Contributed Surplus–Warrant Reserve

As at June 30, 2021, the Company has 9,912,633 equity warrants that are issued, outstanding and exercisable (December 31, 2020: 2,131,716). These equity warrants expire between January 26, 2023, and November 6, 2025, (December 31, 2020: equity warrants had expiry dates between April 12, 2020, and November 6, 2025). Due to the equity classification, the equity warrants are not revalued each reporting period.

	Equity warrant units	Average exercise price $	Warrant Reserve $
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)	-
Expired	(591,911)	(3.40)	-
Equity warrants as at June 30, 2021	**9,912,633**	**2.67**	**13,385**

10. BASIC AND DILUTED LOSS PER SHARE

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

Diluted loss per common share is calculated by adjusting the weighted average number of common shares outstanding to assume conversion of all potential dilutive securities. The Company has restricted share units, stock options and warrants which may be dilutive. As a result of losses incurred for the three and six months ending June 30, 2021 and 2020, these securities are anti-dilutive and therefore excluded from the determination of diluted loss per share.

	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	**June 30, 2021**	June 30, 2020
Numerator:				
Net loss	**$ (940)**	$ (1,143)	**$ (15,734)**	$ (1,911)
Denominator:				
Weighted average number of common shares outstanding for basic loss per share	**97,517,298**	60,764,929	**97,517,298**	52,518,608
Adjustment for dilutive securities	**-**	-	**-**	-
Weighted average number of common shares outstanding for diluted loss per share	**97,517,298**	60,764,929	**97,517,298**	52,518,608
Net loss per common share – basic and diluted	**$ (0.01)**	$ (0.02)	**$ (0.16)**	$ (0.04)

11. COMMITMENTS

As part of its program of research and development of the Enos system, the Company has outsourced certain aspects of the research and development to third party technology and development companies. At June 30, 2021, $5,369 in purchase orders remain outstanding (December 31, 2020: $10,694).

The Company has entered into an agreement with a consultant under which the Company has certain contractual obligations to grant up to100,000 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.

12. SUBSEQUENT EVENT

On July 2, 2021, the Company issued to Aspire Capital Fund, LLC 200,000 Common Shares for proceeds of $329 pursuant to December 23, 2019 common share purchase agreement.

TITAN MEDICAL

TITAN MEDICAL INC.

Management's Discussion and Analysis for the three and six months ended June 30, 2021

August 10, 2021

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INTRODUCTION

The following Management's Discussion and Analysis ("MD&A") is prepared as of August 10, 2021 and should be read in conjunction with unaudited interim condensed consolidated financial statements and the related notes thereto for the three and six months ended June 30, 2021 (the "Interim Financial Statements") of Titan Medical Inc. (referred to hereinafter as "**Titan**", the "**Company**", "**we**", "**us**" and "**our**") and the annual audited financial statements for the year ended December 31, 2020. The Interim Financial Statements have been prepared in accordance with International Financial Reporting Standards **("IFRS")** 34, Interim Financial Reporting ("**IAS 34**") as issued by the International Accounting Standards Board. 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 Information Form ("**AIF**") and Annual Report (" **Annual Report**") on Form 40-F for the year ended December 31, 2020, 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 Ò symbol (registered trademark) 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 this MD&A and in the section entitled "Risk Factors" in the Company's AIF or Annual Report for the year ended December 31, 2020 dated March 31, 2021. 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 "Caution Regarding Forward Looking Statements" in the Company's AIF. 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 AIF and 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.

Please also refer to the risk factors set forth in the Company's Annual Report for the 2020 fiscal year available on the EDGAR section of the SEC's website at www.sec.gov and the Company's AIF for the 2020 fiscal year available on SEDAR at www.sedar.com, which are expressly incorporated by reference into this MD&A.

NON-IFRS FINANCIAL MEASURES

The Company discloses non-IFRS measures (such as adjusted General & Administration (" **G&A**") expenses) that do not have standardized meanings prescribed by IFRS. The Company believes that shareholders, investment analysts and other readers find such measures helpful in understanding the Company's financial performance. Non-IFRS financial measures do not have any standardized meaning prescribed by IFRS and may not have been calculated in the same way as similarly named financial measures presented by other reporting issuers and therefore unlikely to be comparable to similar measures presented by other companies. Furthermore, these non-IFRS measures should not be considered in isolation or as a substitute for measures of performance or cash flows as prepared in accordance with IFRS. These measures should be considered as supplemental in nature and not as a substitute for related financial information prepared in accordance with IFRS.

Adjusted G&A

G&A refers to expenses determined in accordance with IFRS. The Company defines adjusted G&A as G&A excluding stock-based compensation (" **SBC**") expense and severance costs. Management believes adjusted G&A is a useful supplemental measure to determine the Company's cash burn rate related to G&A so investors can understand the cash that is available for research and development **("R&D")**.

OVERVIEW

Titan is a Canadian company committed to enhancing robotic assisted surgery through technology that requires only a single patient access point. The Company's goals are improved patient outcomes, lower operating room costs, and applied technology that is both effective and easy to use, allowing medical professionals to perform their best. The Company's robotic assisted surgery system in development, the Enos™ robotic single access surgical system (the "**Enos system**"), derives its name from the Greek language, meaning 'Of One'. By focusing on a single patient access point, we expect that patient trauma and scarring can be reduced, and patients may be able to recover from surgery faster.

The Enos system has not been cleared or approved by the U.S. Food and Drug Administration (" **FDA**") or any other regulatory authority in any other jurisdiction and 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 155 University Avenue, Suite 750, Toronto, Ontario, Canada M5H 3B7. 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 from its leased premises located in Chapel Hill, North Carolina, United States.

In addition to leveraging in-house R&D capabilities for activities related to the Enos system and the development work pursuant to the agreement with Medtronic plc (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 the table noted under "*Enos Robotic Single Access 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 the table noted under "*Enos Robotic Single Access 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 plc ("**Medtronic**") in connection with the development of robotic assisted surgical technologies and a separate license agreement (the " **License Agreement**") with Medtronic in respect of certain already developed Company technologies.

Under the terms of the License Agreement, Titan granted Medtronic an exclusive license with regard to certain robotic assisted surgical technologies, including patents and know-how, for a one-time upfront royalty payment of $10 million with no further royalty payments due thereunder. Under the terms of the Development Agreement, Titan has granted or will grant Medtronic an exclusive license with regard to the technologies developed thereunder in exchange for license fees totaling up to $31 million with no further royalty payments due thereunder, $20 million of which has already been received by Titan as described below. Titan has retained certain rights to the licensed technologies under each of the agreements to continue to develop and commercialize those technologies for the Company's own business in single access robotic assisted surgery, including the Enos system.

On June 10, 2020, the Company received a $10 million license payment pursuant to the License Agreement. Under the Development Agreement, on October 28, 2020, the Company received a $10 million license payment for completion of Medtronic Milestone 1, and on May 28, 2021, the Company received a further $10 million license payment for completion of Medtronic Milestone 3. The Company's entitlement to receive up to an additional $11 million pursuant to the Development Agreement is conditional upon the completion of Medtronic Milestone 4 set forth in the Development Agreement. The technology development under Medtronic Milestone 4 involves complex electromechanical design and development and there is no assurance that the milestone will be satisfied on a timely basis or at all. The technology design and development require a combination of personnel with experience and expertise in robotic-assisted surgical technology and financial resources. Furthermore, there is no assurance that the Company will receive further license payments from Medtronic, including the payments related to Medtronic Milestone 4.

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

The payments are to be provided as technology milestones are completed and evaluated by Medtronic and are further identified in the table below. The Development Start Date, as defined in the Development Agreement, was June 12, 2020.

Medtronic Milestone[1]	Deadline[2]	Payment [3] (US $ 000's)
Medtronic Milestone 1 [4] [5]	Four (4) months from Development Start Date	10,000
Medtronic Milestone 2 [6]	Four (4) months from Development Start Date	-
Medtronic Milestone 3 [5]	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

Medtronic Milestone[1]	Deadline[2]	Payment [3] (US $ 000's)

Medtronic Milestone 4	Four (4) months from the later of (a) receipt by us of Payment for Medtronic Milestone 3, (b) receipt by us of Medtronic deliverables for Medtronic Milestone 4, and (c) receipt by us from Medtronic of confirmation of certain due diligence in respect of our deliverables for Medtronic Milestone 3	11,000 (7) (8)

Notes:

1. Medtronic Milestone 1, Medtronic Milestone 3 and Medtronic Milestone 4 are each defined in the Development Agreement and consist of the completion of the development of certain robotic assisted surgical technologies as described in the Development Agreement.
2. All as further described and qualified in the Development Agreement.
3. Each payment is conditional upon the corresponding milestone being completed on a timely basis. As of the date of this document, Medtronic Milestone 1, 2 and 3 have been achieved.
4. "Development Start Date" has the meaning ascribed to it in the Development Agreement and was June 12, 2020.
5. As of the date of this document, Medtronic Milestones 1, 2 and 3 have been achieved on schedule and the related payments were received.
6. Medtronic Milestone 2 is a non-technology milestone defined as Titan raising 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 ahead of the deadline in June 2020.
7. The amount of the payment will be the sum of $10.0 million and the amount of the Legal Expenses (as defined below) to be paid to the Company up to a maximum of $1.0 million pursuant to the Development Agreement and License Agreement.
8. The balance outstanding under the Medtronic Loan will be offset against the payment for Medtronic Milestone 4. See below under *"Senior Secured Loan from Medtronic"*.

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

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

While the Company may prepay the Note at any time, in whole or in part, without fee or penalty, the Company has maintained the Note to preserve capital as may be required for corporate purchases including for the development of the Enos system.

Titan has entered into a security agreement dated April 28, 2020 in favor of Medtronic Lender (the " **Security Agreement**") pursuant to which Titan has granted to Medtronic Lender a security interest in all of the Company's present and future property including all personal property, inventory, equipment and intellectual property. In addition, Medtronic Lender's rights and powers under the Security Agreement include without limitation (a) exercising and enforcing all rights and remedies of a holder

of collateral as if Medtronic Lender were the absolute owner of the collateral, (b) collection of any proceeds arising in respect of all of our property pledged as security for the loan, (c) license or sublicense, whether on an exclusive or nonexclusive basis, of any of our intellectual property for such term and on such conditions and in such manner as Medtronic Lender in its sole judgement determines (taking into account such provisions as may be necessary to protect and preserve such intellectual property), and (d) the right to enforce its security in the event of a default which may include the appointment of a receiver by instrument or order of the court.

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

In the event that the Company were to seek further debt financing and if it were not possible to subordinate the further debt financing or otherwise pay the Medtronic Loan and the Note in full satisfaction, the Company would need to seek financing by way of equity financing and there is no assurance that further equity financing will be available or available on acceptable terms.

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 (three months ended June 30, 2020 – 8,000,000).

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 with Aspire Capital Fund, LLC ("**Aspire**"). Under the terms of this agreement, Aspire committed to purchase up to $35 million of Common Shares to purchase up to $35 million of Common Shares. The agreement also restricts the number of Common Shares that may be issued at 9,729,777. To date, the Company has issued 6,981,048 Common Shares of Titan for total proceeds of $5.2 million (three months ended June 30, 2020 - $2.5 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.

ENOS ROBOTIC SINGLE ACCESS SURGICAL SYSTEM

Development

The Company's business consists of the design and development of robotic-assisted surgical technologies for application in minimally invasive surgery (" **MIS**") and is presently focused on the development of the Enos system. The system under development includes a surgeon-controlled patient cart that includes a 3D high-definition vision system and multi-articulating instruments for performing MIS procedures, and a surgeon workstation that provides the surgeon with an ergonomic interface to the patient cart and a 3D high-definition view of the MIS procedure. The Company intends to initially pursue gynecologic surgical indications for use of its Enos system.

Development of the Enos system has proceeded with input from various stakeholders including surgeons and operating room staff experienced in MIS, 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 robotic-assisted surgery, including 3D stereoscopic imaging and restoration of instinctive control, as well as new and enhanced features, including an advanced surgeon workstation incorporating a 3D high-definition display providing a more ergonomic user interface and a patient cart facilitating the use of instruments with enhanced dexterity. The Enos system patient cart has been developed with the goal of delivering multi-articulating instruments and a dual-view camera system into a patient's abdominal body cavity through a single access port. The dual-view camera system consists of a flexible 3D high-definition endoscopic camera along with a light source and an insertion tube with a diameter of approximately 25 millimeters that includes an integrated 2D high-definition camera along with an independent light source that, once inserted, provides visualization of the MIS surgical site for optimal surgical positioning. Once the insertion tube is positioned in the body, it is docked to a central drive unit of the patient cart and the 3D high-definition endoscopic camera is subsequently deployed in a manner that the endoscopic camera and multi-articulating instruments can be

controlled by the surgeon via the workstation. The reusable multi-articulating instruments provide for "snake-like" 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 including a mast, a boom and wheels, allowing for configurability for a number of surgical indications and the ability to be maneuvered within the operating room, or redeployed within hospitals and ambulatory surgical centers, where applicable.

As part of the development of the Enos system, the Company plans on the continued development of a robust training curriculum and post-training assessment tools for surgeons and surgical teams. The training curriculum is planned to include cognitive pre-training, psychomotor skills training, surgery simulations, live animal and human cadaver lab training, surgical team training, troubleshooting and an overview of safety. Post-training assessment will include validation of the effectiveness of those assessment tools. A software training system developer has produced an initial set of core surgical skills simulation modules customized for use with the surgeon workstation in the first phase of the comprehensive surgeon training curriculum that the Company plans for its Enos system.

The Company 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 has focused on the filing and prosecution of patents that management believes validate the novelty of its unique technology, and in turn, support the value of the entire franchise.

Regulatory Overview

The Company has used a combination of internal and external resources 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, and submittal of a Technical File to a European Notified Body to obtain CE marking, which indicates that a product for sale within the European Economic Area has been assessed to conform to health safety and environmental protection requirements.

In the 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 a company chooses, a meeting in which additional feedback and findings are documented in meeting minutes. The recommendations made by the FDA in response to a Pre-Submission are non-binding on the FDA, and circumstances related to a company's product or potential risks identified through post-market surveillance of similar products in clinical use may further change the position of the FDA. Furthermore, while the FDA encourages Q-Submissions, there is no assurance that feedback provided from these communications will result in regulatory approval or clearance, nor does it preclude any identified future changes in regulatory pathways.

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

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

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

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

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

The performance of human surgeries as part of the proposed clinical study with the Enos system will require an IDE from the FDA, which must be submitted and approved in advance. Further, the recruitment of surgeons from multiple hospital sites will be necessary to perform the surgeries. Each of these sites will require approval of their independent Institutional Review Board ("**IRB**") to approve the studies.

Application to the IRB of each hospital can be made once the FDA has approved the Company's IDE application. Only upon successful completion of the IDE clinical study will the Company be in a position to submit to the FDA an application for marketing authorization.

Previous results achieved by surgeons in operating prototypes in animal and cadaver studies have preliminarily validated the potential for single incision surgeries to be performed with the Enos system. Insights gained from these preclinical studies have directed the Company to make product improvements. In June 2019, the Company commenced preclinical live animal and cadaver studies according to Good Laboratory 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 complete 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 2019, the Company's European Notified Body also completed audits of the Company's quality system procedures and related documentation for ISO 13485 Certification, which was ultimately received in January 2020. In September 2020, a surveillance audit of the Company's quality system was successfully completed by the Company's Notified Body.

Development Plan

Following successful capital raises in June 2020 and the first quarter of 2021, the Company believes it has sufficient resources to advance its development plan through 2022.

Given the uncertainty of, among other things, the Company's ability to secure required capital to fund operations beyond 2022, product development timelines, regulatory processes and requirements, actual costs and development times may exceed those forecasted. An estimate of the future costs of the development milestones and regulatory phases for the Enos system beyond the year 2022 is not possible at this time.

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

Milestone Number	Enos System Development Milestones	Estimated Cost [1] (US$ Millions)	Schedule for Milestone Completion	Comments

Milestone 1	Design, prototype and test improvements to instruments, cameras and CDU	3.2	Q4 2020	Completed
Milestone 2	Launch rebranded product line including logos with trademark pending, literature and presentation templates and new website	0.3	Q4 2020	Completed
Milestone 3	Iterate electromechanical design, update sterile adaptors and drape	5.2	Q1 2021	Completed
Milestone 4[2,3]	Perform additional software development and test system performance	5.4	Q1-Q3 2021	In progress
Milestone 5[2]	Perform animal lab assessment	0.1	Q2 2021	Completed

Milestone Number	**Enos System Development Milestones**	**Estimated Cost [1] (US$ Millions)**	**Schedule for Milestone Completion**	**Comments**
Milestone 6[2,4]	Perform biocompatibility testing of instruments, camera systems and accessories at independent lab	3.8	Q2-Q3 2021	In progress
Milestone 7[2]	Perform electrical safety testing for surgeon workstations and patient cart, including electromagnetic compatibility (EMC) and electromagnetic interference (EMI) tests at independent lab	2.7	Q3 2021	-
Milestone 8[2]	Perform animal feasibility or GLP study	2.8	Q3 2021	-
Milestone 9[2]	Complete initial build of Enos system IDE units	10.2	Q4 2021	-
Milestone 10[2]	Complete system verification testing	3.3	Q4 2021	-
Milestone 11[2]	Complete HFE summative testing	1.9	Q4 2021	-
Milestone 12[2]	Update application for IDE as additional testing lab data is received and continue preparation for human confirmatory studies	6.0	Q1 2022	-
Milestone 13[2]	Submit IDE application to FDA			
Milestone 14[2]	Complete secondary build of Enos system IDE units			
Milestone 15[2]	Initiate IDE clinical study	19.0	Q2-Q4 2022	-
Milestone 16[2]	Complete IDE clinical study, data analysis and final report			
Milestone 17[5,6]	Submit application for FDA marketing authorization	TBD	TBD	-
Milestone 18	Tentative FDA marketing authorization letter	TBD	TBD	-

Notes:

1. The estimated costs above include an allocation of $1.8-4.1 million per quarter of general and administrative costs.
2. If the Company achieves Medtronic Milestone 4, it will be entitled to receive a milestone payment from Medtronic of $11 million and upon receipt of the payment the Company estimates that it will have sufficient funds for the execution and completion of Milestones 4 through 16. If the Company does not achieve Medtronic Milestone 4, the Company will need to raise additional capital to complete Milestone 15 and beyond.

3. Milestone 4 was previously projected to be completed in Q1-Q2 2021 in the Company's continuous disclosure documents including the Company's MD&A for Q1 2021 and its Annual Information Form for 2020. The projected completion of Milestone 4 has been revised to Q1-Q3 2021 due to ongoing software development and testing of system performance.
4. Milestone 6 was previously projected to be completed in Q2 2021 in the Company's continuous disclosure documents including the Company's MD&A for Q1 2021 and its Annual Information Form for 2020. The projected completion of Milestone 6 has been revised to Q2-Q3 2021 due to biocompatibility testing that commenced in Q2 2021, continues to be ongoing.
5. The Company anticipates proceeding with FDA marketing authorization as described in the section titled "Enos Robotic Single Access Surgical System – Regulatory Overview".
6. The timing of submission of application for FDA marketing authorization will be determined at a future date upon completion of IDE clinical studies and following further correspondence with the FDA as described in the section entitled "Enos Robotic Single Access Surgical System – Regulatory Overview".

The Company anticipates that its cash balance of $55.0 million at June 30, 2021 and the $11 million license fee the Company would expect to receive upon completion of Medtronic Milestone 4 under the Development Agreement will be sufficient to fund the development of its Enos system and operational expenses through 2022, including any costs pursuant to the activities under the Development Agreement. 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 COVID-19 or any variants, could cause a material impact on working capital resources of the Company.

Due to the nature of technology R&D, there is no assurance that the milestones set forth in the table above will be achieved, and there can be no assurance with respect to the time or resources that may be required to achieve them. The Company expects that additional specific milestones could be identified in the

course of the development of the Enos system, and existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of the Company's development program, clarification of or changes to regulatory requirements, the availability of financing and the ability of development firms engaged by the Company to complete work assigned to them.

INTELLECTUAL PROPERTY AND LICENSING

The Company's patent portfolio has expanded from 12 issued patents at December 31, 2016, to 82 issued patents and 95 patent applications as of June 30, 2021. The Company anticipates further expanding its patent portfolio by filing additional patent applications as it progresses in the development of robotic surgical technologies and, potentially, by licensing suitable technologies.

Pursuant to 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 robotic assisted surgery. Furthermore, pursuant to the Development Agreement with Medtronic, the Company is developing certain robotic assisted surgery technologies, that if completed, will be exclusively licensed by Medtronic for license payments of up to $31 million, of which $20 million has already been received by the Company in respect of the completion of Medtronic Milestone 1 and 3, and a further $11 million will be eligible for receipt upon completion of Medtronic Milestone 4. The Company will retain 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 Development and License Agreements, while Titan has granted an exclusive license to Medtronic, Titan retains world-wide ownership rights to independently commercialize the licensed technologies in single access robotic assisted surgery, including with the Enos system and enhancements thereof. Under each of the Development and License 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

	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	**June 30, 2021**	June 30, 2020
	$	$	**$**	$
Revenue	**10,043**	10,000	**10,093**	10,000
Expenses				
Research and development	**7,088**	121	**14,728**	168
General and administrative	**4,837**	2,389	**8,903**	4,059
Depreciation and amortization	**138**	35	**235**	49
	12,063	2,545	**23,866**	4,276
Net (loss) income from operations	**(2,020)**	7,455	**(13,773)**	5,724
Finance income	**(20)**	(5)	**(33)**	(6)
Gain on settlement	**-**	(1,840)	**-**	(1,840)
(Gain) loss on fair value of warrant derivative	**(1,060)**	8,784	**1,994**	7,665
Warrant derivative liability issue cost	**-**	1,659	**-**	1,816
	(1,080)	8,598	**1,961**	7,635
Net and comprehensive loss	**(940)**	(1,143)	**(15,734)**	(1,911)
Basic and diluted loss per share	**(0.01)**	(0.02)	**(0.16)**	(0.04)

Revenue

Revenue was $10.0 million and $10.1 million for both the three and six months ended June 30, 2021, respectively compared to $10.0 million for both the three and six months ended June 30, 2020. Revenue is entirely related to license payments earned from Medtronic. The Company earns license revenue from achieving defined milestones in the Development Agreement. To date the Company has earned $30 million of the maximum amount of $41 million that could be payable by Medtronic under the Development Agreement and the License Agreement if all of the Medtronic Milestones are completed. The Company's entitlement to receive the balance of up to $11 million pursuant to the Development Agreement is conditional upon the completion of Medtronic Milestone 4 set forth in the Development Agreement. There is no assurance that the Company will receive further payments from Medtronic pursuant to the Development Agreement. See "*Significant Transactions - Development Agreement & License Agreement with Medtronic* ".

Research and Development

R&D expenses were $7.1 million for the three months ended June 30, 2021 compared to $0.1 million for the three months ended June 30, 2020. R&D expenses were $14.7 million for the six months ended June 30, 2021 compared to $0.2 million for the six months ended June 30, 2020.

R&D expenses are related to the development of the Enos system and the development work required to achieve the milestones under the Development Agreement with Medtronic. In the comparative period, R&D was temporarily suspended. 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 R&D center 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*".

General and Administrative

	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	**June 30, 2021**	June 30, 2020
	$	$	**$**	$
General and administrative expense	**4,837**	2,389	**8,903**	4,059

Stock-based compensation expense	**(1,429)**	(206)	**(2,198)**	(435)
Severance provision	**(171)**	-	**(171)**	-
Adjusted general and administrative expense	**3,237**	2,183	**6,534**	3,624

G&A expenses were $4.8 million for the three months ended June 30, 2021 compared to $2.4 million for the three months ended June 30, 2020. The increase in G&A expenses is related to an increase in compensation costs related to expanding the leadership team to support the development of the Enos system, an increase in stock-based compensation of $1.2 million and $0.2 million in severance costs. Adjusted G&A expenses were $3.2 million for the three months ended June 30, 2021 compared to $2.2 million for the three months ended June 30, 2020.

G&A expenses were $8.9 million for the six months ended June 30, 2021 compared to $4.1 million for the six months ended June 30, 2020. The increase in G&A expenses is related to an increase in compensation costs, professional fees related to market research, stock-based compensation of $1.8 million and $0.2 million in severance costs. Adjusted G&A expenses were $6.5 million for the six months ended June 30, 2021 compared to $3.6 million for the six months ended June 30, 2020.

Depreciation and Amortization

Depreciation and amortization expenses consists of depreciation of right of use (" **ROU**") assets, property plant and equipment and amortization of patent rights.

Depreciation and amortization expenses were $138,000 and $235,000 for the three and six months ended June 30, 2021 compared to $35,000 and $49,000 for the three and six month ended June 30, 2020. The increase in expense was due to expansion of leased premises at its R&D facility in Chapel Hill, equipment purchased to support R&D and amortization of the Company's patents.

Net (Loss) Income from Operations

Net loss from operations was $2.0 million and $13.8 million for the three and six months ended June 30, 2021 compared to net income from operations of $7.5 million and $5.7 million for the three and six months ended June 30, 2020. The net loss from operations is related to R&D costs to advance the development of the Enos system and the costs incurred related to the Medtronic Development Agreement, partially offset by milestone revenue from the Medtronic Development Agreement. In the comparative period, net income from operations was related to $10 million in license revenue from the License Agreement with Medtronic. The Company had limited R&D and G&A expenses in the comparative period as the Company temporarily suspended R&D activities.

Finance Income

Finance income was $20,000 and $33,000 for the three and six months ended June 30, 2021 compared to $5,000 and $6,000 for the three and six months ended June 30, 2020. The increase is related to interest income earned on the Company's cash balances that were significantly higher in the current period versus the comparative period.

Gain on Settlement

Gain on settlement was $nil for the three and six months ended June 30, 2021 compared to $1.8 million for the three and six months ended June 30, 2020. In the comparative period, 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.

(Gain) Loss on Fair Value of Warrant Derivative

For the three months ended June 30, 2021, the gain on fair value of warrant derivative was $1.1 million compared to a loss of $8.8 million for the three months ended June 30, 2020. For the six months ended June 30, 2021, the loss on fair value of warrant derivative was $2.0 million compared to a loss of $7.7 million for the six months ended June 30, 2020.

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

Warrant derivative liability issue cost was $nil for both the three and six months ended June 30, 2021 compared to $1.7 million and $1.8 million for the three and six months ended June 30, 2020. 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.

Net and Comprehensive Loss

Net and comprehensive loss was $940,000 and $15.7 million for the three and six months ended June 30, 2021 compared to a net loss of $1.1 million and $1.9 million for the three and six months ended June 30, 2020. The reduction in net loss in the second quarter of 2021 versus the comparative period was due to a $9.8 million difference in the fair value of the warrant derivative, partially offset by an increase in net loss from operations. In the current six month period, the increase in net and comprehensive loss was related to an increase in loss from operations related to the development of the Enos system.

LIQUIDITY AND CAPITAL RESOURCES

	Three Months ended June 30		Six Months ended June 30	
	2021	2020	**2021**	2020
	$	$	**$**	$
Cash provided by (used in) operating activities	**(738)**	6,211	**(14,048)**	3,740
Cash provided by (used in) financing activities	**2,518**	20,766	**43,919**	24,239
Cash provided by (used in) investing activities	**(145)**	(47)	**(335)**	(103)
Net change in cash during the period	**1,635**	26,930	**29,536**	27,876
Cash, beginning of period	**53,370**	1,760	**25,469**	814
Cash, end of period	**55,005**	28,690	**55,005**	28,690

The Company's cash totalled $55.0 million at June 30, 2021 as compared to $25.5 million at December 31, 2020, representing an increase of $29.5 million.

Operating Activities

Cash used in operating activities was $0.7 million and $14.0 million for the three and six months ended June 30, 2021 compared to cash provided by operating activities of $6.2 million and $3.7 million for the three and six months ended June 30, 2020.

Cash used in operating activities during the current three and six month periods 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 the comparative period, cash provided by operating activities related to a $10 million license payment from Medtronic offset partially by operating expenses. The Company had nominal R&D activities in the comparative period.

Financing Activities

Cash provided by financing activities was $2.5 million and $43.9 million for the three and six months ended June 30, 2021 compared to cash provided by financing activities of $20.8 million and $24.2 million for the three and six months ended June 30, 2020.

During the three months ended June 30, 2021, the Company raised $2.5 million from the issuance of Common Shares under the common share purchase agreement with Aspire (see "*Significant Transactions – Aspire Common Share Purchase Agreement* "). In the comparative period, the Company raised $19.3 million from two separate financings (see "*Significant Transactions – June 2020 Financing and May 2020 Financing* ").

During the six months ended June 30, 2021, the Company raised $31.3 million from the issuance of Common Shares related to 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 $2.5 million from the from the issuance of Common Shares to Aspire. In the comparative period, the Company raised $22.7 million from three separate financings (see "*Significant Transactions – June 2020 Financing, May 2020 Financing and March 2020 Financing* ").

Investing Activities

Cash used in investing activities was $145,000 and $335,000 for the three and six months ended June 30, 2021 compared to $47,000 and $103,000 for the three and six months ended June 30, 2020. Cash used in investing activities relates to the purchase of equipment for the development of Enos and patent costs.

Working Capital

The Company defines working capital as current assets less current liabilities. Working capital was $29.8 million at June 30, 2021. Excluding the non-cash warrant derivative liability, working capital would have been $52.4 million. The Company anticipates that its working capital and the $11 million milestone from the Medtronic Development Agreement will be sufficient to fund the development of its Enos system and operational expenses through 2022, including any costs pursuant to the development program pursuant to the Medtronic Development Agreement.

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 COVID-19 or any variants, 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
	$	$	$
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)
December 31, 2019	-	2,413	0.07
September 30, 2019	-	(1,564)	(0.05)

Significant changes in key financial data from the three and six months ended June 30, 2020, through the three and six months ended June 30, 2021 reflect (i) the revenue recognition of the payment under the Medtronic License Agreement, the resumption of product development following receipt of license fees earned pursuant to the Medtronic License Agreement and Development Agreement, as well as equity capital raises in the capital markets, all since the first quarter of 2020, (ii) the Company established in-house R&D capabilities that increased staffing costs, and (iii) 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 identified in this MD&A.

CONTRACTUAL OBLIGATIONS

Contractual obligations relating to accounts payable and accrued liabilities, long-term debt, and lease liabilities and purchase order commitments as at June 30, 2021, are as follows:

	Total	Less than 1 year	2 – 3 years	4 – 5 years	Greater than 5 years
	$	$	$	$	$
Accounts payable and accrued liabilities	2,104	2,104	-	-	-
Lease liabilities	1,308	283	674	351	-
Notes payable[1]	2,135	2,135	-	-	-
Purchase order commitments	5,369	5,369	-	-	-
TOTAL	**10,913**	**9,891**	**674**	**351**	**-**

Purchase order commitments are obligations that are not reflected on the balance sheet. These are contracts with suppliers not yet fulfilled.

Note:

1. On April 28, 2020, the Company issued the Note to an affiliate of Medtronic for the Medtronic Loan and executed and delivered the Security Agreement. The Note is in the principal amount of $1,500 plus Legal Expenses and accrued interest, presently equaling $635. See "*Significant Transactions – Development Agreement & License Agreement with Medtronic*".

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 August 10, 2021:

Type of Securities	Number of Common Shares issued or issuable upon conversion
Common Shares[1]	110,927,690
Stock options[2]	5,396,145
Restricted share units[3]	1,914,981
Derivative warrant units	19,592,392
Equity warrants[4, 5]	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 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.
3. Pursuant to the Company's Share Unit Plan, the Company granted 1,527,860 RSUs to certain directors and officers during the quarter ended March 31, 2021. During the three months ended June 30, 2021, the Company granted 387,121 RSUs to certain directors and officers.
4. Pursuant to the January 2021 offering, 3,709,677 equity warrants were issued with an exercise price of $2.00 and exercisable until January 26, 2026 and 518,234 broker warrants with an exercise price of $1.9375 and exercisable until January 26, 2023. See "*Significant Transactions – January 2021 Equity Offering* ".
5. Pursuant to the February 2021 offering, 4,792,625 equity warrants were issued with an exercise price of $3.00 and exercisable until January 26, 2026 and 670,967 broker warrants with an exercise price of $3.00 and exercisable until February 24, 2023. See "*Significant Transactions – February 2021 Equity Offering* ".

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

These financial statements have been prepared in accordance with accounting principles applicable to going concern, which contemplates that the Company will be able to realize its assets and settle its liabilities in the normal course as they come due during the normal course of operations for the foreseeable future. The Company has shareholders' equity of $32.3 million.

The Company currently does not generate revenue from the sale of products. In 2020, pursuant to its agreements with Medtronic, the Company received $20 million in revenue (see "*Significant Transactions*

– Development Agreement & License Agreement with Medtronic "). The Company achieved Medtronic Milestone 3 in the second quarter of 2021 and received $10 million. If the Company achieves Medtronic Milestone 4 in 2021, it will be entitled to receive approximately $11 million in additional license fees. Other than the license fees noted and interest income on its cash balances, the Company has no regular earnings and accordingly it is primarily dependent upon equity financing for any additional funding required for development and operating expenses. These conditions indicate the existence of a material uncertainty that may cast significant doubt on the ability of the Company to continue as a going concern if additional funding is not secured.

The preparation of financial statements in conformity with IAS 34 requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of provisions at the date of the financial statements and the reported amount of expenses during the period. Financial statement items subject to significant judgement include, (a) incremental borrowing rate used to measure lease liabilities, (b) the fair value estimate of the measurement of lease, warrant liabilities and note payable, and (c) the assessment of the Company's ability to meet its obligations as they come due. While management believes that the estimates and assumptions are reasonable, actual results may differ.

(a) Revenue recognition

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

- Revenue from the License Agreement for intellectual property rights and know-how (the '**License 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 License Payment and will be recognized at the time the service is performed.

- Revenue from the Development Agreement and the allocation of ownership and license rights developed under each milestone is recognized when the rights are granted, and customer acceptance is established.

- Under the terms of the Development Agreement, payment is dependent on when the customer confirms completion of each milestone as defined. Due to the uncertainty of milestone achievements and entitlement of payments, the Company recognizes revenue only upon acceptance by the customer of work performed and the milestone achieved.

(b) Stock Options

The Black-Scholes model used by the Company to determine fair values of stock options and warrants was developed for use in estimating the fair value of the stock options and warrants. This model requires the input of highly subjective assumptions including future stock price volatility and expected time until exercise. Changes in the subjective input assumptions can materially affect the fair value estimate.

(c) Warrant Liability

In accordance with IAS 32, if the exercise price of certain of the Company's warrants is not a fixed amount, the warrants are accounted for as a derivative financial liability. The existence of features which determine whether the warrants should be treated as a derivative financial liability, are where there is existence of at least one of the following features of the warrant (a) denominated in a currency

(Canadian dollar) other than the Company's functional currency (US dollar); (b) they have a cashless exercise option as is the case for the warrants issued in March 2019, March 2020, and June 2020.

The warrant liability is initially measured at fair value and subsequent changes in fair value are recorded through net and comprehensive loss for the period. The accounting guidance for fair value measurements prioritizes the inputs used in measuring fair value into the following hierarchy:

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

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

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

The fair value of the Company's warrant liability is initially based on level 2 (significant observable inputs). At June 30, 2021, warrant liability is based on level 1, quoted prices (unadjusted) in an active market, for the Company's listed warrants and level 2 for the Company's unlisted warrants.

RELATED PARTY TRANSACTIONS

During the three and six months ended June 30, 2021 and June 30, 2020, transactions between the Company and directors, officers and other related parties were related to compensation matters in the normal course of operations and are measured at the fair value, which is the amount of consideration established and agreed to by the related parties.

FINANCIAL INSTRUMENTS

The Company's financial instruments consist of cash, 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.

OUTLOOK

During the first six months ended June 30, 2021, the Company secured capital in an amount to enable it to continue product development of its Enos system, and perform services under the Development Agreement.

The Company estimates that it has sufficient cash on hand to meet all its current obligations as they become due, including its obligations under the Development Agreement, the License Agreement and the Medtronic Loan.

With its current financial resources and assuming the Company achieves Medtronic Milestone 4 and receives the payment from Medtronic in respect of the milestone, the Company expects to be able to continue operations through 2022 and complete Enos system Milestones 4 through 16.

During the remainder of 2021, the Company expects to continue the development of the Enos system while clarifying with the FDA the requirements for the IDE clinical study protocol and to understand any special controls which the FDA may apply, and preparing to submit an IDE application to the FDA for human confirmatory studies to be conducted in 2022.

INTERNAL CONTROL OVER FINANCIAL REPORTING

The Chief Executive Officer and the Chief Financial Officer of the Company (collectively the " **Certifying Officers**") are responsible for establishing and maintaining internal control over financial reporting ("**ICFR**"), as those terms are defined in National Instrument 52-109 Certification of Disclosure in Issuer's Annual and Interim Filings, and in applicable SEC rules and regulations, for the Company.

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

The Company concluded that, as of December 31, 2020, the Company's ICFR was not effective due to a three identified material weaknesses. The Company experienced significant and rapid change during the 2020 fiscal year as a result of the establishment of a new R&D facility, the augmentation of its development team, new arrangements with external development firms and the transition arising from the retirement of the Company's former Chief Financial Officer **("CFO")** and the appointment of a new CFO in the fall of 2020, as well as changes in the Company's financial accounting and reporting personnel. The Company recently appointed a new CFO in July 2021. The Company's continuous risk assessment process was not effective in responding to the rapid rate of change in personnel and new business developments and the Company did not have sufficient human resources available to adequately assess risk and reinforce or strengthen controls in the requisite timeframe. Prior to presentation of its financial statements for their approval by the Company's audit committee and board of directors, the Company determined that it would adjust its consolidated annual financial statements as at and for the year ended December 31, 2020 with respect to expense recognition to correct errors in the calculation of asset and liability balances and the appropriate IFRS application and disclosure required for an amendment of a contract with an external development firm.

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.

The identified internal control weaknesses were part of the annual control cycle and therefore management will only be able to evaluate these controls as part of the annual reporting process at December 31, 2021. Management believes it has taken the necessary steps to remediate these control weaknesses to ensure there are sufficient controls in place to ensure the reliability of the interim financial statements. However, given management's inability to evaluate the effect of remediation efforts until the next annual reporting process, management is unable to conclude that ICFR were effective as of June 30, 2021.

ICFR is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the annual financial statements for external reporting purposes in line with IFRS. Management is responsible for establishing and maintaining adequate internal controls over financial reporting appropriate to the nature and size of the Company. However, any system of internal control over financial reporting has inherent limitations and can only provide reasonable assurance with respect to annual financial statement preparation and presentation.

RISK FACTORS

For a detailed description of risk factors associated with the Company, refer to the "Risk Factors" section of the AIF, which is available on SEDAR at www.sedar.com and filed as an exhibit to the Form 40-F, available on EDGAR at www.sec.gov.

An investment in the Common Shares is speculative and involves a high degree of risk due to the nature of the Company's business. It is recommended that investors consult with their own professional advisors before investing in the Company's Common Shares.

Exhibit 99.4

FORM 52-109F2
CERTIFICATION OF INTERIM FILINGS
FULL CERTIFICATE

I, David McNally, Chief Executive Officer of Titan Medical Inc., certify the following:

1. ***Review:*** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Titan Medical Inc. (the "issuer") for the interim period ended June 30, 2021.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

4. ***Responsibility:*** The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings,* for the issuer.

5. ***Design:*** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer and I have, as at the end of the period covered by the interim filings

   (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

      (i) material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and

      (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

   (b) designed ICFR, or caused it 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 the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer and I used to design the issuer's ICFR is Integrated Framework (COSO).

5.2 ***ICFR – material weakness relating to design:*** N/A

5.3 ***Limitation on scope of design:*** N/A

6. ***Reporting changes in ICFR:*** The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on January 1, 2021 and ended on June 30, 2021 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

August 10, 2021

(SIGNED) "David McNally"

David McNally
Chief Executive Officer

Exhibit 99.5

FORM 52-109F2
CERTIFICATION OF INTERIM FILINGS
FULL CERTIFICATE

I, Stephen Lemieux, Chief Financial Officer of Titan Medical Inc., certify the following:

1. ***Review:*** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Titan Medical Inc. (the "issuer") for the interim period ended June 30, 2021.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

4. ***Responsibility:*** The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings,* for the issuer.

5. ***Design:*** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer and I have, as at the end of the period covered by the interim filings

   (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

      (i) material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and

      (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

   (b) designed ICFR, or caused it 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 the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer and I used to design the issuer's ICFR is Integrated Framework (COSO).

5.2 ***ICFR – material weakness relating to design:*** N/A

5.3 ***Limitation on scope of design:*** N/A

6. ***Reporting changes in ICFR:*** The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on January 1, 2021 and ended on June 30, 2021 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

August 10, 2021

(SIGNED) *"Stephen Lemieux"*

Stephen Lemieux
Chief Financial Officer