

(Previously Ortho Regenerative Technologies Inc.)

Financial Report

Second Quarter - Fiscal Year 2023

July 31, 2022



Management's Discussion and Analysis for the three and six months ended July 31, 2022

(In thousands of Canadian dollars, except for units, share and per share amounts)

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

This Management's Discussion and Analysis ("MD&A") for ChitogenX Inc. (previously Ortho Regenerative Technologies Inc., the "Corporation" or "ChitogenX") provides an overview of the Corporation's operations, performance and financial results for the second quarter of our 2023 fiscal year ended on July 31, 2022 and compares those of the same period in 2022 fiscal year. This MD&A is the responsibility of management and has been reviewed and approved by its Board of Directors. The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the MD&A. The Board of Directors carries out this responsibility principally through its Audit Committee. The Audit Committee is appointed by the Board of Directors and is comprised of financially literate directors. This report was reviewed by the Corporation's Audit Committee and approved by ChitogenX's Board of Directors on September 28, 2022.

This document should be read in conjunction with the unaudited financial statements and notes thereto for the second quarter of our 2023 fiscal year ended on July 31, 2022, which have been prepared in accordance with International Financial Reporting Standards ("IFRS"). Further information about ChitogenX Inc., is available online on SEDAR at www.sedar.com.

Unless otherwise noted, all amounts are presented in thousands of Canadian dollars, except for share and per share amounts.

Going concern

This MD&A has been prepared on a going-concern basis, which implies that the Corporation will continue realizing its assets and discharging liabilities in the normal course of business for the foreseeable future. As reflected in the annual audited financial statements, the Corporation is still a clinical stage R&D company and has not yet achieved profitability. During the second quarter ended on July 31, 2022, the Corporation incurred a net loss of \$2.2 million, and used cash in operations of \$2.0 million. As at the end of the second quarter of fiscal year 2023, the Corporation had a working capital deficit of \$3.8 million. Consequently, the Company's performance raises significant doubt about the Company's ability to continue as a going concern.

Accordingly, the ability of the Corporation to realize the carrying value of its assets and continue operations as a going concern is dependent upon its ability to obtain additional financing and ultimately on generating future profitable operations. Management anticipates that the continued advancement of its lead Ortho-R program will facilitate securing additional funds from existing and new investors. There is no assurance that any fund-raising initiatives will be successful. Factors within and outside the Corporation's control could have a significant bearing on its ability to obtain additional financing. The unaudited financial statements as at and for the quarter ended July 31, 2022, do not include any adjustments related to the carrying values and classifications of assets and liabilities that would be necessary should the Corporation be unable to continue as a going concern.

Covid-19 pandemic

The outbreak of a novel strain of coronavirus, identified as "COVID-19", was declared a global pandemic by the World Health Organization on March 11, 2020, and is still adversely affecting the global economy despite the efforts by local governments to vaccinate their populations and reduce the economic adverse effects of COVID-19. In response, many countries have required entities to limit or suspend business operations and implemented travel restrictions and quarantine measures. Some non-essential activities were canceled or delayed due to COVID-19. These measures have disrupted the activities of many entities and have led to significant volatility in the global markets. The Corporation continues to monitor and actively manage the developing impacts from COVID-19, including but not limited to, the effect on the Corporation's clinical development phases, potential future effects on its assets, cash flow and liquidity, and will continue to assess impacts to the Corporation's operations, going concern assumption, and the value of assets and liabilities reported in its financial statements. Elective surgeries levels are key to ensure enrollment in our US Phase I/II clinical trial on rotator cuff tear repair. Based on recent interactions with the clinical centers involved in the clinical trial, scheduling and rate of elective surgeries are back to pre-pandemic levels and consequently should not impact patient enrollment.

Non-IFRS Financial Measures

This MD&A refers to certain non-IFRS measures. Management uses these non-IFRS financial measures for purposes of comparison to prior periods and development of future projections and earnings growth prospects. This information is also used by management to measure the results of ongoing operations and in analyzing our business performance and trends. These measures are not recognized measures under IFRS, do not have a standardized meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other companies. Rather, these measures are provided as additional information to complement those IFRS measures by providing further understanding of our results of operations from management's perspective. Accordingly, they should not be considered in isolation nor as a substitute for analysis of our financial information reported under IFRS. We use a non-IFRS measure, "EBITDA Loss", to provide supplemental measures of our operating performance and thus highlight trends in our core business that may not otherwise be apparent when relying solely on IFRS financial measures. EBITDA Loss is defined as net loss before (i) provision for (recovery of) income taxes; (iii) interest (income) expense and other financing costs; (iii) depreciation; and (iv) amortization of intangible assets.





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Cautionary note regarding forward-looking statements

This MD&A may contain some forward-looking information as defined under applicable Canadian securities laws. Forward looking information can generally be identified using forward-looking terminology such as "may", "anticipate", "expect", "intend", "estimate", "continue" or similar terminology. Forward looking information is subject to various known and unknown risks and uncertainties, many of which are beyond the ability of the Corporation to control or predict, that may cause the Corporation's actual results or performance to be materially different from actual results and are developed based on assumptions about such risks and other factors set out herein.

GLOSSARY TERMS

Calendar & Financial		Corporate & Operations			
CDU	Convertible Debenture Units	API	Active Pharmaceutical Ingredient		
EBITDA (L)	EBITDA Loss	CHGX	ChitogenX Inc.		
FVA	Fair Value Adjustment		(Previously Ortho Regenerative Technologies Inc.		
FY	Fiscal Year	CMC	Chemistry Manufacturing and Controls		
G&A	General and Administrative	cGMP	current Good Manufacturing Practice		
IR	Investors Relations	CMO	Contract Manufacturing Organization		
ITC	Investment tax credits	CSE	Canadian Securities Exchange		
NCDUs	Non-Convertible Debenture Units	FDA	US Food and Drug Administration		
Q2-23	Second quarter FY-23	IND	Investigational New Drug application with the FDA		
Q1-23	First quarter FY-23	MCRA	MCRA, LLC, a US based orthopedic specialty CRO		
Q4-22	Fourth quarter FY-22	MRI	Magnetic Resonance Imaging		
Q3-22	Third quarter FY-22	MTA	Material Transfer Agreement		
Q2-22	Second quarter FY-22	ORTHO-C	Proprietary biopolymer for Articular Cartilage repair		
Q1-22	First quarter FY-22	ORTHO-M	Proprietary biopolymer for Proprietary Biopolymer for		
Q4-21	Fourth quarter FY-21		Meniscus repair		
Q3-21	Third quarter FY-21	ORTHO-R	Proprietary biopolymer for Rotator cuff repair		
SR&ED	Scientific Research and Experimental	ORTHO-V	Proprietary biopolymer for Osteoarthritis healing		
	Development Expenses	OTCQB	US over-the-counter venture trading market		
R&D	Research and Development	Polytechnique	Ecole Polytechnique de Montreal		
YTD	Year to date	PRP	Platelet-rich plasma		
YE	Year-end	Pre-RFD	Pre-Request for Designation		
W/C	Working Capital, defined as short-term assets less short-term liabilities				

OVERVIEW OF THE BUSINESS AND BUSINESS STRATEGY

ChitogenX is a clinical stage biotech company incorporated under the Canada Business Corporations Act. The Corporation's head office, principal address and registered office is located at 16667 Hymus Blvd., Kirkland, Quebec, Canada and its wholly owned US subsidiary, OR4102022 Inc. has been incorporated on April 20, 2022 and is located at 12 Penns Trail in Newtown, Pennsylvania, USA. The Corporation's shares are publicly traded on the CSE under the symbol "CHGX", as well as on the United States OTCQB market under the symbol "CHNXF".

On September 7, 2022, The Corporation changed its corporate name from Ortho Regenerative Technologies Inc. to ChitogenX Inc. to better reflect the Company's expanded clinical and commercial opportunities, mission, values, and core competencies. The Corporation is developing products in the regenerative medicine market, one of the most dynamic and promising sectors of the health care industry.

Regenerative Medicine Overview

The concept of regenerative medicine is to provide us with tools to return anatomy and physiology to a more normal appearance and behaviour. Although there are many definitions, of what constitutes regenerative medicine, the following is succinct:

Regenerative Medicine is an emerging interdisciplinary field of research and clinical applications focused on the repair, replacement or regeneration of cells, tissues or organs to restore impaired function resulting from any cause, including congenital defects, disease, trauma and aging. It uses a combination of several technological approaches that moves it beyond traditional transplantation and replacement therapies. These approaches may include, but are not limited to, the use of soluble molecules, gene therapy, stem cell transplantation, tissue engineering and the reprogramming of cell and tissue types.

Combinations of these approaches can 1) improve the natural healing process in areas of the body it is needed most, 2) take over the function of a permanently damaged organ, 3) heal or repair a damaged organ or tissue, or 4) deliver healing "accelerators" chemicals that might inspire repair to specific damaged areas of the body.



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Regenerative medicine is a relatively new and rapidly expanding field that brings together experts in biology, chemistry, materials and computer science, engineering, genetics, robotics, and other fields to find solutions to some of the most challenging medical problems faced by humankind. We believe ChitogenX is at the forefront of this rapidly expanding field.

The Global Regenerative Medicine Market was estimated at \$US9B market in 2021 and is projected to grow at 22.8% CAGR through 2030. It is one of the most dynamic markets in medicine today. The musculoskeletal and wound healing segment accounted for about 60% share of the regenerative medicine market in 2021. Cell therapies are used in the treatment of musculoskeletal diseases such as bone tissue replacement, cartilage, tendon, and ligament repair and replacement. ChitogenX is well positioned to become the preferred regenerative medicine delivery system for this rapidly growing part of the industry.

Regenerative medicine is applicable in cardiovascular, oncology, dermatology, musculoskeletal, wound healing, ophthalmology, neurology, and others. The musculoskeletal application segment accounted for the largest share in 2021, whereas cardiovascular is expected to be the fastest-growing segment, registering a CAGR of 24.3% during the forecast period (2022-2030).

Problem & Solution

The delivery of a tissue scaffold, cellular or molecular therapy or any combination thereof makes a fundamental assumption; that the substance(s) will stay where they were placed and function as desired; if they wander off-target, the desired enhanced healing might not occur and furthermore, the potential exists for off-target effects.

Providing a reliable, biologically safe transport mechanism that would allow the targeted body system to receive the regenerative material to aid in body system repair is, therefore, a mission-critical goal and a problem that requires solving for the regenerative medicine market to meet its projected growth estimates.

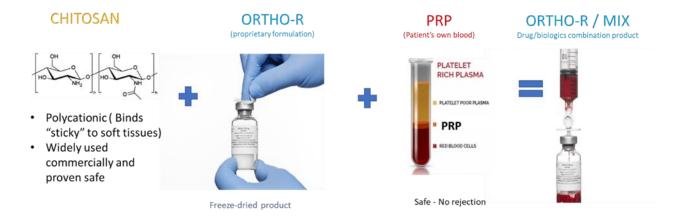
ChitogenX has acquired such a solution from the Polytechnique at the University of Montreal. Our Patented **Drug/ Biologic/ Combination** technology platform, is a muco-adhesive CHITOSAN based biopolymer matrix, specifically designed to be combined with biologics such as Platelet-Rich Plasma (PRP) or Bone Marrow Aspirate Concentrate (BMAC), to augment and accelerate the regeneration of new tissue in various potential indications.

BUSINESS STRATEGY

- 1. Perform Rotator Cuff Repair proof of concept phase I/II clinical trial program to establish regenerative platform delivery mechanism.
- 2. Leverage Polytechnique partnership to obtain non-dilutive grants to drive proof of concept in multiple potential indications
- 3. Leverage our proprietary platform beyond orthopedic applications by seeking R&D and/or development partners for each high potential application
 - Leverage strong global method and composition patents
 - Leverage initial IND from FDA to initiate multiple development programs
- 4. Position ChitogenX to commercialize its proprietary medical grade chitosan to the research-based healthcare industry to generate cashflow for the company in 18-24 months.

1. Perform Rotator Cuff Repair proof of concept phase I/II clinical trial program to establish regenerative platform

ORTHO R is formulated and designed to improve the healing of body tissues beginning with sports and occupation related injuries to tendons, meniscus, and ligaments.





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ORTHO-R is a patent-protected freeze-dried formulation of a biopolymer, a lyoprotectant and a clot activator. ORTHO-R is solubilized in platelet-rich plasma ("PRP") to form an injectable combination of the chitosan scaffold and the PRP-biologic, and an FDA designated bioactive implant that coagulate after implantation. In vitro testing has allowed the Corporation to identify specific formulations that meet the following criteria for optimal commercial products:

- (i) rapid and complete solubilization in PRP;
- (ii) biopolymer-PRP mixtures having paste-like handling properties desired by surgeons;
- (iii) biopolymer-PRP mixtures that coagulate rapidly to form soft tissue-adherent Drug-Biologics hybrid implants;
- (iv) biopolymer-PRP biologics implants that are mechanically stable and resist platelet-mediated clot retraction; and
- (v) dispersion of the biopolymer in the implants that is homogenous for optimal biodegradability.

The polymer-biologics hybrid mix, designated as drug/biologic combination product by the FDA, but may be considered a medical device by other regulatory jurisdictions, can be directly applied at the site of injury by a surgeon during a routine operative procedure without significantly extending the time of surgery and without further intervention. A US FDA IND was granted in December 2021, to start our proof-of-concept Phase I/II Rotator Cuff Tear Repair clinical trial at 10 US sites.

The use of ORTHO-R as an adjunct to standard of care suturing techniques produced promising histological findings in small and large animal experimental models, which is hoped to translate to faster and superior rotator cuff repair in humans. No adverse events were found in any of the above-mentioned animal studies, which suggests a high level of safety. Progress made during the recent quarters have set the stage for achievements of major corporate/regulatory/strategic milestones over the current and upcoming calendar years.

Market Opportunity: (Source:Pearl Diver HealthCare Research, iData Research.) for first clinical application

Close to 700K shoulder rotator cuff repairs are performed in North America every year with an unfortunate 20% to 90% failure rate. ORT has already initiated its FDA designated Phase I/II study giving it the regulatory lead in the US for launching the first FDA approved drug/biologic combination for augmenting the performance of the standard of care surgical shoulder cuff repair.

The orthopedic and sports medicine soft tissue repair market is a \$6B+ global market. The ORTHO-R product is first targeting the following soft tissue repair indications: 1) rotator cuff Tear repair: 4M injuries and 700K surgeries/year (50%+ failure rate) in USA alone, 2) Tendinopathy, 11M injuries/year, and 3) Meniscus Tear repair: 1.2M injuries/year and 200K+ surgeries/year (40% failure rate) in USA alone. Standard of care for these injuries is surgery alone. The orthopedic community are looking for better treatments to improve patient outcomes and reduce procedure failure rate.

This market opportunity is further enhanced by the fact that surgeons all over the world know that soft tissue such as ligaments, tendons and meniscus are not well vascularized and thus when repaired with the standard of care (sutures, anchors, and staples) results in healing principally with scar tissue which is more fragile and susceptible to re-tear than native tissue. Given the belief by many that platelet rich plasma (PRP) improves the quality of tissue healing, surgeons have vocalized a desire to find a way to make PRP resident to the surgical repair site, so that the PRP can trigger the tissue repair cascade to these troublesome non-vascularized soft tissues. Surgeons have been using PRP for over a decade but are frustrated by the inability for the PRP alone to establish residency on the surgical repair site due to its highly liquid nature. ORTHO-R is specifically designed to overcome the residency issue due to its unique and patented composition. Therefore, once approved, a ready-made and very large market can be rapidly satisfied thus reducing go to market investment by the Corporation, development partner or acquirer of our technology.

Market is looking for improving outcome of standard of care BUT this cannot be done at the expense of the industry economic model – which is based on time for surgery for each respective type of procedures. Over the last few months, the Corporation has worked with surgeons involved in our rotator cuff study to perfect and optimize the delivery of ortho-R. Current protocol now adds less than **2 minutes** to standard of care surgery!

ORTHO-R®: Key points of differentiation

Unlike other natural biopolymer matrix such as Hyaluronic Acid (HA) or Collagen, the chitosan natural biopolymer molecules are positively charged and therefore are muco-adhesive (sticky) to the negatively charged soft tissues of the human body (tendons, ligaments, meniscus). Characteristics related to the electrostatic binding of the combination product, resulting modification of cell function, slowing of blood clot retraction and extended release of growth factors compared to PRP alone provided justification for classification of the product as a drug. ORTHO-R has a fast coagulation onset, and with its muco-adhesive feature offer the unique benefit of significantly increasing the in-situ residency time of PRP implants from less than 24 hours for PRP alone to up to 6 weeks for ORTHO-R chitosan-PRP drug/biologic combination product, allowing PRP to contribute to the normal healing cascade. ORTHO-R is therefore a perfect matrix system delivering biologics such as PRP, that could be used in various musculoskeletal injury conditions as well as multiple other applications where the delivery of regenerative medicine such as blood, blood products, stem cells, pharmaceuticals or other molecules is desired.



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Regulatory:

During FY-21, we received from the US FDA Office of Combination Products, the ORTHO-R product designation as a Drug/Biologics combination product.

ORTHO-R has physicochemical interacting actions on various cell types and other PRP components, therefore supporting a Drug/Biologic combination product. The ORTHO-R reconstituted in PRP Drug/biologic implant is delivered through accessory devices. The product's jurisdictional assignment is to the FDA's Center for Biologics Evaluation and Research (CBER). There are multiple merits of a Drug/Biologics therapeutic combination product. One of them is the ability to have a multiple mode of action label, related to the various interactions between our proprietary biopolymer and PRP, which may justify the scientific rationale behind the product's therapeutic effect, and the generation of further intellectual property.

Clinical:

The Phase I/II clinical trial status is as follows:

- Our Investigational New Drug (IND) application was granted by the FDA on December 10, 2021.
- 10 US based clinical sites have been selected for the trial, 9 have been initiated and are actively recruiting patients and the last site is expected to commence recruitment during Q4-22(calendar)
- We have initiated surgeries and should complete randomization of Phase I patients prior to the end of October. This would conclude the restrictive recruitment part of the trial (one patient at a time) and allow full simultaneous recruitment by all sites.
- Completion of the Phase II recruitment is expected in H1-23 (Calendar) depending on sites' enrolment rate.
- Follow up and individual patient assessment and Phase II scoring will take place 12 months after surgery.

2. Leverage Polytechnique's partnership to secure non-dilutive grants to drive proof of concept in multiple indications for Ortho-R

ChitogenX has received and is seeking non-dilutive research grants through its partnership with Polytechnique

Indication	Development Stage	Details
Meniscus	Pre-Clinical	Testing the efficacy of ORTHO-M/PRP Drug-Biologic Implant formulation, for meniscus repair. Efficacy of our product has already been demonstrated in an animal proof of concept study. Our contracted research veterinarian expert, with the help of a major arthroscopic instrumentation company, have recently completed the development of surgical instruments tools, suitable to the sheep preclinical model. The next steps are to validate our model in large animal pilot and pivotal studies, starting in Q3-23. Human clinical trials would then follow. \$500K grant obtained
Tendinopathy	Feasibility	Feasibility research on a freeze-dried biopolymer formulation combined with autologous biologics, tailored for intra-articular injections to provide the combined visco-biologics supplementation of articular joints and potentially help with tendon healing and regeneration. \$4M grant submitted in Q2-22 with adjudication expected in Q4, 2022 (Calendar).

3. Drive development of our proprietary platform beyond orthopedic applications by seeking R&D and/or development partners for each high potential application

Our Proprietary Technology Platform Can Be So Much More

Considering the significant bioactivity and residency of our proprietary biopolymer – PRP implants, ChitogenX continues to assess its potential for therapeutic uses outside of the rotator cuff/meniscus repair market. The functionality of the chitosan framework could potentially be used in numerous other applications which could potentially address high unmet needs with profound clinical consequences.

Over the recent months, the Corporation initiated scientific discussions with experts in the wound healing, gastrointestinal, neurological, oncological, and cardiovascular markets to identify high unmet medical needs in each category what could potentially be solved by the characteristics of our technologies. Our discussions have yielded formal commitments to participate in these various development programs for which non-dilutive grants funding will be sought.

We will also investigate combining ChitogenX's patented chitosan framework with targeted delivery of numerous autologous and synthetic therapeutics, either developed internally, licensed, or secured through strategic partnerships with biologic and/or pharma companies.

We will determine the highest value programs through consultation with our scientific and business advisory board and find R&D or development partners for the highest value projects





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4. Investigate the sale of medical grade chitosan to the research-based healthcare industry to generate cashflow for the company in 18-24 months.

Global and North America Medical Grade Chitosan Market (US\$ Mn)										
GLOBAL	2022 E	2023 F	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	2030 F	CAGR (2022 - 2030)
Animal Based CHITOSAN	247.6	271.9	298.9	328.8	362.0	398.9	439.9	485.5	536.3	10.1%

Medical grade chitosan market is expanding fast, with a projected CAGR exceeding 10% for the coming years.

ChitogenX medical grade chitosan platform has potential significant advantages vs existing commercial medical grade chitosan formulations, namely, 1) 3-yr shelf life of lyophilized chitosan vs 6 months for the other products currently marketed, 2) GMP grade & Low-cost manufacturing, 3) Composition and methods patents pending in US and Canada, and 4) Easier regulatory pathway potential pathway to revenue in 18 to 24 months.

ChitogenX Overall Value Proposition

Technology Platform	ORTHO-R: Unique Drug / Biologics /	Great Value Creation & Exit
	Device Combination Product	Potential
 Proprietary, novel, multi-indications, second generation, de-risked platform Strong intellectual property protection in three patent families Addresses significant unmet medical need in large regenerative medicine market First solution to increase residence time to augment regeneration of new tissue Validated mode of action, safe and easy to use solution Rapid coagulation, avoids shrinkage of implant, potentially adheres to multiple tissues Demonstrated efficacy in large animal model (decreased tendon gap & improved bone structure) 	 In the US regulatory lead as the first PRP based drub/biologic product in human trials Target U.S. market first with clear regulatory pathway from FDA (IND to BLA) Potentially simpler regulatory pathways in major markets outside the US Advantageous manufacturing costs Uses autologous PRP which can be sourced quickly and easily during surgery Lyophilized chitosan provides long shelf life 	 Phase I/II clinical trial ongoing Multiple material milestones expected over next quarters including completion of enrollment into phase I/II clinical trial. NASDAQ listing to be considered for 2023 calendar year Multiple regenerative medicine applications Experienced management, Board and Clinical Advisory Board with history of value creation Low market valuation vs. industry peers

Intellectual Property

ORT is the owner of 3 patent families. Our patent portfolio includes the following:

Family	Description	Patent Status
<u>No.1</u>	Clot-activated polymer composition for repairing the tissue of the subject, where the polymer composition adheres to the tissue and promotes cell proliferation, comprising platelet-rich plasma (PRP), a biopolymer, a salt, and a clot activator.	Issued – GloballyExpiry - 2030
<u>No.2</u> :	Freeze-dried polymer compositions for mixing with platelet rich plasma to form implants for tissue repair or compositions for therapeutic intra-articular injection.	Issued – GloballyExpiry - 2035
<u>No.3</u> :	Freeze-dried biopolymer scaffolds that form a hydrated microparticle dispersion after contact with blood or blood-derived fluids and stimulate anabolic wound repair processes, including angiogenesis, cell chemotaxis, tissue remodeling, and extracellular matrix.	 Issued/Allowance pending – Globally Expiry – 2035

Q2-2023 CORPORATE HIGHLIGHTS (May 1, 2022 to July 31, 2022)



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- On May 1, 2022, the Corporation received a method and composition patent from the US Patent Office and received notice issue from Canada and European patent offices for the composition and method patents on one of its key patents for its freeze-dried polymer compositions for mixing with platelet rich plasma to form implants for tissue repair or compositions for therapeutic intra-articular injection.
- On May 4, 2022, the Corporation announced that the United States Patent and Trademark Office (the "USPTO") had issued a patent related to the Company's ORTHO-R soft tissue repair platform. The issued patent, titled, "Freeze-Dried Polymer Compositions for mixing with platelet rich plasma to form implants for tissue repair and/or composition for therapeutic intraarticular injection" (US Patent Application No. U.S. 11,285,100 B2) provides broad protection for both the composition and the method of use of our ORTHO R technology. New patent issued by USPTO to protect core IP until 2035 and positions the Corporation as leading player in the dynamic regenerative medicine market. The patent enables delivery of PRP in soft tissue repair surgery in a proprietary way.
- On May 19, 2022, the Corporation issued 500,000 warrants with an exercise price of \$0.35 per Common Share and expiring July 31, 2023 as compensation to non-related parties providing social media support and other corporate services.
- On May 26, 2022, the Corporation announced that it had received, through its partnership with Polytechnique Montreal, a \$0.5 million non-dilutive grant from Axelys, to advance the development of its technology platform indication for meniscus repair.
- On June 13, 2022, the Corporation announced that patient recruitment for its Phase I/II Clinical trial for testing Ortho-R for rotator cuff repair had been initiated with six of the ten sites actively recruiting patients.
- On July 27, 2022, we announced the initiation of patients' enrollment in its U.S. Phase I/II rotator cuff tear repair clinical trial.

Events Subsequent to the end of the quarter

 On September 7, 2022, The Corporation announced that it has changed its corporate name to ChitogenX Inc. to better reflect the Company's expanded clinical and commercial opportunities, mission, values, and core competencies.

SELECTED FINANCIAL DATA

The following table sets forth financial information relating to the periods indicated and should be read in conjunction with the July 31, 2022 unaudited financial statements.

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			Chang	e			Chang	ge
	Q2-23	Q2-22	\$ ¹	% ²	YTD-23	YTD-22	\$ ¹	% ²
Expenses								
R&D	444	141	303	215%	1,107	543	564	104%
G&A	484	367	117	32%	1,051	805	246	31%
Share-based compensation	162	64	98	153%	204	127	77	61%
Financial	349	332	17	5%	700	671	29	4%
Total Expenses	1,439	904	535	59%	3,062	2,146	916	43%
FVA embedded derivative	(78)	-	(78)	-100%	(812)	-	(812)	-100%
FVA on warrants	2	-	2	100%	(37)	-	(37)	-100%
Net (Loss) and Comprehensive loss	(1,363)	(904)	(459)	51%	(2,213)	(2,146)	(67)	3%
(Loss) per share								
WA # of shares outstanding	51,038,776	34,885,186	16,153,590	46%	45,423,158	34,872,899	10,550,259	30%
Basic and diluted loss per share	0.03	0.03	0.00	3%	0.05	0.06	-0.01	-21%

^{1.} A positive variance represents a negative impact to net loss and a negative variance represents a positive impact to net loss

^{2.} Percentage change is presented in relative values



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EBITDA(L) Reconciliation (See "Management's Responsibility for Financial Reporting" – "Non-IFRS Financial Measures") The following table provides a reconciliation of net loss to EBITDA(Loss) for Q2-23 as compared to Q2-22.

			Chang	ge			Chang	ge
	Q2-23	Q2-22	\$ ¹	% ²	YTD-23	YTD-22	\$1	% ²
Net loss	(1,363)	(904)	(459)	51%	(2,213)	(2,146)	(67)	3%
Add (deduct)				0				0
Financial Expense	349	332	17	5%	700	671	29	4%
FVA embedded derivative	(78)	-	(78)	-100%	(812)	-	(812)	-100%
FVA on warrants	2	-	2	100%	(37)	-	(37)	-100%
Depreciation	6	10	(4)	-40%	12	17	(5)	-29%
Amortization	8	8	-	0%	16	16	-	0%
EBITDA (L)	(1,076)	(554)	(522)	94%	(2,334)	(1,442)	(892)	62%

^{1.} A positive variance represents a negative impact to net loss and a negative variance represents a positive impact to net loss

^{2.} Percentage change is presented in relative values

	Q2-23 vs Q2-22
Revenues	CHITOGENX is a clinical stage company. No revenues were generated during each of FY-23 and FY-22.
R&D expenses	 R&D expenses include internal and external expenses. Internal expenses represent mostly salaries and consulting fees for our staff. External expenses include all development costs related to work performed under our Collaborative R&D contract with Polytechnique as well as specific manufacturing activities, regulatory, pre-clinical and clinical work to advance our pipeline. R&D expenses are presented net of R&D tax credits (ITCs) recoverable from the provincial government for Scientific Research and Experimental Development (SR&ED) programs, and net of government grants. R&D expenses are also presented net of grants which are amortized over their respective term.
	• R&D expenses for each of the Q2-23 and YTD-23 periods increased over the prior year periods at \$0.4 million and \$1.1 million compared to \$1.1 million and \$0.5 million respectively, representing increases of 215% and 104%.
	 During FY-23, the Corporation increased its R&D activities after receiving the clearance from the FDA of its IND application in Q4-22 to commence its Phase I/II clinical study for testing Ortho-R for rotator cuff repair. R&D expenses in Q2-23 and YTD-23 include site initiation and training fees, and other auxiliary costs required to get all 10 sites ready for enrollment and screening patients. For the Q2-22 and YTD-22periods, R&D costs were mainly related to the preparation and filing of the ORTHO-R IND with FDA.
G&A expenses	• G&A expenses include salaries and consulting fees paid to non-R&D staff, professional fees, conferences, travel expenses, as well as investors relation activities.
	• G&A spending in Q2-23 increase over Q2-22 at \$0.5 million compared to \$0.4 million representing a 32% variance. G&A expenses for YTD-23 was \$1.1 million compared to \$0.8 million for YTD-23, a 31% increase. The respective increases in Q2-23 and YTD-23 compared to the prior year periods includes some additional salary charges related to the addition of a new CEO, Phil Deschamps, the cost of retaining the prior CEO during a 2-month transition period. The G&A expenses also include a severance to the departing CEO, to be paid until Q1-24.
Share-based compensation (SBC)	• Represents the expense related to issuing stock options to staff, consultants and board members. Variances for the comparative quarters include non-recurrent grant to a new Board member as well contractual vesting for members of management on options already outstanding. SBC expenses increased in Q2-23 as a result of new options issued to the new CEO and other senior staff.
Financial expenses	 Financial expenses include interest on loans, non-convertible and convertible debentures, as well as effective interest on debentures as well as foreign exchange gain or loss. Over the last year, the Corporation financed its operations via the issuance of interest-bearing instruments such as CDUs, NCDUs and ITC loans as opposed to equity. While such financial instruments do not lead to an immediate dilution in the total number of shares outstanding in the short term, they lead to increased interest charges. Between October 2020 and April 2022, the Corporation completed CDU financings totalling \$3.2 million. The Corporation also secured a \$3.0 million non-convertible debenture in November 2020 as well as a \$1.1 million bridge financing in Q4-22, part of which (\$0.2 million) was converted into the \$3.2 million Private Placement financing ("April 2022 PIPE"). All these transactions have impacted financial expenses.





Management's Discussion and Analysis for the three and six months ended July 31, 2022

(In thousands of Canadian dollars, except for units, share and per share amounts)

	• Financial expenses for Q2-23 and YTD-23 were stable compared to Q2-22, and YTD-22 at \$0.3 million and \$0.7 million respectively.
Fair Value Adjustment ("FVA") of Embedded Derivative	 On July 19, 2022, the Corporation announced the amendment of three series of CDUs to extend their respective maturity dates. An Embedded derivative comprised of the conversion options classified as liability was created following the amendment of the CDUs. Starting Q4-22, any change in the Fair Value of the Conversion Option of the CDUs ("FVCO") has to be recorded as a financial expense. During Q2-23 and YTD-23, the change in the FVCO, led to an Adjustment of the Fair Value ("FVA") of the conversion option representing gains of \$0.1 million and \$0.8 million respectively. There was no FVCO adjustments required for Q2-22 and YTD-22 as the embedded derivative was created in Q3-22.
Fair Value Adjustment ("Fair Value Adjustment") on warrants	 The terms of the warrants issued as part of the December 2022 Bridge financing led to the creation of a warrant liability. Until the warrants are exercised or expire, a fair value adjustment to the warrants will be recorded quarterly to reflect the change in the warrant liability. During Q2-23 and YTD-23, the revaluation of the Warrants' fair value as compared to the YE-22 value was nominal.
Net Loss for the period.	 Net loss increased by 51% between Q2-22 and Q2-23 at \$1.4 million compared to \$0.9 million. The \$0.5 million increase in net loss was primarily due to the increase in R&D and G&A spendings described above. YTD-23 net loss was stable as compared to YTD-22 and \$2.2 million as compared to \$2.1 million, a 3% increase.
EBITDA (L)	• Management believes that our EBITDA (L) performance is more indicative of our operating results as it eliminates the financial costs associated with our financial structure such as CDUs and NCDA financings, and ITC financings as well as depreciation and the amortization of intangible assets.
	• After eliminating the impact of the financial expenses, as well as depreciation and amortization, but also after eliminating the impact of the combined gain on revaluation of the CDU embedded derivative and warrant liability, our EBITDA loss during Q2-23 was \$1.1 million compared to \$0.6 million for Q2-22, representing a 94% increase.
	• EBITDA loss during YTD-23 was \$2.3 million compared to \$1.4 million for YTD-22, representing a 62% increase.

SELECTED BALANCE SHEET HIGHLIGHTS

The following table sets forth the financial information related to the Corporation's statements of financial position for the periods indicated and should be read in conjunction with the unaudited financial statements for quarter ended July 31, 2022.

As at,			Change	?
	July 31, 2022	31-Jan-21	\$ ¹	% ²
Cash	879	313	566	181%
Total assets	1,684	1,123	561	50%
Trade accounts payable and accrued liabilities	776	607	169	28%
Convertible notes	803	934	-131	-14%
Convertible Debentures - Short term	2,525	-	2,525	100%
Convertible Debentures - Long term	-	2,387	-2,387	-100%
Non-Convertible Debentures	2,498	2,349	149	6%
Warrants classified as liability	103	139	-36	-26%
Embedded derivative - Short term	770	-	770	100%
Embedded derivative - Long term	-	1,582	-1,582	-100%
Total liabilities	7,688	8,227	-539	-7%
Common shares	10,455	7,891	2,564	32%
Warrants	2,317	1,828	489	27%
Contributed surplus	2,364	2,104	260	12%
Deficit	(21,140)	(18,927)	-2,213	12%

- 1. A positive variance represents a positive impact to our balance sheet and a negative variance represents a negative impact to our balance sheet.
- 2. Percentage change is presented in relative values



Management's Discussion and Analysis for the three and six months ended July 31, 2022

(In thousands of Canadian dollars, except for units, share and per share amounts)

Selected items	Q2-23 vs YE-22
Cash	• Cash at the end of Q2-23 was \$0.9 million compared to \$0.3 million at the start of the fiscal year. The increase in cash takes into consideration the net impact of the April 2022 PIPE which generated net proceeds of \$2.7 million less liquidities required to fund operations during the first 6 months of FY-23.
Total Assets	• The increase in cash during YTD-23 period led to a 50% increase in our total assets between the end of FY-22 and Q2-23.
Trade AP and accrued liabilities	• Trade accounts payables and accrued liabilities increased by \$0.2 million or 28% during the first 6 months of FY-23 following the increase in R&D activities that took place during the recent quarters.
Convertible Notes	• Convertible notes were issued as part of the December bridge financing which matures in December 2022. The reduction since the start of the fiscal year takes into consideration the \$0.2 million of notes converted into the April 2022 PIPE, as well as accretion expense for the period.
Convertible debentures units ("CDU")	 During FY-20 and FY-21, the Corporation issued \$3.2 million of CDUs to fund its operations. Considering the CDUs mature on May 1, 2023, the Convertible Debentures are now presented as short-term liability. The nominal increase between the end of FY-22 and Q2-23 represents accretion expense of \$0.1 million.
Non-convertible Debentures ("NCDU")	• During Q4-21 the Corporation secured a \$3 million NCDU financing to fund its activities. The increase of \$0.1 million between YE-22 and Q2-23 represents accretion expense for the Q2-23 period.
Warrants classified as liability	• This item represents the \$0.1 million Fair Value of the warrants issued as part of the December 2022 bridge financing less the gain on reevaluation of the warrants between the date of issuance and Q2-23. (See "Financial Statements - note 11b").
Embedded Derivative	 In July 2022, a \$1.2 million embedded derivative representing the related conversion options was created following the amendment of the CDUs. Any change in the Fair Value of the Conversion Option of the CDUs ("FVCO") is recorded as a financial expense in the statements of loss, as a gain or loss on embedded derivative related to CDUs. Changes to the FVCO takes place based on 1) reduction of the FVCO following quarterly re-evaluation of the FVCO; 2) exercise of the conversion option by the holder; or 3) repayment/maturity. The FV of the conversion option of the CDUs was \$1.6 million at YE-22 and presented as long-term. Considering the May 1, 2023 maturity of the CDU, the Embedded derivative is now presented as short-term liability and has been reduced by 51% to \$0.8 million since YE-22 due to a gain on the Fair Value Adjustment.
Total Liabilities	• Total liabilities have decreased by \$0.5 million between YE-22 and Q2-23. The variation resulted mainly from the \$0.8 million gain on revaluation of the warrant liability and CDU embedded derivative offset by a \$0.2 million increase in payables.
Common Shares	• Common shares have increase by \$2.6 million mainly as a result of the April 2022 PIPE net of share issue costs.
Warrants	• Warrants increased by \$0.5 million mainly as a result of the warrants issued as part of the April 2022 PIPE net of the allocation of share issue costs, less the impact of expired warrants.
Contributed Surplus	• The contributed surplus increased by \$0.3 million as a result of share-based compensation expense and the expiry of warrants.
Deficit	• Increase reflects the performance of the Corporation during Q2-23. (See "Statement of Loss" commentaries)

SELECTED QUARTERLY FINANCIAL INFORMATION

The following table sets out the Corporation's selected unaudited quarterly financial information for the eight quarters ended July 31, 2022. This information is derived from unaudited quarterly financial statements prepared by management in accordance with IFRS. The following quarterly information is presented on the same basis as the audited financial statements and should be read in conjunction with those statements and their accompanying notes.

	Q2-23	Q1-23	Q4-22	Q3-22	Q2-22	Q1-22	Q4-21	Q3-21
R&D Expenses (Net)	444	663	415	591	141	402	390	191
G&A expenses	484	567	309	357	367	438	472	342
Share-based compensation	162	42	67	43	64	63	112	101
Financial expenses (income)	349	351	370	266	332	339	294	179
FVA embedded derivative	(78)	(734)	(279)	667	-	-	-	-
FVA on warrants	2	(39)	(31)	-	-	-	-	-
Net Loss	(1,363)	(850)	(851)	(1,924)	(904)	(1,242)	(1,268)	(813)
Loss per share (Basic and diluted):	0.02	0.02	(0.02)	(0.06)	(0.03)	(0.04)	(0.04)	(0.03)
EBITDA (Loss)	(1,076)	(1,254)	(773)	(973)	(554)	(888)	(955)	(611)





Management's Discussion and Analysis for the three and six months ended July 31, 2022

(In thousands of Canadian dollars, except for units, share and per share amounts)

(See "Management's Responsibility for Financial Reporting" – "Non-IFRS Financial Measures")

Notes	Valuable information
R&D expenses (Net of ITCs and grants)	• Net R&D expenses fluctuates based on the timing of R&D activities. R&D activities have accelerated over the last year as the Corporation was getting ready to start and initiated its Phase I/II trial for testing Ortho-R for rotator cuff repair.
G&A expenses	• G&A expenses have been stable over the last 2 years. G&A expenses in Q1-23 included the impact of senior management changes that took place during the quarter. We expect G&A to be stable for the coming quarters.
Share-Based Compensation	• Share-based compensation fluctuates as a results of staff changes, and due to the timing of expense recognition associated with the vesting of the options issued. Q2-23 SBC included the impact of issuing options and RSUs to the new CEO and new chief Medical Officer.
Financial expenses	 Financial expenses have been relatively stable over the last few quarters after having increased in Q4-21 following the implementation of the \$3.0 million NCDU. Interest charges on the CDUs may go down over time as CDU holders opt to convert their debenture prior to maturity.
FVA of embedded derivative	• The changes to the terms of the CDU conversion price as well as the variation in share price during the last quarters has led to quarterly adjustments to the FVCO of the CDUs representing respective decreases (gains) or increases (losses) since the embedded derivative was created in Q2-22.
FVA on warrants	• There has been nominal quarterly variations (adjustments) to the fair value of the warrants issued as part of the December 2021 bridge financing
Net loss	 Over the last few quarters, net loss reflect has been mainly impacted by the FVA of the derivative liability related to the CDUs as well as to a lessor extent to the fluctuations of the R&D, G&A and SBC expenses. Net loss in Q2-23 was up compared to Q1-23 as FVA on the embedded derivative decreased by \$0.6 million. Net loss in Q3-22 increased mainly as a result of the creation of the CDU embedded derivative. Going forward ChotogenX' net loss will be mainly driven by the level of R&D spending made to advance its R&D programs (Ortho-R, Ortho-M, and Ortho-C) as well as the financial expenses related to its capital structure include FVA of each of the embedded derivative and warrants.
EBITDA (Loss)	 EBITDA (Loss) (See "Management's Responsibility for Financial Reporting" – "Non-IFRS Financial Measures") eliminates the impact of the FVA on the CDU, NCDU, ITC and other financings which reflect the Corporation's financing strategy adopted to attract the required capital to fund its operations. After eliminating such expenses, the EBITDA (Loss) in Q2-23 decreased over Q1-23 as R&D activities were down \$0.2 million. Fluctuations over prior quarter were directly related to variations in R&D and G&A spendings described above.

LIQUIDITIES AND CAPITAL RESSOURCES

			Change	
For the 3-month period ended on,	31-Jul-22	31-Jul-21	\$ ¹	% ²
Operating activities:				
Net loss from operations	(2,213)	(2,146)	(67)	3%
Other items not affecting cash	67	581	(514)	-88%
Changes in non-cash working capital	140	(25)	165	-660%
Cash used in operations	(2,006)	(1,590)	(416)	26%
Investing activities:				
Cash used in investing activities	-	(33)	33	100%
Financing activities:				
Cash provided by financing activities	2,570	135	2,435	1804%
Cash, beginning of period	313	2,379	(2,066)	-87%
(Decrease) increase in cash	564	(1,488)	2,052	-138%
Effect of foreign exchange on cash	2	(36)	38	-106%
Cash, end of period	879	855	24	3%

^{1.} A positive variance represents a positive impact to cash flows and a negative variance represents a negative impact to cash flows

^{2.} Percentage change is presented in relative values



CHITOGENX

Management's Discussion and Analysis for the three and six months ended July 31, 2022

(In thousands of Canadian dollars, except for units, share and per share amounts)

	Q2-23 vs Q2-22
Cash used in operations	• Cash used in operations represents the cash flows from operations, excluding income and expenses not affecting cash plus changes in non-cash working capital items.
	• Cash used in operations was \$2.0 million for YTD-23 as compared to \$1.6 million for YTD-22 period, representing a \$0.4 million decrease. The increase results from the \$0.5 million decrease in items not affecting cash which captured the combined \$0.8 million gains on fair value adjustments to the CDU embedded derivative and warrant liability. Cash used in operations in YTD-23 was also impacted by a \$0.2 million positive change in non-cash working capital items including a favorable change of \$0.2 million in payables.
Cash used in investing activities	No investments during YTD-23, compared to nominal investment in YTD-22.
Cash provided by financing activities	• Financing activities generated \$2.6 million during the YTD-23 period representing the net impact of the April 2022 PIPE compared to \$0.1 million in YTD-22 which included nominal proceeds from the exercise of warrants as well as a \$0.1 million government grant to support R&D work.
Cash, End of the period	• The Corporation ended Q2-23 with \$0.9 million of cash compared to \$0.9 million at the end of Q2-22 representing a nominal 3% increase. Cash increased by \$0.6 million during YTD-23 as a result of the April 2-22 PIPE compared to a \$1.5 million decrease in YTD-22 as the Corporation mainly used its liquidities to fund its operations.

Cash, and Working Capital

As at,			Change	
	2022-07-31	2022-01-31	\$ ¹	% ²
Cash	879	313	566	181%
Total current assets	1,313	722	591	82%
Accounts payables and accrued liabilities	776	607	169	28%
Convertible unit Bridge	803	934	(131)	100%
Convertible debentures - Short term	2,525	-	2,525	100%
Embedded derivative	770	-	770	100%
Warrants presented as a liability	103	139	(36)	100%
Total current liabilities	5,150	1,869	3,281	176%
Working Capital	(3,837)	(1,147)	(2,690)	235%

^{1.} A positive variance represents a positive impact, and a negative variance represents a negative impact

Cash at the end of Q2-23 was \$0.9 million as compared to \$0.3 million at the end of YE-22 representing a \$0.6 million increase. During Q2-23, working capital was impacted by the reclass of the convertible debentures now presented as short-term liability. Working Capital at the end of Q2-23 was showing a \$3.8 million deficit compared to a \$1.1 million deficit as at the end of Q2-22. Included in the working capital deficit is 1) the non-cash \$0.8 million the embedded derivative (FVCO of the CDUs) which will be eliminated at the latest on May 1, 2023, as well as 2) the \$2.5 million CDUs which can be converted up to May 1, 2023.

With Phase I/II activities picking up and related corporate milestones soon to be met over the coming quarters, the Corporation is highly confident that most of the CDU will be converted at or prior to maturity, thus eliminating a total of \$3.3 million worth of short-term liabilities (\$2.5 million CDU, and \$0.8 million embedded derivative).

The Corporation will continue to use its liquidities to fund its operations including its primary objective of advancing its first Phase I/II human trial on Ortho-R for rotator cuff repair and is also currently assessing various scenarios for adding to its liquidities and addressing the maturity of the remaining \$0.8 million convertible notes due in Q4-23.

During prior periods, the Corporation has demonstrated its ability to raise the necessary capital to support its operations and achieve development milestones. However, there is no assurance that the Corporation will be able to secure the necessary financing to fund it various development programs. Management has continued to implement IR and financing initiatives to attract the required capital to fund its operations and deliver R&D and corporate milestones over the next fiscal year. (See "Overview of the Business" and "Going concern").

Future financing

As of July 31, 2022, ChitogenX had 34.3 million warrants outstanding with an average exercise price of \$0.42. 32.7 million warrants are subject to an acceleration clause. 16 million warrants issued as part of the April 2022 PIPE can be accelerated if the average VWAP of the Corporation's shares over any ten (10) consecutive trading days (the "Trading Period") is greater or equal to \$0.50 (the "Accelerator price"),

^{2.} Percentage change is presented in relative values





Management's Discussion and Analysis for the three and six months ended July 31, 2022

(In thousands of Canadian dollars, except for units, share and per share amounts)

the Corporation may give notice to the warrant holder that it must exercise its remaining warrants within a period of 30 days from the date of receipt of the notice, failing which the warrants will automatically expire. Same applies for 16.7 million warrants with an accelerator price of \$1.00 but will require a 20-day trading period.

The extent to which these warrants are exercised will be a function of the market price of the Corporation's underlying common shares and investors' view of the opportunity for shareholder value creation over the investment time for each individual investor. If the acceleration clause had been exercised for all warrants outstanding at the end of Q2-23 and for which the acceleration clause applied, the maximum influx of cash to the Corporation would have been approximately \$13.9 million. Assuming all warrants are exercised prior to their maturity a total of \$14.2 million could be raised.

The Corporation's use of available funds over the coming year is of utmost concern to the Board. Since the extent and timing of warrant exercise as a source of financing are uncertain, management continues to look for alternative sources of financing to secure the required capital necessary to fund its operations and development projects. Management's focus is on securing equity-based financings from Canadian and US based institutional and/or accredited investors. The Corporation is also actively promoting its technologies to strategic partners.

Discussion of operating cash requirements

All programs in the Corporation's current portfolio will require a significant investment to increase their market value (through, for example, clinical trials) or to attract a strategic partner. We estimate that \$30 million will be required to bring our rotator cuff (Ortho-R), meniscus (Ortho-M), and cartilage (Ortho-C) programs to market. There are several areas where duplication between programs can provide savings such as the manufacture of the chitosan material, which is common across our product platform. We therefore do not need to replicate several manufacturing activities, or some associated costs, for each of the projects.

Ortho-R for the repair of rotator cuff tears is a clinical development stage program and represents our lead product for commercialization. We currently estimate that an additional investment of at least \$3 million will be required to provide proof of concept in human and another \$10 million to bring the same program to commercialization.

Ortho-M (meniscus) is the Corporation's second candidate and is also in a development phase. Proof of efficacy in a large animal preclinical model is currently taking place 80% of which is funded by 3rd party grants. Ortho-M's development pathway and plan will be similar to Ortho-R and will benefit from all cGMP activities performed on scaling-up Ortho-R. Consequently, management estimates that \$1.5 million will be required prior to submitting an IND application prior to testing Ortho-M in human for meniscus tear repair.

Ortho-C and Ortho-V are currently at earlier stage of development and management does not intend to commit any sums to the advancement of these projects until its successfully advances Ortho-R and Ortho-M in human clinical testing.

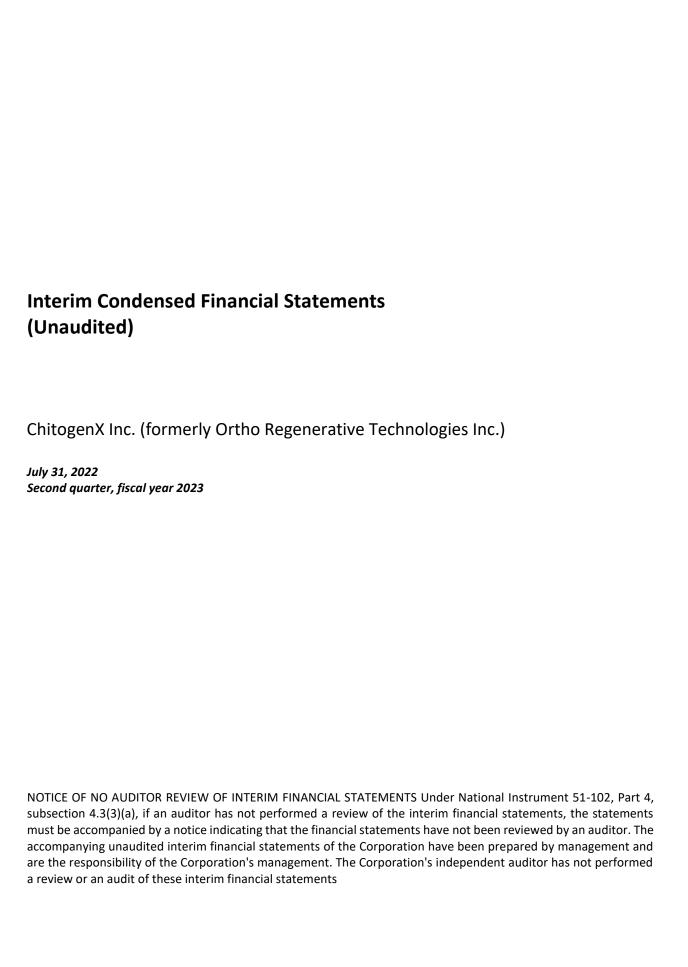
In order to successfully advance its current R&D programs, ChitogenX entered on into a Collaborative R&D Agreement with Polytechnique on to ensure access to Polytechnique's staff, expertise and laboratories. The agreement expires on August 14, 2024.

Statement of Compliance

The unaudited interim financial statements included in this MD&A for the quarter ending July 31, 2022 have been prepared in accordance with *International Financial Reporting Standards* as issued by the *International Accounting Standards Board ("IASB")* as well as with those standards and interpretations as issued by the *International Financial Reporting Interpretations Committee ("IFRIC")* issued and effective or issued and early adopted as at the time of preparing these interim financial statements.

Use of Estimates and Judgements

Reference should be made to the Corporation's 2022 annual financial statements, *note 3*, for an extended description of the information concerning the Corporation's significant judgments, estimates and assumptions that have the most significant effect on the recognition and measurement of assets, liabilities, income and expenses.



Interim Condensed Statements of Financial Position (Unaudited)

In thousands of Canadian dollars except for share and per share amount

As at	Notes	July 31, 2022	January 31, 2022
ASSETS			
Current			
Cash		879	313
Sales tax and other receivables		54	35
Investment tax credits receivable		220	254
Prepaid expenses and deposits		160	120
Total current assets		1,313	722
Equipment	4	56	69
Intangible assets	5	315	332
Total assets		1,684	1,123
LIABILITIES AND SHAREHOLDERS' DEFICIT			
Current			
Accounts payable and accrued liabilities	6	776	607
Government grants		-	12
Accrued interest on debentures		173	177
Convertible notes	10	803	934
Convertible debentures	8	2,525	-
Conversion options	8	770	-
Warrants	10	103	139
Total current liabilities		5,150	1,869
Long-term loan	7	40	40
Convertible debentures	8	-	2,387
Conversion options	8	_	1,582
Non-convertible debentures	9	2,498	2,349
Total liabilities		7,688	8,227
SHAREHOLDERS' DEFICIT			
Common shares	11	10,455	7,891
Warrants	11	2,317	1,828
Contributed surplus		2,364	2,104
Deficit		(21,140)	(18,927)
Total shareholders' deficit		(6,004)	(7,104)
Total liabilities and shareholders' deficit		1,684	1,123

Going Concern Uncertainty (Note 1); Commitments (Note 20).

These unaudited interim condensed financial statements were approved and authorized for issuance by the Board of Directors on September 28, 2022.

"/s/ "Pierre Laurin" ", Director

Interim Condensed Statements of Loss and Comprehensive Loss (Unaudited)

In thousands of Canadian dollars except for share and per share amount

		Three months ended,		Six month	s ended,
	Notes	July 31, 2022	July 31, 2021	July 31, 2022	July 31, 2021
Expenses					
Research and development	13	444	141	1,107	543
General and administrative	14	484	367	1,051	805
Share-based compensation	11	162	64	204	127
Financial	15	349	332	700	671
Total Expenses		1,439	904	3,062	2,146
Other items					
Fair Value adjustment on embedded derivative	8	(78)	-	(812)	-
Fair Value adjustment on warrants	10	2	-	(37)	-
Net loss and comprehensive loss		1,363	904	2,213	2,146
Loss per share					
Weighted average number of common shares outstanding		51,038,776	34,855,186	45,423,158	34,864,928
Basic and diluted loss per common share		0.03	0.03	0.05	0.06

Going Concern Uncertainty (Note 1)

Interim Condensed Statement of Changes in Shareholders' Deficit (Unaudited)

In thousands of Canadian dollars, except for share and per share amount For the six months ended July 31,

	Notes	Number of common shares	Share capital	Warrants	Equity component of convertible debentures	Contributed surplus	Deficit	Total
Balance as at January 31, 2021		34,567,600	7,706	2,080	469	1,605	(13,661)	(1,801)
Shares issued	11	73,628	40	-	-	-	-	40
Share-based compensation	11	-	-	-	-	126	-	126
Exercise of warrants	11	100,000	73	(10)	-	-	-	63
Expired warrants	11	-	-	(101)	-	101	-	-
Warrants extension adjustment	11	-	-	20	-	-	-	20
Conversion of debentures	8	173,013	56		(9)	-	-	47
Extension of convertible debentures and								
reclassification warrants from equity to	8	-	-	-	(460)	-	(345)	(805)
liability								
Net loss for the period		=	-	-	-	-	(2,146)	(2,146)
Balance as at July 31, 2021		34,914,241	7,875	1,989	-	1,832	(16,152)	(4,456)
Balance as at January 31, 2022		34,956,093	7,891	1,828	-	2,104	(18,927)	(7,104)
Shares/Units issued	11	16,082,683	2,673	568	-	-	-	3,241
Share/Unit issue costs	11	-	(109)	(23)	-	-	-	(132)
Share-based compensation	11	-	-	-	-	204	-	204
Expired warrants	11	-	-	(56)	-	56	-	-
Net loss for the period		-	-	-	-	-	(2,213)	(2,213)
Balance as at July 31, 2022		51,038,776	10,455	2,317	-	2,364	(21,140)	(6,004)

Interim Condensed Statement of Cash Flows (Unaudited)

In thousands of Canadian dollars For the six months ended July 31,

	Notes	July 31, 2022	July 31, 2021
Operating activities:			
Net loss from operations		(2,213)	(2,146)
Add items not affecting cash:			
Share-based compensation	11	204	127
Shares issued as a supplier payment		-	40
Consulting fees and supplier and other payable settled through the		319	
issuance of shares, warrants or debentures		213	-
Depreciation and Amortization	4,5	30	33
Amortization – financial charges	15	55	22
Unrealized gain on foreign exchange		(3)	36
Interest on loans and debentures	8,15	322	302
Gain due to Fair Value adjustment – embedded derivative	8	(812)	-
Gain due to Fair Value adjustment – warrants liability	10	(36)	-
Government grant amortization	13	(12)	(25)
Loss on convertible debenture revaluation		-	26
Warrants extension adjustment	10	-	20
Net change in non-cash operating working capital	12	140	(25)
Cash used in operating activities		(2,006)	(1,590)
Investing activities:			
Acquisition of equipment	4	-	(33)
Cash used in investing activities		-	(33)
Financing activities:			
Proceeds from government grant	13	-	75
Proceeds from exercised warrants	11	-	60
Proceeds from the issuance of shares	11	2,702	-
Payment of share issue costs	11	(132)	
Cash provided by financing activities		2,570	135
Cash, beginning of period		313	2,379
Increase (decrease) in cash		564	(1,488)
Effect of foreign exchange on cash		2	(36)
Cash, end of period		879	855

Going Concern Uncertainty (Note 1)

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

1. Presentation of Financial Statements

Description of the Business and Going Concern Uncertainty

ChitogenX Inc. ("the Corporation", or "ChitogenX"), formerly Ortho Regenerative Technologies Inc., was incorporated under the Canada Business Corporations Act on February 5, 2015. The Corporation's head office, principal address and registered office is located at 16667 Hymus Blvd., Kirkland, Quebec, Canada. On September 7, 2022, the Corporation changed its corporate name to ChitogenX Inc. to better reflect its expanded clinical and commercial opportunities, mission, values and core competencies. Since September 12, 2022, the Corporation's shares are listed on the Canadian Securities Exchange ("CSE"), under the symbol "CHGX" and on the United States OTCQB ("OTCQB") market, under the symbol "CHNXF". These shares were previously listed on the CSE market under the symbol "ORTH" and on the OTCQB market under the symbol "ORTIF".

The Corporation is an emerging Orthopaedic and Sports Medicine biologics company dedicated to the development of novel therapeutic soft tissue repair technologies to dramatically improve the success rate of orthopaedic and sports medicine surgeries. The Corporation's proprietary biopolymer has been specifically designed to increase the healing rates of occupational and sports related injuries to tendons, ligaments, meniscus, and cartilage. The biopolymer – autologous PRP combination implant, can be directly placed into the site of injuries by surgeons during routine operative procedures without significantly extending the duration of surgeries and without further interventions. Considering the significant bioactivity and residency of our proprietary biopolymer – PRP implants, ChitogenX continues to assess its potential for therapeutic uses outside of the soft tissue repair market.

These unaudited interim condensed financial statements have been prepared on the going concern basis, which presumes the Corporation will continue its operations for the foreseeable future and will be able to realize its assets and discharge its liabilities in the normal course of operations. In its assessment to determine if the going concern assumption is appropriate, management considers all data available regarding the future for at least, without limiting to, the next twelve months.

The Corporation has yet to generate revenue and has relied upon the issuance of debt and equity instruments to fund its operations. During the six-month period ended July 31, 2022, the Corporation incurred a net loss of \$2,213 and used cash in operations of \$2,006. As at July 31, 2022, the Corporation had a negative working capital balance of \$3,837.

The ability of the Corporation to fulfill its obligations and finance its future activities depends on its ability to raise capital and on the continuous support of its creditors. The Corporation believes its efforts to raise sufficient funds to support its activities will be successful, however, there is no assurance that funds will continue to be raised on acceptable terms. This indicates the existence of a material uncertainty that may cast a significant doubt about the ability of the Corporation to continue as a going concern without obtaining additional financial resources.

Failure to obtain such additional financing could result in delay or indefinite postponement of the Corporation's strategic goals. These unaudited interim condensed financial statements do not include any adjustments to the amounts and classification of assets and liabilities that would be necessary should the Corporation be unable to continue as a going concern. Such adjustments could be material.

These unaudited interim condensed financial statements were approved and authorized for issuance by the Board of Directors on September 28, 2022.

2. Summary of Significant Accounting Policies

Basis of measurement

These unaudited interim condensed financial statements have been prepared on a historical cost basis, except for the revaluation of certain financial assets and financial liabilities to fair value.

Functional and presentation currency

These unaudited interim condensed financial statements are presented in Canadian dollars, which is also the functional currency of the Corporation.

Transactions denominated in foreign currencies are initially recorded in the functional currency of the related entity using the exchange rates in effect at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated using the closing exchange rates. Any resulting exchange difference is recognized in the statement of loss and comprehensive loss. Non-monetary assets and liabilities denominated in foreign currencies and measured at historical cost are translated using historical exchange rates, and those measured at fair value are translated using the exchange rate in effect at the date the fair value is determined. Expenses are translated using the average exchange rates for the period or the exchange rate at the date of the transaction for significant items.

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

	July 31, 2022	January 31, 2022
End of period exchange rate – USD	1.2824	1.2719
Period average exchange rate – USD	1.2869	1.2528

Statement of Compliance

These unaudited interim condensed financial statements of the Corporation have been prepared in accordance with International Financial Reporting Standards ("IFRS"). These financial statements have been prepared in accordance with those IFRS standards and International Financial Reporting Interpretations Committee ("IFRIC") interpretations issued and effective or issued as at the time of preparing these unaudited interim condensed financial statements. The policies set out below have been consistently applied to all the periods presented.

The preparation of the Corporation's unaudited interim condensed financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of expenses, assets and liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

3. Use of Estimates and Judgment

The preparation of the unaudited interim condensed financial statements requires management to undertake several judgements, estimates and assumptions about recognition and measurement of assets, liabilities, income and expenses. The actual results may differ from these judgements and estimates. These estimates and judgements are based on management's best knowledge of the events or circumstances and actions the Corporation may take in the future. The estimates are reviewed on an ongoing basis. Information about the significant judgements, estimates and assumptions that have the most significant effect on the recognition and measurement of assets, liabilities, income and expenses are discussed in Note 3 of the Corporation's 2022 annual financial statements and are still applicable during the six months ended July 31, 2022.

4. Equipment

	Cost	Accumulated depreciation	Carrying Value
Balance as at January 31, 2022	271	(202)	69
Additions	-	(13)	(13)
Balance as at July 31, 2022	271	(215)	56

5. Intangible Assets

	Cost	Accumulated amortization	Carrying Value
Balance as at January 31, 2022	485	(153)	332
Additions	-	(17)	(17)
Balance as at July 31, 2022	485	(170)	315

6. Accounts Payable and Accrued Liabilities

Balance as at	July 31, 2022	January 31, 2022
Trade accounts payable	766	466
Accrued liabilities	10	141
	776	607

7. Long-Term Loan

	Interest Rate	Maturity	July 31, 2022	January 31, 2022
Canada Emergency Business Account	Interest-free	December 31, 2023	40	40

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

On April 29, 2020, the Corporation received a government loan under the Canada Emergency Response Benefit ("CERB"), part of Canada's COVID-19 economic response plan. The loan bears no interest and has a maturity date of December 31, 2023. Upon repayment of the loan at or prior to its maturity on December 31, 2023, the Corporation would receive a grant of \$10 to reduce the balance repayable.

8. Convertible Debentures

a) Host instrument

	Six months ended July 31, 2022	Year ended January 31, 2022
Opening balance	2,387	2,476
Accretion expense	138	346
Conversion of debentures into common shares	-	(47)
Remeasurement resulting from extension of convertible debentures' maturities	-	(388)
Total	2,525	2,387
Short-term	2,525	-
Long-term	-	2,387
Total	2,525	2,387

The following table shows the nominal value of the convertible debentures with their maturity date:

Nominal amounts outstanding as at

Maturity Date	Initial Amount	July 31, 2022	January 31, 2022
May 1, 2023	3,204	2,783	2,783
Total	3,204	2,783	2,783
Short-term		2,783	-
Long-term		-	2,783
Total		2,783	2,783

On April 21, 2020, the Corporation completed a non-brokered private placement for \$1,060 worth of unsecured convertible debentures at a price of \$1 (one thousand) per debenture, on same terms as the unsecured convertible debentures issued on October 8, 2019, and December 30, 2019 for \$1,644 and 500 respectively. The debentures bear interest at a rate of 10% per annum with a term of 2 years. The debentures are convertible at a price per Class A common shares of \$0.30, in whole or in part, at the option of the holder at any time prior to the close of business on the last business day immediately preceding the maturity date. Each debenture unit consisted of one \$1 (\$ one thousand) principal amount unsecured convertible debenture and 2,000 share purchase warrants, each exercisable into one common share of the Corporation at \$0.50 per share two years from issuance.

In the event that the average VWAP over any twenty (20) consecutive trading days is greater or equal to \$1.00, the Corporation may give notice to the warrant holder that it must exercise its remaining warrants within a period of 30 days from the date of receipt of the notice, failing which the warrants will automatically expire. The "average VWAP" is the average of the volume weighted average market prices of the Corporation's Class "A" Shares on a single day. Long-term loans of \$302 as at January 31, 2020 were converted as part of the closing of April 21, 2020 (\$914 of loans payable were converted into convertible debenture units issued on October 8, 2019).

At creation, the Corporation valued the debt component of the debentures by calculating the present value of the principal and interest payments, discounted at a rate of 27.5%, being management's best estimate of the rate that a non-convertible debenture with similar terms would bear as at April 21, 2020. The equity component consists of the warrants and the conversion option. The values attributed to each were based on the relative fair value approach. On initial recognition, the liability components were \$801, the warrants were \$124 and the conversion options were \$135.

In connection with the issuance of convertible debenture units, 27,067 compensation warrants were issued. Each compensation warrant is exercisable into one common share of the Corporation at \$0.50 per share 18 months from issuance.

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

On July 19, 2021, the Corporation amended its convertible debentures and related warrants agreements (the "Amendment"). Under the terms of the Amendment, the maturity date of all outstanding convertible debentures and related unexercised warrants was extended to May 1, 2023 and certain of the conversion features were clarified.

The Amendment was accounted for as an extinguishment of all outstanding debentures as the change in the fair value before and after the Amendment exceeded 10% of the carrying amount of the debentures. Accordingly, the Corporation recorded a loss on extinguishment of the debentures in the amount of \$26 in the third quarter of fiscal year 2022.

At that date of the Amendment, the Corporation derecognized the carrying amount of the outstanding convertible debentures of \$2,651 and a new liability totaling \$2,262 was recorded by using the discounted cash flows method assuming an effective interest determined on the estimated rate for a loan with similar terms from comparable companies, but without a conversion feature. The difference between both amounts was recorded as decrease of deficit \$389. Resulting from the clarification of the conversion option features, the Corporation determined that the conversion option was now considered as an embedded derivative to be classified as a liability instrument. Therefore, the Corporation derecognized the \$460 carrying amount of the conversion option initially classified as an equity component and recorded the fair value of \$1,194 as a liability. The difference between both amounts was recorded as an increase of deficit of \$734. The Corporation utilized a Monte Carlo simulation model to determine the fair value of the conversion option.

Accretion charges, included in financing expense on the statement of loss and comprehensive loss, attributable to the debentures during the six months ended July 31, 2022 was \$138 (\$220 during the six months ended July 31, 2021). In addition, \$137 of interest expense was recorded, of which \$112 is included as Interest payable on debentures in the statement of financial position.

During the six months ended July 31, 2022, no debentures (\$47 for the year ended January 31, 2022) were converted into common shares of the Corporation.

b) Embedded Derivative

	Three months ended	Year ended
	July 31, 2022	January 31, 2022
Opening balance – July 19, 2021	1,582	1,194
Fair Value adjustment	(812)	388
Total	770	1,582

During the six months ended July 31, 2022, the Corporation recorded a gain on revaluation of their related embedded derivative's fair value of \$812. This adjustment mainly results from the decrease in the Corporation's share price going down from \$0.35/share on January 31, 2022 to \$0.27/share as of July 31, 2022, net of the impact of the conversion price amendment discussed in Note 11.

9. Non-convertible Debentures

	Three months ended July 31, 2022	Year ended January 31, 2022
Opening balance	2,349	2,099
Additions	-	-
Fair value of warrants allocated to equity	-	-
Transaction costs	-	-
Accretion expense	149	250
Total	2,498	2,349
Short-term	-	-
Long-term	2,498	2,349
	2,498	2,349

On November 30, 2020, the Corporation issued 3,000 secured non-convertible debenture units (the "Debenture Units") at a purchase price of \$1 per Debenture Unit for gross proceeds of \$3,000, of which an amount of \$55 was in exchange of consultants' remuneration. These units are secured by a \$4,000 hypothec against the universality of the Corporation's present and future assets. Each Unit consists of one 10% secured non-convertible debenture of the Corporation in the principal amount of \$1 (each, a "Debenture") and 500 Class "A" share purchase warrants (each, a "Warrant") both maturing November 30, 2023 (the "Maturity Date"). Each Warrant entitles the holder thereof to purchase one Class "A" Share of the Corporation (each, a "Share") at an exercise price of \$0.75 until the Maturity Date.

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

The Corporation valued the debt component of the non-convertible debentures by calculating the present value of the principal and interest payments, discounted at a rate of 25%, being management's best estimate of the rate that a non-convertible debenture without warrant coverage would bear as at November 30, 2020. On initial recognition, the liability components were \$2,272, and the warrants were \$728. In connection with the transaction, 170,850 broker's warrants were issued. Transaction costs of \$209 were netted against the liability and will be amortized using the effective interest method over the period of the loan. A further \$67 in transaction costs, related to the warrants, were capitalized to share issue costs.

Accretion expense included in financing expense on the statement of loss and comprehensive loss, attributable to the debentures during the six months ended July 31, 2022 was \$150 including \$17 of amortization of transaction costs (\$117 during the six months ended July 31, 2021). In addition, \$150 of interest expense was recorded (\$150 during the six months ended July 31, 2021), of which \$50 is still accrued and included in accrued interest on debentures in the statement of financial position.

The following table shows the nominal value of the non-convertible debentures with their maturity date:

		Nominal amount	s outstanding as at	
Maturity Date	Initial Amount	July 31, 2022	January 31, 2022	
November 30, 2023	3,000	3,000	3,000	
Total	3,000	3,000	3,000	
Short-term		-	-	
Long-term		3,000	3,000	
Total		3,000	3,000	

10. Convertible notes

a) Host instrument

	July 31, 2022	January 31, 2022
Opening Balance	934	-
Additions	-	1,075
Fair value of warrants allocated to liability	-	(170)
Transaction costs	-	(48)
Loss on debt issuance	-	54
Accretion expense	89	23
Financing rollover	(220)	-
Total	803	934
Short term portion	803	934
Long term portion	-	-
Total	803	934

The following table shows the nominal value of the convertible notes with their maturity date:

· ·		Nominal amounts outstanding as at		
Maturity Date	Initial Amount	July 31, 2022	January 31, 2022	
December 13, 2022	1,075	855	1,075	
Total	1,075	855	1,075	
			_	
Short-term portion		855	1,075	
Long-term portion		-		
Total		855	1,075	

On December 13, 2021, the Corporation announced the closing of a non-brokered private placement offering (the "Private Placement") where it issued 1,075 unsecured Convertible Note Units at a price of \$0.975 per Convertible Note Unit for total gross proceeds of \$1,048. Each Convertible Note Unit consists of one (1) unsecured convertible note (each a "Note") of the Company in the principal amount of \$1,000 and 1,000 Class "A" common share purchase warrants (each a "Warrant"). The Notes bear interest at

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

a rate of 10% per annum from the date of issue, payable in cash, semi-annually in arrears and will mature (the "Maturity Date") on the earlier of (i) 12 months following the closing date of the Private Placement, or (ii) 20 days following the closing of a capital raise in the form of an equity or debt financing of at least \$5,000 (the "Capital Raise"). Any unpaid interest payments will accrue and be added to the principal amount of the Notes. Should the Company complete a Capital Raise prior to the Maturity Date, the holder of a Note will have the option, but not the obligation, to convert the outstanding value of the Note and any accrued and unpaid Interest thereon, into the equity securities and/or debt instrument to be issued pursuant to the Capital Raise, at the same terms and conditions.

Each Warrant will entitle the holder thereof to purchase one Class "A" common share (each, a "Share") at an exercise price of \$0.50 at any time up to 24 months following December 13, 2021. The Notes and the Warrants are subject to a statutory hold period under the applicable securities laws and in such case the certificates evidencing the Notes and the Warrants will bear a legend to that effect, as applicable. The Company has paid \$21 in commissions and issued 21,700 finders' warrants in connection with the convertible note financing, in compliance with applicable securities laws. This leaves the Corporation with a total net proceeds of \$1,027.

The Corporation valued the debt component of the Convertible notes by calculating the present value of the principal and interest payments, discounted at a rate of 24%, being management's best estimate of the rate that a Convertible note would bear as at December 13, 2021. On initial recognition, the host instrument was \$958 and the warrants at \$170. Since an anti-dilutive clause is attached to the warrants, the Corporation determined that the warrants were classified as financial liability. The Corporation utilized a Monte Carlo simulation model to determine the fair value of the warrants. Transaction costs were netted against the liability and will be amortized using the effective interest method over the period of the debt.

Accretion expense included in financing expense on the statement of loss and comprehensive loss, attributable to the Notes during the six months ended July 31, 2022 was \$89 (nil during the six months ended July 31, 2021). In addition, \$62 of interest expense was recorded, of which \$11 is included as Interest payable on debentures in the statement of financial position.

b) Warrants

	July 31, 2022	January 31, 2022
Opening balance – December 13, 2021	139	170
Fair Value adjustment	(36)	(31)
Total	103	139

During the six months ended July 31, 2022, the Corporation recorded a gain on revaluation of their related Warrants' fair value of \$36. This adjustment mainly results from the decrease in the Corporation's share price going down from \$0.35/share on January 31, 2022 to \$0.27/share as of July 31, 2022, net of the impact of the exercise price amendment discussed in Note 11.

11. Share Capital and other equity instruments

(a) Share capital

The Authorized Share Capital is composed of

- i. Unlimited number of Class "A" common shares, with no par value
- ii. Unlimited number of Class "AA" preferred shares, non-voting, non-cumulative dividends at the discretion of the directors, no par value
- iii. Unlimited number of Class "B" preferred shares, redeemable, non-voting, non-cumulative dividends of 1%, no par value

Class "A" common shares	#	\$
Balance as at January 31, 2022	34,956,093	7,891
Common shares issued	16,082,683	2,673
Share issue costs	-	(109)
Balance as at July 31, 2022	51,038,776	10,455

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

On April 5, 2022, the Corporation completed a non-brokered private placement of units and issued 16,000,000 units at a price of \$0.20 per Unit for total gross proceeds of \$3,200 (the "April 2022 Private Placement") of which an amount \$2,702 was received in cash, an amount of \$220 was issued as a replacement to convertible notes issued in December 2021 and the balance in compensation for accounts payable and accrued liabilities. Each Unit consists of one (1) Class "A" common share of the Company (each, a "share") and one share purchase warrant (each a "Warrant"). Each Warrant will be exercisable into one (1) Share in the capital of the Company at the price of \$0.35 per Warrant Share for a period of 24 months from closing (the "Warrant Maturity Date"). Until the Warrant Maturity Date, should the closing price of the Shares be greater or equal to \$0.50 for ten (10) consecutive trading days, the Company may give notice to the Warrant holder, at any time after the statutory 4-month hold period, that it must exercise its remaining Warrants within a period of 30-days from the date of receipt of the notice, failing which the Warrants will automatically expire. The Company has paid \$131 in commission fees and issued 657,650 finders' warrants in connection with the Private placement, in compliance with applicable securities laws.

As a result of the closing of the April 2022 Private Placement, the Corporation had an obligation to amend the terms of certain of its previously issued securities based on anti-dilution provisions governing these securities. Therefore, the Convertible Debentures bearing interest of 10% per annum and maturing on May 1, 2023 were amended such that their conversion price was reduced from \$0.30 to \$0.20 to match the purchase price of units issued under this April 2022 Private Placement. In addition, the exercise price of the 1,075,000 warrants and the 20,625 Finder's warrants issued on December 13, 2021 issued in connection with the Convertible notes financing were reduced from \$0.50 to \$0.35 to match the exercise price of the Warrants comprised in the Units sold under this Private Placement.

(b) Share based compensation

The Corporation implemented an incentive stock option plan for directors, officers, employees and consultants to participate in the growth and development of the Corporation by providing such persons with the opportunity, through stock options, to purchase common shares of the Corporation. The stock option plan provides that the aggregate number of shares reserved for issuance, set aside and made available for issuance may not exceed 10% of the number of issued shares at the time the options are to be granted. The maximum number of options which may be granted to any one beneficiary shall not exceed 5% of the issued shares, calculated at the date the option is granted.

The stock option plan is administered by the Board of Directors of the Corporation and it has full and final authority with respect to the granting of all options thereunder. The exercise price of any options granted under the stock option plan shall be determined by the Board of Directors, subject to any applicable regulations or policies. The term and vesting of any options granted under the stock option plan shall be determined by the Board of Directors at the time of grant, and vary from one grant to another, however, subject to earlier termination in the event of dismissal for cause, termination other than for cause or in the event of death, the term of any options granted under the stock option plan may not exceed 8 years.

Options granted under the stock option plan are not to be transferable or assignable other than by will or other testamentary instrument or pursuant to the laws of succession to a qualified successor. In the event of death of an option holder, options granted under the stock option plan expire upon the earlier of the normal expiry date of the options or one year from the date of death of the option holder.

Subject to certain exceptions, if an employee, director, officer, consultant ceases to hold office or provide consulting services, options granted to such a holder under the stock option plan will expire 90 days after the holder ceases to hold office or such earlier date as the Board of Directors may decide at the date the options were granted. Notwithstanding the foregoing, in the event of a termination for cause of an option holder, all unexercised options held by such option holder shall immediately expire.

On April 8, 2022 (the "Date of Grant") the Corporation granted 2,000,000 stock purchase options (the "Options") to its newly hired CEO, Philippe Deschamps. Half of the Options will vest annually and equally over the first 3 years following the Date of Grant. The balance of the Options will vest based on achievements of predetermined operational and corporate milestones.

On May 19, 2022, the Corporation issued 500,000 warrants with an exercise price of \$0.35 per Common Share and expiring April 30, 2023 as compensation to non-related parties providing social media support and other corporate services.

During the six months ended July 31, 2022 and 2021, the Corporation recorded compensation expense of \$204 and \$127, respectively, with corresponding credits to contributed surplus related to the issuance of stock options. The weighted average fair value of the options granted during the six months ended July 31, 2022, estimated by using the Black-Scholes option pricing model, was \$0.17 (\$0.38 for the year ended January 31, 2022).

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

The following table presents the common shares issuable on exercise of the share-based payment transaction granted during the year ended:

	Six months ended July 31, 2022		Year ended January 31, 2022	
	Number of Weighted Averag		Number of	Weighted Average
	Shares	Exercise Price	Shares	Exercise Price
Options outstanding, beginning of year	2,946,000	\$0.47	2,746,000	\$0.47
Granted during the period	2,500,000	\$0.21	350,000	\$0.47
Options cancelled/expired	(350,000)	\$0.50	(150,000)	\$0.47
Options outstanding, end of period	5,096,000	\$0.34	2,946,000	\$0.47

All share-based payments will be settled in equity. The Corporation has no legal or contractual obligation to repurchase or settle the options in cash.

During the six months ended July 31, 2022, the following options were granted:

Number	Notes	Date of grant	Expiry date	Exercise price	Fair value
2,000,000	(i)	April 8, 2022	April 8 ,2030	0.20	0.16
500,000	(ii)	June 20, 2022	June 20, 2030	0.26	0.21
2,500,000					

⁽i) Half of the Options will vest annually and equally over the first 3 years following the date of grant. The balance will vest based on achievements of predetermined operational and corporate milestones.

The following options were outstanding as at July 31, 2022:

Outstanding	Exercisable	Exercise price	Remaining contractual life (years)
75,000	75,000	\$0.60	6.25
665,000	665,000	\$0.50	0.87
950,000	900,000	\$0.36	2.27
100,000	75,000	\$0.70	6.65
65,000	32,500	\$0.58	6.16
245,000	245,000	\$0.37	0.62
220,000	110,000	\$0.72	6.26
126,000	126,000	\$0.71	4.22
100,000	100,000	\$0.30	0.22
50,000	37,500	\$0.47	6.65
2,000,000	-	\$0.20	7.69
500,000	250,000	\$0.26	7.89
5,096,000	2,616,000		

The fair values of the options issued during the six months ended July 31, 2022 were estimated using the Black-Scholes option pricing model, with the following assumptions:

Exercise price	\$0.20 - \$0.26
Risk-free rate	2,57% - 3.39%
Volatility factor (i)	87.92% - 88,46%
Expected life (years)	8

⁽i) Volatility was determined using the historical share price of comparable companies as the Corporation has insufficient historical data.

⁽ii) 50% vesting at the date of grant and the balance on November 9, 2023.

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

(c) Restricted Stock Units

On April 8, 2022 (the "Date of Grant") the Corporation granted 551,938 Restricted Stock Units ("RSU") to its newly hired CEO, Philippe Deschamps. Half of the RSU's will vest annually and equally over the first 3 years following the date of grant. The balance will vest based on achievements of predetermined operational and corporate milestones.

The following tables present the movement in outstanding RSUs during the current period:

	Six months ended July 31,	Year ended January 31,
	2022	2022
	Number of RSUs	Number of RSUs
Units outstanding, beginning of year	-	-
Granted during the period	551,938	-
Units outstanding, end of period	551,938	-

(d) Warrants

The following tables present the common shares issuable on exercise of full warrants issued during the current period:

	Number of Shares	Weighted Average Exercise Price
Balance as at January 31, 2022	17,407,981	\$0.55
Granted during the period	17,157,650	\$0.35
Expired during the period	(218,619)	\$0.50
Balance as at July 31, 2022	34,347,012	\$0.42

As at July 31, 2022, the Corporation had outstanding warrants as follows:

Number of warrants	Exercise price	Fair value of warrants	Remaining contractual life
1,670,850	\$0.75	\$0.49	1.33 years
15,518,512	\$0.50	\$0.03 - \$0.16	0.37 – 1.37 years
17,157,650	\$0.35	\$0.03 – \$0.05	0.75 – 1.68 years
34,347,012			

12. Supplemental Cash Flow Information

Six months ended

	July 31, 2022	July 31, 2021
Net change in non-cash operating working capital items		
Sales tax receivable and other receivables	(19)	33
Prepaid expenses and deposits	(40)	148
Investment tax credits receivable	34	(48)
Accounts payable and accrued liabilities	165	(158)
Total	140	(25)

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

13. Research and Development Expenses

	Three months ended,		Six month	ns ended,
	July 31, 2022	July 31, 2021	July 31, 2022	July 31, 2021
Development costs	468	151	1,161	557
Patent costs	3	9	33	29
Depreciation – equipment	6	10	12	17
Amortization – intangible assets	8	8	16	16
	485	178	1,222	619
Investment tax credit	(41)	(18)	(103)	(51)
Government grants (i)	-	(19)	(12)	(25)
Total	444	141	1,107	543

⁽i) Government grants are recognized as a reduction of the expenses on a systematic basis over the period in which the related development costs are incurred. During the year ended January 31, 2022, the Corporation received a grant of \$75, of which \$63 was recognized in the income statement as a reduction of the related R&D expenses and \$12 remained recorded on the statement of financial position as government grants as of January 31, 2022. During the six months ended July 31, 2022, the Corporation recorded the remaining \$12 as a reduction of the related R&D expenses.

14. General and Administrative Expenses

	Three months ended,		Six months ended,	
	July 31, 2022	July 31, 2021	July 31, 2022	July 31, 2021
Consulting fees (i)	224	161	531	330
Professional and investor's relations fees	66	126	206	343
Office and administrative	194	80	314	132
Total	484	367	1,051	805

⁽i) Consulting fees include fees paid to management in lieu of salary.

15. Financing Expense, Net

	Three months ended,		Six months ended,	
	July 31, 2022	July 31, 2021	July 31, 2022	July 31, 2021
Interest expense	-	11	-	21
Interest coupon on notes and debentures	166	144	350	289
Effective interest on notes and debentures	155	145	322	291
Loss on debentures extinguishment	-	26	-	26
Fair value adjustment - warrant extension	-	20	-	20
Amortization - financing cost	31	-	55	-
(Gain) Loss on foreign exchange	(3)	(14)	(27)	24
Total	349	332	700	671

Notes to Interim Financial Statements

In thousands of Canadian dollars except for share and per share amounts

16. Income Taxes

As at July 31, 2022, the Corporation had accumulated non-capital losses for income tax purposes, which are available to be applied against future taxable income.

	Federal	Provincial
2036	663	657
2037	1,242	1,261
2038	865	607
2039	1,273	1,312
2040	1,311	1,391
2041	2,349	2,385
2042	2,941	2,973
	10,644	10,586

17. Financial Instruments

During the six months ended July 31, 2022, the convertible debentures conversion options were revaluated and reclassified from equity to liabilities and carried at fair value through profit and loss ("FVTPL"). Warrants issued as part of the Convertible notes in December 2021 are also being carried at FVTPL. For the year ended January 31, 2022, the Corporation had no financial instruments carried at fair value through other comprehensive income ("FVTOCI").

As at July 31, 2022:	FVTPL	Amortized cost
Financial asset:		
Cash	-	879
Financial liabilities:		
Accounts payable and accrued liabilities	-	776
Accrued interest on debentures	-	173
Convertible notes	-	803
Long-term loan	-	40
Convertible debentures	-	2,525
Non-convertible debentures	-	2,498
Conversion options classified as liability	770	-
Warrants classified as liability	103	-

As at January 31, 2022:	FVTPL	Amortized cost
Financial asset:		-
Cash	-	313
Financial liabilities:		
Accounts payable and accrued liabilities	-	607
Accrued interest on debentures	-	177
Convertible notes	-	934
Long-term loan	-	40
Convertible debentures	-	2,387
Non-convertible debentures	-	2,349
Conversion options classified as liability	1,582	-
Warrants classified as liability	139	-

The Corporation categorizes its financial assets and liabilities measured at fair value into one of three different levels depending on the observation of the inputs used in the measurement. The three levels are defined as follows:

- Level 1: Fair value is based on unadjusted quoted prices for identical assets or liabilities in active markets;
- **Level 2:** Fair value is based on inputs other than quoted prices included within Level 1 that are not observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3: Fair value is based on valuation techniques that require one or more significant unobservable inputs.

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The fair value of a financial instrument is approximated by the consideration that would be agreed to in an arm's length transaction between willing parties and through appropriate valuation methods, but considerable judgement is required for the Corporation to determine the value. The actual amount that could be realized in a current market exchange could be different than the estimated value. The fair values of financial instruments included in current assets and current liabilities approximate their carrying values due to their short-term nature.

18. Financial Risk Factors

The Corporation's activities expose it to financial risks: market risk, more specifically cash flow and fair value interest rate risk, and liquidity risk. The Corporation's overall risk management program focuses on the unpredictability of the financial market and seeks to minimize potential adverse effects on its financial performance. The Corporation does not use derivative financial instruments to hedge these risks.

(a) Credit risk

Credit risk arises from cash deposited with a financial institution. The Corporation reduces this risk by dealing with creditworthy financial institutions.

(b) Market risk

(i) Cash flow and fair value interest rate risk

The Corporation is exposed to fair value interest rate risk due to its short-term debt and convertible debenture negotiated at a fixed rate.

(ii) Currency risk

The Corporation has cash and accounts payable and accrued liabilities denominated in USD, and EUR. The Corporation does not hold financial derivatives to manage fluctuation in these risks.

The following presents the accounts that are exposed to foreign exchange volatility, as at:

	July 31, 2022		January 31, 2022	
	Foreign Currency	CAD equivalent	Foreign Currency	CAD equivalent
Cash – USD	480	615	100	128
Accounts payable and accrued liabilities – USD	431	553	294	374
Accounts payable and accrued liabilities – EUR	8	11	6	8

A plus or minus 5% variation in exchange rate, all else being held equal, would result in a foreign exchange gain or loss of \$59 (\$25 in fiscal 2022).

(c) Liquidity risk

Liquidity risk is the risk that the Corporation will not be able to meet its obligations as they fall due. The following are the contractual maturities of financial liabilities calculated based on contractual undiscounted cash flows including interest coupons (if applicable):

As at July 31, 2022:	Carrying value S	Contractual cash flows \$	Less than 12 months \$	Greater than 12 months \$
Financial liabilities	•	7	T	- T
Accounts payable and accrued liabilities	776	776	776	-
Interest payable on debentures	173	173	173	-
Long-term loan	40	40	-	40
Convertible debentures	2,525	3,003	3,003	-
Non-convertible debentures	2,498	3,400	300	3,100
Convertible notes	803	887	887	-
Total	6,815	8,279	5,139	3,140

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As at January 31, 2022:	Carrying value \$	Contractual cash flows \$	Less than 12 months \$	Greater than 12 months \$
Financial liabilities				
Accounts payable and accrued liabilities	607	607	607	-
Interest payable on debentures	177	177	177	-
Long-term loan	40	40	-	40
Convertible debentures	2,387	3,141	278	2,863
Non-convertible debentures	2,349	3,550	300	3,250
Convertible notes	934	1,168	1,168	-
Total	6,494	8,683	2,530	6,153

(d) Capital risk management

The Corporation's objective when managing capital is to maintain its ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders. The Corporation's definition of capital includes equity, comprised of issued common shares, warrants and contributed surplus. The Corporation's primary objective with respect to its capital management is to ensure that it has enough financial resources to meet its financial obligations. To secure the additional capital necessary to carry out these plans, the Corporation will attempt to raise additional funds through the issuance of debt, equity or by securing funds from strategic partners. The Corporation is not subject to any externally imposed capital requirements.

19. Related Party Transactions

The following table presents the related party transactions presented in the statement of loss:

	Three months ended		Six months ended	
	July 31, 2022	July 31, 2021	July 31, 2022	July 31, 2021
Transactions with key management and members of the Board of				
Directors:				
Share-based compensation	153	35	183	73
Consulting fees	279	129	592	274
Interest earned on debentures	81	64	153	129
Interest earned on debentures by Manitex, a shareholder of the Corporation:	49	60	115	120
R&D expenses incurred with École Polytechnique, a partner of Polyvalor	192	79	318	206

The following table presents the related party transactions presented in the statement of financial position as at:

	July 31, 2022 \$	January 31, 2022 \$
Key management and directors:		
Accounts payable and accrued liabilities	71	143
Debentures and notes	1,218	1,199
Conversion options classified as embedded derivatives	244	501
Warrants classified as liability	42	31
Accrued interest on debentures and notes	28	42
Manitex Capital, a shareholder of the Corporation:		
Debentures and notes	877	915
Conversion options classified as liability	267	548
Warrants classified as liability	10	13
Accrued interest on debentures and notes	35	30
Polyvalor, a shareholder of the Corporation:		
Accounts payable due to École Polytechnique, a partner of Polyvalor	123	4

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20. Commitments

a) Polytechnique contract

In June 2015, the Corporation entered into collaborative research agreement with École Polytechnique ("Poly") which stipulated that when the Corporation's products are commercialized, it must make non-refundable payments to Polyvalor, a shareholder of the Corporation, equal to 1.5% of net sales. The agreement can be extended upon mutual consent of the parties. Following the latest amendment entered in July 2022, the agreement has been extended until August 14, 2024.

b) Axelys Project

On May 2, 2022, ChitogenX entered into a research and financing agreement with Axelys and Ecole Polytechnique whereby Axelys, a non-for-profit organization, agreed to grant the Corporation and Poly, a sum of \$557 to advance the development of its second technology platform indication, ORTHO-M, for meniscus repair (the "Axelys Project"). The Corporation's contribution to the Axelys Project totals \$140 over 2 years. The project commenced on August 1, 2022.