

(Previously - Ortho Regenerative Technologies Inc.)

Financial Report

Second Quarter - Fiscal Year 2024

July 31, 2023



Management's Discussion and Analysis for the three and six-month periods ended July 31, 2023

(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 and year-to-date periods of our 2024 fiscal year ended on July 31, 2023 and compares those of the same periods for the 2023 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 Aud it 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' Board of Directors on September 28, 2023.

This document should be read in conjunction with the unaudited interim condensed consolidated financial statements and notes thereto for the second quarter of our 2024 fiscal year ended on July 31, 2023, which have been prepared in accordance with International Financial Reporting Standards ("IFRS"). Further information about ChitogenX, is available online on SEDAR at <u>www.sedar.com</u>.

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 unaudited interim condensed consolidated financial statements, the Corporation is still a clinical stage R&D company and has not yet achieved profitability. The Corporation has relied upon the issuance of debt and equity instruments to fund its operations. During the six-month period ended July 31, 2023, the Corporation incurred a netloss of \$0.3 million and used cash in operations of \$0.6 million. As at July 31, 2023, the Corporation had a negative working capital balance of \$3.4 million.

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 as well as other R&D initiatives leveraging its strong IP portfolio 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 se interim unaudited financial statements as at and for the quarter ended July 31, 2023, 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.

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 c ore 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; (ii) interest (income) expense and other financing costs; (iii) depreciation; and (iv) amortization of intangible assets.

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 uncertaintie s, 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.



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GLOSSARY TERMS

Calendar & Financial		Corporate & O	perations
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	СМО	Contract Manufacturing Organization
ITC	Investment tax credits	CSE	Canadian Securities Exchange
NCDUs	Non-Convertible Debenture Units	FDA	US Food and Drug Administration
Q2-24	Second quarter FY-24	IND	Investigational New Drug application with the FDA
Q1-24	First quarter FY-24	MCRA	MCRA, LLC, a US based orthopedic specialty CRO
Q4-23	Fourth quarter FY-23	MRI	Magnetic Resonance Imaging
Q3-23	Third quarter FY-23	MTA	Material Transfer Agreement
Q2-23	Second quarter FY-23	NSERC	Natural Sciences and Engineering Research Council of
Q1-23	First quarter FY-23		Canada
Q4-22	Fourth quarter FY-22	ORTHO-C	Proprietary biopolymer for Articular Cartilage repair
Q3-22	Third quarter FY-22	ORTHO-M	Dranzistan, hispalumar for Dranzistan, Dispalumar for
SR&ED	Scientific Research and Experimental Development Expenses		Proprietary biopolymer for Proprietary Biopolymer for Meniscus repair
R&D	Research and Development	ORTHO-R	Proprietary biopolymer for Rotator cuff repair
YTD	Year to date	ORTHO-V	Proprietary biopolymer for Osteoarthritis healing
YE	Year-end	OTCQB	US over-the-counter venture trading market
WA	Weighted Average	Polytechnique	Ecole Polytechnique de Montreal
W/C	Working Capital, defined as short-term assets	PRP	Platelet-rich plasma
	less short-term liabilities	Pre-RFD	Pre-Request for Designation

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 sub sidiary, 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's proprietary Chitosan-based platform as well as ORTHO-R provide an efficacious, safe and reliable regenerative medicine delivery mechanism to aid in tissue healing and organ repair.

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 transp lantation, 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 where it is most needed, 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, mat erials and computer science, engineering, genetics, robotics, and other fields to find solutions to some of the most challenging me dical problems faced by humankind. We believe ChitogenX is at the forefront of playing a critical role in enabling this rapidly expanding field of medicine.

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. Biological, cell and pharmaceutical therapies are used in the treatment of muscu loskeletal damage to cartilage, tendon, and ligaments as well as skin and organ repair disease or damage. 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 and wound healing application segment accounted for over 60% share of the market in 2021 and are expected to grow at a CAGR of 30%+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; t hat 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 delivery 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 muco-adhesive CHITOSAN based scaffold is a versatile biopolymer scaffold that can form novel **Drug/ Cell/ Biologic Combination** technology platforms. when combined with cells, pharmaceuticals, biologics such as Platelet-Rich Plasma (PRP), Bone Marrow Aspirate Concentrate (BMAC), or other regenerative medicine treatments where it potentially can enhance healing, augment, and accelerate the regeneration of new tissue in various potential indications.

PRODUCT POSITIONING:

For the regenerative medicine market ChitogenX's chitosan-based biopolymer is an efficacious, safe and reliable regenerative medicine delivery mechanism to targeted body systems to aid in tissue and organ repair.

CHITOSAN-BASED BIOPOLYMER: Key points of differentiation

Our Chitosan-based Biopolymer is formulated and designed to be universally combined with products to improve the healing of body tissues.

Our Chitosan-based Biopolymer is a patent-protected freeze-dried, lyo-protectant clot activating sticky biopolymer.

Unlike other natural biopolymer matrix such as Hyaluronic Acid (HA) or Collagen, the chitosan natural biopolymer molecules are positively charged and therefore electrostatically stick to the negatively charged soft tissues of the human body (skin, tendons, ligaments, meniscus). Our Chitosan-based Biopolymer has a fast coagulation onset, and with its muco-adhesive feature offer the unique benefit of significantly increasing the in-situ residency time of cell, pharmaceutical, or biologic implants for up to 6 weeks so that they may deliver their regenerative effects. Our CBB is therefore a perfect matrix system for delivering regenerative implants, 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.

INTELECTUAL PROPERTY

ChitogenX is the owner of 4 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 – Globally Expiry - 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 – Globally Expiry - 2035



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<u>No.3</u> :	Freeze-dried biopolymer scaffolds that form a hydrated microparticle dispersion after contact with blood or blood-derived fluids including	• Issued/- Globally
	angiogenesis, cell chemotaxis, tissue remodeling, and extracellular matrix.	• Expiry – 2035
<u>No. 4</u>	Lyophilized Polymer Scaffold compositions, processes for preparation and use in anabolic wound repair.	Allowed in US and CanadaExpiry 2035

Notice of allowance of US and Canadian of patent family No 4. provides a huge boost to Company's attractiveness as a regenerative medicine scaffold. The notice of allowance provides for patent protection for our Chitosan-based Biopolymer scaffold on its own and in combination with a wide variety of therapeutic agents and protects for the use of ChitogenX's proprietary CBB scaffold in combination with other regenerative medicine approaches.

BUSINESS STRATEGY

1. Prioritize Development programs in the US and other jurisdictions with accelerated regulatory pathway.

Considering the significant bioactivity and potential to drive residency of our proprietary biopolymer, ChitogenX continues to assess its potential for therapeutic uses outside of programs that require a Biologics Licence Application (BLA) from FDA. The functionality of the proprietary chitosan framework could be used in numerous other applications which could potentially address high unmet needs with profound clinical consequences and a simplified regulatory pathway in the US and other jurisdictions.

We will continue to investigate combining ChitogenX's patented chitosan-based biopolymer 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.

2. Leverage Polytechnique's partnership to secure non-dilutive grants to drive proof of concept in multiple indications for our Chitosan-Based Biopolymer

ChitogenX can secure non-dilutive research grants through its partnership with Polytechnique.

<u>Meniscus</u>

A first \$0.5 million grant has been secured to test the efficacy of our Chitosan-based Biopolymer/PRP Drug-Biologic Implant formulation, for meniscus repair. The 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, has recently completed the surgical procedures in 20 large animals and we expect to announce the results of this pre-clinical trial by Q3-2023 (calendar).

In February 2023, the Corporation successfully confirmed soft-tissue residency properties of its Chitosan-based Biopolymer/PRP based biopolymer matrix, as it reported on the first objective of this study. The meniscus tear repair study confirmed the presence of tissue adherence and the aggregation of PRP regenerative cells imbedded in the tear. It represents the second orthopedic CBB/PRP soft tissue proof of concept application to be successfully confirmed following similar results generated in a previously reported similar study for rotator cuff tear repair. ChitogenX intends to file an IND with the FDA to commence human clinical trials with in 12 months following completion of the meniscus study.

Tissue Healing

In February 2023, ChitogenX and its scientific partner Polytechnique secured a \$3.5 million grant from NSERC and Prima Québec. The 4-year grant will be used to advance scientific development, expand the scope of indications, develop new biomaterials for regenerative medicine and accelerate the commercial readiness of the Corporation's flagship CBB technology platform.

3. Leverage IP portfolio and growing scientific evidence of efficacy and safety, to attract development partners to accelerate and contribute to funding our commercial development programs.

We intend to leverage the attractive growth potential of the regenerative medicine market to form development partnerships. We are currently evaluating opportunities for fast-track regulatory programs with potential 510(k) pre-market submissions in the US and commercial readiness in other jurisdictions.

We expect to soon announce our plans to take full advantage of the broad clinical and commercial opportunities now available to the company.

4. Complete Rotator Cuff Tear Repair U.S. phase I/II clinical trial program to establish a proof of concept for our regenerative platform



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ChitogenX has recently concluded enrolment of its U.S. Phase I/II rotator cuff tear repair clinical trial entitled: <u>A Blinded, Randomized</u> <u>Controlled Study Investigating the Safety of Ortho-R® for Rotator Cuff Repair Compared with Standard of Care: ORT-2020-01 (Ortho-R®</u> <u>Study</u>). The We made this decision to optimize our return on the investment made in this trial. It will be our first clinical proof of con cept demonstrating the safety of our ORTHO-R. 20 subjects were enrolled prior to concluding enrollment. (See "Subsequent Events") All study activities will be completed by June 2024 as per the original clinical trial protocol following completion of the clinical follow-up and safety analysis for the 20 recruited subjects. Study results are expected during the fall of 2024. The Company, and its clinical and regulatory advisors believe that concluding subject enrollment at this stage still allows for key study objectives to be met.

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.

ORTHO-R is a patent-protected freeze-dried formulation of a biopolymer, a lyo-protectant 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 and stick to tissue 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 mucoadhesive 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 U.S. sites.

The use of ORTHO-R as an adjunct to standard of care anchoring/suturing techniques produced promising histological findings in small and large animal experimental models, which is hoped to translate to faster and superior rotator cuff tear repair in humans. No a dverse events were found in any of the above-mentioned animal studies nor in the first five patients of the phase I/II ongoing clinical trial, which suggests a high level of safety. Progress made during the recent quarters has 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 the first clinical application in rotator cuff repair

Close to 700,000 shoulder rotator cuff repairs are performed in North America every year with a high 20% to 90% failure rate. ChitogenX has already initiated its FDA designated Phase I/II clinical trial giving it the regulatory lead in the U.S. for launching the first FDA approved drug/biologic combination for augmenting the performance of the standard of care surgical shoulder rotator 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 is looking for better treatments to improve p atient 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 sufficient residency time on the surgical repair site due to its highly liquid nature. ORTHO-R is specifically designed to overcome the insufficient residency time issue due to its unique and



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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.

ChitogenX Overall Value Proposition

Technology Platform	Chitosan-Base Biopolymer: Unique	Great Value Creation & Exit
	Drug / Biologics / Device Combination	Potential
	Product	
 Proprietary, novel, multi-indications, second 	\circ In the U.S. regulatory lead as the	 Recent regenerative medicine
generation, de-risked platform	first PRP based drug/biologic	transactions support higher
• Strong intellectual property protection in four	product in human trials	valuation for the company
patent families	 Streamlined development program 	 Concluded recruitment, of
 Addresses significant unmet medical need in 	based on mix of simple regulatory	proof of concept safety trial.
large and rapidly growing regenerative medicine	pathway, high unmet medical need	study activity completed in
market	and value of targeted market/	6/2024
• First solution to increase residence time of PRP	 Advantageous manufacturing costs 	 Multiple potential
to augment regeneration of new tissue	 Uses autologous PRP which can be 	regenerative medicine
\circ Validated mode of action, safe and easy to use	sourced quickly and easily during	applications
solution	surgery	 Experienced management,
• Rapid coagulation, avoids shrinkage of implant,	 Lyophilized chitosan provides long 	Board and Clinical Advisory
potentially adheres to multiple tissues	shelf life	Board with history of value
 Demonstrated efficacy in large animal model 		creation
(decreased tendon gap & improved bone		
structure)		

Q2-24 CORPORATE HIGHLIGHTS (May 1 to July 31, 2023)

- On June 5, 2023 ChitogenX closed a \$0.3 million second tranche of its previously announced non-brokered private placement offering
 of units. The second tranche of the offering consists of gross cash proceeds of \$41 and \$247 in debt conversions from holders of
 convertible debentures which matured on May 1, 2023.
- On June 15, 2023 the ChitogenX announced it had retained the services of the Bruder consulting & Venture group to broaden and accelerate ongoing strategic development partnership discussions.

Events Subsequent to the end of the quarter

- On September 26, 2023, the Corporation announced that it has concluded enrolment of its U.S. Phase I/II rotator cuff tear repair phase I/II clinical trial. All study activities are expected to be completed by June 2024 as per original clinical trial protocol following completion of the clinical follow-up and safety analysis for 20 recruited subjects. Study results are expected during the summer of 2024.
- On September 28, 2023, ChitogenX announced that it has received a notice of allowance for a key patent in both the US and Canada. The new patent make the Corporation's Chitosan based biopolymer scaffold proprietary without the need for it to be combined with Plasma Rich Platelets or other blood products as was previously the case. The notice of allowance provides for 1) proprietary chitosan scaffold on its own and in combination with a wide variety of therapeutic agents, 2) protects for the use of ChitogenX' proprietary scaffold in combination with biologics in addition to previous PRP and blood products applications, 3) provides huge boost to the Company's attractiveness as a regenerative medicine with a proprietary scaffold, and 4) positioned the Corporation to leverage opportunities for commercial readiness and fast-tracking regulatory programs with potential 510(k) pre-market submissions in the US.



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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, 2023 unaudited condensed consolidated interim financial statements.

	Q2-24	Q2-23	Chang	ge	YTD-24	YTD-23	Chang	е
	\$	\$	\$ ¹	% ²	\$	\$	\$1	% ²
Expenses								
R&D	195	444	(249)	-56%	613	1,107	(494)	-45%
G&A	345	484	(139)	-29%	929	1,051	(122)	-12%
Share-based compensation	44	162	(118)	-73%	100	204	(104)	-51%
Financial	124	349	(225)	-64%	463	700	(237)	-34%
	708	1,439	(731)	-51%	2,105	3,062	(957)	-31%
FVA embedded derivative	(299)	(78)	(221)	283%	(1,742)	(812)	(930)	115%
FVA on warrants	-	2	(2)	-100%	(51)	(37)	(14)	38%
Net (Loss) and Comprehensive loss	(409)	(1,363)	954	-70%	(312)	(2,213)	1,901	-86%
(Loss) per share								
WA number of shares outstanding	77,090,687	51,038,776	26,051,911	51%	64,209,464	45,423,158	18,786,306	41%
Basic and diluted loss per share	-0.01	-0.03	0.02	-80%	-0.00	-0.05	0.04	-90%

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

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 the Q2-24 and YTD-24 periods as compared to the prior year.

	Q2-24	Q2-23	Chan	ge	YTD-24	YTD-23	Cha	nge
	\$	\$	\$ ¹	% ²	\$	\$	\$ 1	% ²
Net loss	(409)	1,363)	954	-70%	(312)	(2,213)	1,901	-86%
Add (deduct)								
Financial	124	349	(225)	-64%	463	700	(237)	-34%
FVA embedded derivative	(299)	(78)	(221)	283%	(1,742)	(812)	(930)	115%
FVA on warrants	-	2	(2)	-100%	(51)	(37)	(14)	38%
Depreciation	3	6	(3)	-50%	6	12	(6)	-50%
Amortization	8	8	-	0%	16	16	-	0%
EBITDA (L)	(573)	(1,076)	503	-47%	(1,620)	(2,334)	714	-31%

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.

Selected items	Q2-24 vs Q2-23 and YTD-24 vs YTD-23
Revenues	• CHITOGENX is a clinical stage company. No revenues were generated during each of YTD-24 and YTD-23
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 Q2-24 and YTD-24 were significantly lower than in the prior year periods. The respective decreases were 56% and 45%. R&D expenses decreased due to the timing and nature of R&D activities, the conclusion of enrolment for the Corporation's Phase I/II rotator cuff trial, as well as the use of R&D grants which serve to fund a large portion of our R&D activities since the \$3.4 million INSERC R&D grant was secured in Q1-24.



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	• 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 expenses	• G&A spending in Q2-24 were down compared to Q2-23 at \$0.3 million compared to \$0.5 million. G&A spending for the YTD-24 period were down 12% compared to YTD-23.
	• G&A in Q2-23, and YTD-23 included a severance charge for the termination of our previous CEO. G&A in
	YTD-24 included a special charge for salary deferral, as management opted to defer salaries for preserving
	cash to support R&D operations.
	• Represents the expense related to issuing stock options to staff, consultants and board members. Variances
Share-based	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.
compensation (SBC)	 SBC expenses in Q2-24 were down 73% compared to Q2-23. The YTD decrease was 51%.
compensation (SDC)	 SBC expenses during FY-24 were impacted by the decrease in the Corporation's share price when compared
	to the strike price of options outstanding.
	• Financial expenses include interest on loans, notes, non-convertible and convertible debentures, as well as
	effective interest on debentures as well as foreign exchange gain or loss.
Financial expenses	• Financial expenses were down 64% and 34% respectively for Q2-24 and YTD-24 period compared to Q2-23,
	and YTD-23. The reduction was due to 1) partial repayment of the Q4-22 bridge financing, as well as
	conversion of \$2.3 million of CDUs into the May/June 2023 Private Placement.
	 On October 19, 2022, the Corporation announced the amendment of three series of CDUs to extend their respective maturity dates.
Fair Value	 An Embedded derivative comprised of the conversion options classified as liability was created following the
Adjustment ("FVA")	amendment of the CDUs during FY-22. Starting Q4-22, any change in the Fair Value of the Conversion Option
of Embedded	of the CDUs ("FVCO") have been recorded as a financial expense.
Derivative	• During the Q2-24 and Q2-23 periods, the change in the FVCO, led to a Fair Value Adjustment ("FVA") of the
	conversion option representing a \$0.3 million and \$0.1 million gain. Such gain was \$1.7 million and \$0.8
	million respectively for the YTD-24 and YTD-23 periods.
Fair Value Adjustment ("Fair	• The terms of the warrants issued as part of the December 2022 Bridge financing led to the creation of a warrant liability.
Value Adjustment")	 During each of Q2-24 and Q2-23, as well as YTD-24 and YTD-23 the revaluations of the Warrants' fair value
on warrants	were nominal.
	• Due to the significant reduction in expenses as well the gain on re-evaluating the Fair Value of the Conversion
Net Income (Loss) for	Option on the debentures, the Corporation net loss decreased significantly during the FY-24 periods
the period	compared to the corresponding periods in FY-23.
	• Net loss in Q2-24 was \$0.4 million, down 70% compared to Q2-23, while net loss for the YTD-24 was down
	86% compared to YTD-23.
EBITDA (L)	• 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 Q2-24 was \$0.6 million compared to \$1.1 million for Q2-23,
	representing a 47% decrease, and reflecting the overall decrease in expenses described above.
	• The reduction in EBITDA loss for the YTD-24 period was \$0.7 million, or 31% decrease compared to YTD-23.



Management's Discussion and Analysis for the three and six-month periods ended July 31, 2023

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

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 condensed consolidated financial statements for period ended July 31, 2023.

As at,	July 31, 2023	January 31, 2023	Chang	е
	\$	\$	\$1	% ²
Cash	33	108	-75	-69%
Prepaids and deposits	122	122	0	0%
Intangible Assets	283	299	-16	-5%
Total assets	700	738	-38	-5%
Trade accounts payable and accrued liabilities	2,237	1,793	444	25%
Notes	480	480	0	0%
Convertible Debentures - Short term	640	2,681	-2,041	-76%
Embedded derivative (Short-term conversion option)	-	1,098	-1,098	-100%
Convertible Debentures - Long term	2,491	2,363	128	5%
Embedded derivative (Long-term conversion Option)	352	996	-644	-65%
Total liabilities	6,610	10,581	-3,971	-38%
Common shares	13,780	10,357	3423	33%
Warrants	2,877	2,406	471	20%
Contributed surplus	2,902	2,551	351	14%
Deficit	(25,469)	(25,157)	-312	1%

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

Selected items	Q2-24 vs YE-23
Cash	• Cash at the end of Q2-24 was nil compared to \$0.1 million at the start of the fiscal year.
Total Assets	• Considering the nominal change in Cash between the periods, total assets remained stable between YE-23 and Q2-24 at \$0.7 million.
Trade AP and accrued liabilities	 Trade accounts payables and accrued liabilities increased by \$0.5 million during the first 6 months of FY-24. The main increase between the 2 periods related to increase in amounts due to management as no salaries/fees were paid during the FY-24 period.
Notes	• Notes were issued as part of the December 2021 bridge financing which matured in December 2022. They continue to bear interest until full repayment.
Convertible	• During FY-20 and FY-21, the Corporation issued \$3.2 million of CDUs to fund its operations.
debentures (Short-term)	• The \$2.0 Million decrease during the YTD-24 period relates to the net impact of the CDU and interest being converted into the May/June 2023 private placements.
Derivative	• Represents the conversion option liability for the CDU matured on May 1, 2023.
(Short-Term)	• The conversion option was eliminated on maturity.
Convertible debentures (Long-term)	 During Q4-21 the Corporation secured a \$3.0 million NCDU financing to fund its activities. During Q4-23, an agreement has been reached with 100% of the NCDU Debenture holders to extend the term of the debenture to February 1, 2025 and add a conversion features. Following this amendment, the debentures previously referred as NCDUs are now presented as CDUs.
Embedded	Represents the conversion option liability for CDU maturing on February 2025.
derivative (Long-Term)	• The change in value of the conversion option for these CDUs led to a \$0.6 million reduction since the start of the year. The balance as at Q2-24 represents to current outstanding value of the conversion option.
Total Liabilities	• Total liabilities have decreased significantly between YE-23 and Q2-24. Following conversion of debentures into the May/June 2023 Private Placements, as well as the elimination/reduction of the conversion options on the debentures. Total liabilities decreased by \$4 million during the first 6-months of FY-24.
Common Shares	• The increase takes into account the closing of the May/June 2023 Private placements.
Warrants	• Warrants increased during the YTD-24 period due to the issuance of warrants as part of the May/June 2023 Private placements.
Contributed Surplus	• The contributed surplus increased by \$0.4 million as a result of share-based compensation expense and the expiry of warrants.
Deficit	• The increase reflects the performance of the Corporation during FY-24. (See "Statement of Loss" commentaries



Management's Discussion and Analysis for the three and six-month periods ended July 31, 2023

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

SELECTED QUARTERLY FINANCIAL INFORMATION

The following table sets out the Corporation's selected unaudited quarterly financial information for the eight quarters ended July 31, 2023. 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 interim unaudited financial statements and should be read in conjunction with those statements and their accompanying notes.

	Q2-24	Q1-24	Q4-23	Q3-23	Q2-23	Q1-23	Q4-22	Q3-22
R&D Expenses (Net)	195	418	561	567	444	663	415	591
G&A expenses	345	584	509	523	484	567	309	357
Share-based compensation	44	56	92	95	162	42	67	43
Financial expenses	124	339	1,070	373	349	351	370	266
FVA embedded derivative	(299)	(1,443)	-	277	(78)	(734)	(279)	666
FVA on warrants	-	(51)	(72)	22	2	(39)	(31)	-
Net Loss	(409)	97	(2,160)	(1,857)	(1,363)	(850)	(851)	(1,923)
EBITDA (Loss)	(573)	(1,047)	(1,145)	(1,171)	(1,076)	(1,254)	(773)	(973)

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

Notes	Valuable information
R&D expenses	• R&D expenses fluctuate based on the timing of R&D activities. The reduction of R&D expenses in Q2-24 compared to prior quarter show the impact of the reduction of R&D activities which followed the conclusion of enrollment into the Phase I/II rotator cuff study, as well as the use of R&D grants which serve to fund a large portion of our R&D activities.
G&A expenses	• G&A expenses have fluctuated due to the impact of senior management changes that took place during the various periods. G&A expenses have decreased during Q2-24 due to reduction of compensation to senior management.
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.
Financial expenses	 Financial expenses have increased by \$0.7 million between Q3-23 and Q4-23 due to the non-recurrent loss on extinguishment of the NCDU debt. Interest charges have decreased in Q2-24 following conversion in May and June 2023 of a significant portion of the outstanding debentures into the Private Placements.
FVA of embedded derivative	• The changes to the terms of the conversion price of convertible debentures as well as the variation in share price during the last quarters has led to quarterly adjustments to the FVCO of the debentures representing respective decreases (gains) or increases (losses) since the embedded derivative were created.
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. Warrants have expired in Q1-24.
Net Income or Loss	 Over the last 2 years, fluctuations in net income or loss 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 income in Q1-24 is due to the \$1.4 million positive FVA of the derivative liability.
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 Q2-24 decreased by \$0.4 million from Q1-24 reflecting a decrease in overall expenses. Fluctuations over prior quarter were directly related to variations in R&D and G&A spendings described above.



Management's Discussion and Analysis for the three and six-month periods ended July 31, 2023 (In thousands of Canadian dollars, except for units, share and per share amounts)

LIQUIDITIES AND CAPITAL RESSOURCES

			Change	2
For the 6-month period ended on,	31-Jul-23	31-Jul-22	\$ ¹	% ²
Operating activities:				
Net loss from operations	(312)	(2,213)	1,901	-86%
Other items not affecting cash	(1,467)	67	-1,534	-2290%
Changes in non-cash working capital	1,156	140	1,016	726%
Cash used in operations	(623)	(2,006)	1,383	-69%
Investing activities:				
Cash used in investing activities	-	-	-	100%
Financing activities:				
Cash provided by financing activities	547	2,570	-2,023	-79%
Cash, beginning of period	108	313	-205	-65%
(Decrease) increase in cash	(76)	564	- 640	-113%
Effect of foreign exchange on cash	1	2	-1	-50%
Cash, end of period	33	879	-846	-96%

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

Selected items	YTD-24 vs YTD-23
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 \$0.6 million for YTD-24 period as compared to \$2.0 million for YTD-23 period, representing a \$1.4 million decrease. The decrease results from the \$1.9 million decrease in net loss, and a \$1.0 million increase in non-cash working capital which were offset by items not affecting cash which captured the combined \$1.8 million gains on fair value adjustments to the CDU embedded derivative and warrant liability.
Cash used in investing activities	• No investments during YTD-23, compared to nominal investment in YTD-22.
Cash provided by financing activities	• Financing activities in YTD-24 generated \$0.5 million from funds raised as part of the May/June 2023 PIPE financing compared to \$2.6 million in YTD-23 representing the net impact of the April 2022 PIPE.
Cash, End of the period	• The Corporation ended Q2-24 with \$nil cash compared to \$0.9 million at the end of Q2-23.

Cash, and Working Capital

As at,	2023-07-31	2023-01-31	Change	
	\$	\$	\$	%
Cash	33	108	(75)	-69%
Total current assets	379	396	(17)	-4%
Accounts payables and accrued liabilities	2,237	1,793	444	25%
Convertible debentures - Short term	640	2,681	(2,041)	-76%
Convertible unit Bridge	480	480	-	100%
Total current liabilities	3,767	7,222	(3,455)	-48%
Working Capital	(3,388)	(6,826)	3,438	-50%

1. A positive variance represents a positive impact, and a negative variance represents a negative impact

2. Percentage change is presented in relative values

Cash at the end of Q2-24 was \$nil as compared to \$0.1 million at the end of YE-23 representing a \$0.1 million increase. Despite the nominal cash position, working capital deficit between YE-23 and Q2-24 has improved significantly following the maturity and conversion of the CDU maturing in May 2023.



Management's Discussion and Analysis for the three and six-month periods ended July 31, 2023

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

Working Capital at the end of Q2-24 showed a \$3.5 million deficit compared to a \$6.8 million deficit as at the end of FY-23, a 50% improvement.

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").

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 additional financial commitments to increase their market value (through, for example, clinical trials) or to attract a strategic partner. After having concluded enrolment on the Phase I/II rotator cuff program, we estimate that \$0.5 million will be required to complete the study and position ChitogenX for Phase II readiness on this program.

We wish to make best use of our financial resources and leverage out strong intellectual properties. The notice of allowance on new patents ("See Subsequent Events") provides for 1) proprietary chitosan scaffold on its own and in combination with a wide variety of therapeutic agents, 2) protects for the use of ChitogenX' proprietary scaffold in combination with biologics in addition to exisiting PRP and blood products applications, 3) provides huge boost to the Company's attractiveness as a regenerative medicine with a proprietary scaffold, and 4) positioned the Corporation to leverage opportunities for commercial readiness and fast-tracking regulatory programs with potential 510(k) pre-market submissions in the US. We are now in a unique position to secure co-development agreements using our Ortho-R (Chitosan-PRP), as well as our new Chitosan based IP. Co-development agreements represent the best approach to create value while leveraging 3rd party funding.

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

In February 2023, the Corporation secured a \$3.5 million grant from NSERC and Prima Québec in partnership with Polytechnique Montréal. The 4-year grant will be used to advance the scientific development, expand the scope of indications, develop new biomaterials for regenerative medicine and accelerate the commercial readiness of the Company's flagship ORTHO-R technology platform.

We intend to leverage our R&D grants as well as our exclusive relationship with Poly to advance our R&D initiatives at nominal costs for the Corporation.

The Corporation's cash burn has significantly reduced over the last few quarters, as evidenced by 1) the steep reduction in overall R&D expenses following the conclusion of enrollment into the Phase I/II rotator cuff trial, 2) the securing of the \$3.5 million NSERC grant which has reduced significantly the R&D expenses for ChitogenX, 3) management's decision to significantly reduce and defer the majority of payment on its compensation, and 4) the conversion of a significant portion of the debt leading to reduced financial costs. Management is actively pursuing strategic initiatives and R&D partnering to attract/secure non-dilutive financing while continuing to seek financing via traditional financing means. A 3rd closing of the PIPE announced in May 2023 is anticipated before the end of Q3-24 and will provide additional capital to help the Corporation fund its operations and implement its strategic initiatives.

Statement of Compliance

The unaudited interim financial statements included in this MD&A for the quarter ending July 31, 2023 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 2023 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 Consolidated Financial Statements (Unaudited)

ChitogenX Inc.

July 31, 2023 Second quarter, fiscal year 2024

NOTICE OF NO AUDITOR REVIEW OF INTERIM FINANCIAL STATEMENTS Under National Instrument 51-102, Part 4, subsection 4.3(3)(a), if an auditor has not performed a review of the interim consolidated financial statements, the statements must be accompanied by a notice indicating that the financial statements have not been reviewed by an auditor. The accompanying unaudited interim consolidated financial statements of the Corporation have been prepared by management and are the responsibility of the Corporation's management. The Corporation's independent auditor has not performed a review or an audit of these interim consolidated financial statements.

Interim Consolidated Statements of Financial Position

(Unaudited)

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

As at	Notes	July 31, 2023	January 31, 2023
A 60576			
ASSETS			
Current		22	100
Cash		33	108
Sales tax and other receivables		41	39
Investment tax credits receivable		183 122	127 122
Prepaid expenses and deposits		379	
Total current assets	1	379	396 43
Equipment	4		-
Intangible assets	5	283	299
Total assets		700	738
LIABILITIES AND SHAREHOLDERS' DEFICIT			
Current			
Accounts payable and accrued liabilities	6	2,237	1,793
Accrued interest on debentures and notes	8,9,10	369	328
Advance from a shareholder	12	-	750
Current portion of long-term loan	7	40	40
Notes	10	480	480
Convertible debentures	8	640	2,681
Conversion options	8	-	1,098
Warrants	10	1	52
Total current liabilities		3,767	7,222
Convertible debentures	8,9	2,491	2,363
Conversion options	8,9	352	996
Total liabilities		6,610	10,581
SHAREHOLDERS' DEFICIT			
Common shares	11	13,780	10,357
Warrants	11	2,877	2,406
Contributed surplus		2,902	2,551
Deficit		(25,469)	(25,157)
Total shareholders' deficit		(5,910)	(9,843)
Total liabilities and shareholders' deficit		700	738

Going Concern Uncertainty (Note 1); Related Party Transactions (Note 21); and Commitments (Note 22).

<u>"/s/ "Philippe Deschamps"</u> ", Director

<u>"/s/ "Pierre Laurin" ", Director</u>

Interim Consolidated Statements of Financial Position

(Unaudited)

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

		Three months ended,		Three months ended, Six mont	
	Notes	July 31, 2023	July 31, 2022	July 31, 2023	July 31, 2022
Expenses					
Research and development	13	195	444	613	1,107
General and administrative	14	345	484	929	1,051
Share-based compensation	11	44	162	100	204
Financial	15	124	349	463	700
Total Expenses		708	1,439	2,105	3,062
Other items					
Fair Value adjustment on embedded derivative	8	(299)	(78)	(1,742)	(812)
Fair Value adjustment on warrants	10	-	2	(51)	(37
Net loss and comprehensive loss		409	1,363	312	2,213
Loss per share					
Basic and diluted		0.01	0.03	0.00	0.05
Weighted average number of common shares		77 000 697	51,038,776	64,209,464	15 122 150
outstanding		77,090,687	51,038,770	04,209,404	45,423,158

Interim Consolidated Statements of Changes in Shareholders' Deficit

(Unaudited)

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

		Number of					
	Notes	common shares	Share capital	Warrants	Contributed surplus	Deficit	Total
	Notes	3110103	capital	warrants	301 1103	Denen	Total
Balance as at January 31, 2022		34,956,093	7,891	1,828	2,104	(18,927)	(7,104)
Shares 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		-	-	-	-	(2,213)	(2,213)
Balance as at July 31, 2022		51,038,776	10,455	2,317	2,364	(21,140)	(6,004)
Balance as at January 31, 2023		51,038,776	10,357	2,406	2,551	(25,157)	(9,843)
Shares issued	11	27,764,981	3,423	749	(27)	-	4,145
Share-based compensation	11	-	-	-	100	-	100
Expired warrants	11	-	-	(278)	278	-	-
Net Loss		-	-	-	-	(312)	(312)
Balance as at July 31, 2023		78,803,757	13,780	2,877	2,902	(25,469)	(5,910)

Interim Consolidated Statements of Cash Flows

(Unaudited)

In thousands of Canadian dollars

Notes	July 31, 2023	July 31, 2022
	(312)	(2,213)
11	100	204
		319
4.5	21	30
17		55
	(25)	(3)
8,17	230	322
, 8,9	(1,742)	(812)
10	(51)	(36)
15	-	(12)
14	1,156	140
	(623)	(2,006)
4	-	-
	-	-
11	547	2,702
	-	(132)
	547	2,570
	1	2
	108	313
	(76)	564
	. ,	879
	11 4,5 17 8,17 8,9 10 15 14 4	(312) 11 100 4,5 21 17 - 4,5 21 17 - (25) (25) 8,17 230 8,9 (1,742) 10 (51) 15 - 14 1,156 4 - 623) - 4 - 11 547 11 547 547 - 11 547

Notes to Interim Consolidated Financial Statements

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

1. Reporting entity and going concern

ChitogenX Inc. ("the Corporation", or "ChitogenX"), previously 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 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. 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".

ChitogenX Inc. is a clinical stage regenerative medicine company dedicated to the development of novel therapeutic tissue repair technologies to improve tissue healing. The Company is committed to the clinical development of its proprietary ORTHO-R technology platform, a muco-adhesive CHITOSAN based biopolymer matrix, specifically designed to deliver biologics such as platelet-rich plasma (PRP) or bone marrow aspirate concentrate (BMAC), to enhance healing in various Regenerative Medicine Applications.

These unaudited interim consolidated 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, 2023, the Corporation incurred a net loss of \$312 and used cash in operations of \$623. As at July 31, 2023, the Corporation had a negative working capital balance of \$3,388.

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 consolidated 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 consolidated financial statements were approved and authorized for issuance by the Board of Directors on September 28, 2023.

2. Summary of Significant Accounting Policies

Basis of measurement

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

Statement of Compliance

These unaudited interim consolidated financial statements of the Corporation have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by International Accounting Standard Board ("IASB"). These unaudited interim consolidated 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 consolidated financial statements. The policies set out below have been consistently applied to all the periods presented.

The preparation of the Corporation's unaudited interim consolidated financial statements require 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 o utcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

Notes to Interim Consolidated Financial Statements

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

Consolidation

Subsidiaries are all entities over which the Corporation has control. The Corporation controls an entity when the Corporation is exposed to, or has rights to, variable returns from its involvement in the entity and could affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Corporation. They are deconsolidated from the date that control ceases. Inter-company transactions, balances and unrealized gains on transactions between the Corporation's subsidiaries are eliminated. Unrealized gains or losses are also eliminated. When necessary, amounts reported by subsidiaries have been adjusted to conform to the Corporation's accounting policies.

Corporation	Nature of Services	% voting
OR4102022 Inc. ⁽¹⁾	US cost center	100%

⁽¹⁾ Subsidiary created on April 20, 2022.

Functional and presentation currency

These unaudited interim consolidated 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 consolidated statement of loss and comprehensive loss. Non-monetary assets and liabilities denominated in foreign currencies 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.

	July 31, 2023	January 31, 2023
End of period exchange rate – USD	1.3177	1.3350
Period average exchange rate – USD	1.3341	1.3085

3. Use of Estimates and Judgment

The application of the Corporation's accounting policies requires management to use estimates and judgments that can have a significant effect on the expenses, comprehensive loss, assets and liabilities recognized and disclosures made in the unaudited interim consolidated financial statements.

Management's best estimates concerning the future are based on the facts and circumstances available at the time estimates are made. Management uses historical experience, general economic conditions and assumptions regarding probable future outcomes as the basis for determining estimates. Estimates and their underlying assumptions are reviewed periodically, and the effects of any changes are recognized immediately. Actual results could differ from the estimates used.

Management's budget and strategic plans are fundamental information used as a basis for the estimates necessary to prepare financial information. Management tracks performance as compared to the budget, and significant variances in actual performance are a key trigger to assess whether certain estimates used in the preparation of financial information must be revised.

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 2023 annual audited financial statements dated January 31, 2023 and are still applicable during the first six-month period of fiscal year 2024 ended July 31, 2023.

4. Equipment

	Cost	Accumulated depreciation	Carrying Value
Balance as at January 31, 2023	271	(228)	43
Additions	-	(5)	(5)
Balance as at July 31, 2023	271	(233)	38

Notes to Interim Consolidated Financial Statements

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

5. Intangible Assets

	Cost	Accumulated amortization	Carrying Value
Balance as at January 31, 2023	485	(186)	299
Additions	-	(16)	(16)
Balance as at July 31, 2023	485	(202)	283

6. Accounts Payable and Accrued Liabilities

Balance as at	July 31, 2023	January 31, 2023
Trade accounts payable	1,979	1,484
Accrued liabilities	258	309
	2,237	1,793

7. Long-Term Loan

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

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, 2023	Year ended January 31, 2023
Opening balance	5,044	2,387
Additions	-	3,389
Conversions	(2,143)	-
Fair value of conversion option allocated to liability	-	(1,047)
Accretion expense	230	315
Total	3,131	5,044
Current portion	640	2,681
Non-current portion	2,491	2,363
Total	3,131	5,044

On May 5 2023, the Corporation completed the first closing of a non-brokered private placement of units and on June 5, 2023, completed a second closing. Some holders of convertible debentures which matured on May 1, 2023 agreed to convert their debt and interest payable into the private placement (see *Note 11*).

On December 12, 2022, the Corporation amended its non-convertible debentures and related warrants agreements (the "Amendment"). The maturity date of the outstanding non-convertible debentures and related warrants were extended to February 1, 2025. A conversion option was also added, with an anti-dilution protection feature, at a maximum conversion price of \$0.35 per share or warrant exercise price in a Private Placement financing, whichever is lower.

The Amendment was accounted for as an extinguishment of all outstanding debentures as the present value of the cash flows und er the new terms discounted using the original effective interest rate is at least 10% different from the discounted present value of the remaining cash flows of the original financial liability.

At the date of the Amendment, the Corporation derecognized the carrying amount of the outstanding original debentures of \$2,621 and a new liability totaling \$2,342 was recorded by using the discounted cash flows method assuming an effective interest of 24.6% determined on the estimated rate for a loan with similar terms from comparable companies. The Corporation utilized a Monte Carlo simulation model to determine the fair value of the conversion option.

Notes to Interim Consolidated Financial Statements

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The conversion option of \$1,047 is considered as an embedded derivative to be classified as a liability instrument because of its antidilution feature. The total value of the new host instrument and conversion option is \$3,389. The difference between the total value and the carrying amount derecognized of the outstanding original debentures was recorded as a loss on debt extinguishment of \$768.

Accretion charges, included in financing expense on the consolidated statement of loss and comprehensive loss, attributable to the convertible debentures during the six months ended July 31, 2023 was \$230. In addition, \$230 of interest expense was recorded, and \$329 is included as Interest payable on convertible debentures in the consolidated statement of financial position.

During the six months ended July 31, 2023, excluding the conversion mentioned above, no additional debentures were converted into common shares of the Corporation (nil during the year ended January 31, 2023).

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

	Nominal amounts outstanding as at		
Maturity Date	Initial Amount	July 31, 2023	January 31, 2023
May 1, 2023	3,204	640	2,783
February 1, 2025	3,000	3,000	3,000
Total	6,204	3,640	5,783
Current portion		640	2,783
Non-current portion		3,000	3,000
Total		3,640	5,783

b) Embedded Derivative

	Six months ended July 31, 2023	Year ended January 31, 2023
Opening balance	2,094	1,582
Additions		1,047
Fair value adjustment	(1,742)	(535)
Total	352	2,094
Current portion	-	1,098
Non-current portion	352	996
Total	352	2,094

For the six-month period ended July 31, 2023, the Corporation recorded a positive adjustment on revaluation of conversion options of the convertible debentures (embedded derivative's fair value) of \$1,742 resulting from the decrease in the Corporation's share price from \$0.26/share on January 31, 2023 to \$0.14/share as of July 31, 2023.

9. Non-convertible Debentures

	Six months ended July 31, 2023	Year ended January 31, 2023
Opening balance	-	2,349
Accretion expense		272
Loss on debt extinguishment (Note 8)		768
Debenture derecognition (Note 8)	-	(3,389)
Total	-	-
Current portion	-	-
Non-current portion		-
Total	-	-

Notes to Interim Consolidated Financial Statements

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10. Notes

a) Host instrument

	Six months ended July 31, 2023	Year ended January 31, 2023
Opening Balance	480	934
Accretion expense	-	141
Conversion of notes	-	(220)
Repayment of notes	-	(375)
Total	480	480
Current portion	480	480
Non-current portion	-	-
Total	480	480

On April 5, 2022, \$220 of Notes were converted into a non-brokered private placement of units as a replacement of notes issued in December 2021. In December 2022, the Corporation reimbursed Notes totaling \$375 and agreed with the remaining investors to defer payment.

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. The Corporation valued the debt component of the 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 be ar 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 consolidated statement of loss and comprehensive loss, attributable to the Notes for the six months ended July 31, 2023 was nil. In addition, \$30 of accrued interest expense was recorded and \$39 is included as Interest payable on convertible debentures in the consolidated statement of financial position.

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

	Nominal amounts outstanding as at		
Maturity Date	Initial Amount	July 31, 2023	January 31, 2023
December 13, 2022	1,075	480	480
Total	1,075	480	480
Current portion		480	480
Non-current portion		-	-
Total		480	480

b) Warrants

	Six months ended July 31, 2023	Year ended January 31, 2023
Opening balance	52	139
Fair value adjustment	(51)	(87)
Total	1	52

For the six-month period ended July 31, 2023, the Corporation recorded a positive adjustment on revaluation of the warrants' fair value of \$51.

Notes to Interim Consolidated Financial Statements

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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	2,575
Share issue costs	-	(109)
Balance as at January 31, 2023	51,038,776	10,357
Common shares issued	27,764,981	3,133
Share issue costs	-	-
Balance as at July 31, 2023	78,803,757	13,490

On May 5, 2023, the Corporation completed the first tranche of a non-brokered private placement of units. 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 entitle the holder to purchase one Share of the Corporation ("Warrant Share") at a price of \$0.35 per Warrant Share for a period of 36 months from closing (the "Closing Date"), subject to adjustment in certain events. If, at any time following the Closing Date, the daily volume weighted average trading price of the Shares on the Canadian Securities Exchange is greater than \$0.50 per Share for the preceding 10 consecutive trading days, the Corporation shall have the right to accelerate the expiry date of the Warrants to a date that is at least 30 days following the date of such notice to holders of Warrants. On June 5, 2023, the Corporation completed the second tranche of a non-brokered private placement of units with the same conditions as the first tranche.

The first closing of \$3,856 included gross cash proceeds of \$1,267, consulting fees of \$497 paid through the issuance of units and \$2,092 from conversion of debentures which matured on May 1, 2023 including interests. The Corporation issued 25,708,988 units at a price of \$0.15 per Unit.

A second closing of \$288 consisting of gross cash proceeds of \$41 and \$247 from conversion of debentures which matured on May 1, 2023 including interests.

Shares and warrants were valued based on their relative fair values. The fair value of the shares was determined by the closing price on the date of the transaction and the fair value of the warrants was determined based on a Monte Carlo simulation model. The remaining of the common shares issued during the year arise from a settlement with a supplier.

(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.

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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.

During the six-month period ended July 31, 2023 and 2022, the Corporation recorded compensation expense of \$100 and \$204, respectively, with corresponding credits to contributed surplus related to the stock option plan. No option was granted during the six months ended July 31, 2023. The weighted average fair value of the options granted during the six-month period ended July 31, 2022, estimated by using the Black-Scholes option pricing model, was \$0.16.

The fair value of the options was estimated on the date of grant based on the following weighted average assumptions:

	July 31, 2023	January 31, 2023
Weighted average exercise price	-	0.21
Weighted average risk-free rate	-	2.73%
Weighted average volatility factor (i)	-	106.12%
Weighted average expected life (years)	-	8.0

(i) Volatility was determined using the historical share price of the Corporation.

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, 2023		Year ended January 31, 2023	
	Number of	Weighted Average	Number of	Weighted Average
	Shares	Exercise Price	Shares	Exercise Price
Options outstanding, beginning of year	4,776,000	0.32	2,946,000	0.47
Granted during the period	-	-	2,500,000	0.21
Options forfeited	-	-	-	-
Options cancelled/expired	(989,250)	0.39	(670,000)	0.57
Options exercised	-	-	-	-
Options outstanding, end of year	3,786,750	0.31	4,776,000	0.32

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.

The following options were outstanding as at July 31, 2023:

Outstanding	Exercisable	Exercise price	Remaining contractual life (years)
75,000	75,000	\$0.60	5.25
465,000	465,000	\$0.50	0.13
450,000	450,000	\$0.36	3.11
100,000	100,000	\$0.70	5.65
65,000	48,750	\$0.58	5.16
81,750	81,750	\$0.71	5.38
50,000	50,000	\$0.47	5.65
2,000,000	483,333	\$0.20	6.69
500,000	250,000	\$0.26	6.89
3,786,750	2,003,833		

(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. During the six-month period ended July 31, 2023, 133,385 RSU vested following the achievement of operational and corporate milestones.

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

	Six months ended July 31, 2023	Year ended January 31, 2023
	Number of RSUs	Number of RSUs
Units outstanding, beginning of year	551,938	-
Exercised	(133,385)	551,938
Units outstanding, end of year	418,553	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, 2023	34,325,312	\$0.42
Issued	27,631,596	\$0.35
Expired	(6,858,000)	\$0.49
Exercised	-	-
Balance as at July 31, 2023	55,098,908	\$0.38

As at July 31, 2023, 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	0.33 years
8,063,812	\$0.50	\$0.10 - \$0.11	0.06 – 0.08 years
45,364,246	\$0.35	\$0.001 - \$0.04	0.18 – 2.75 years
55,098,908			

On December 12, 2022, the Corporation amended some of its warrant agreements expiring on the same date as the non-convertible debentures. Under the terms of the amendment, the maturity date was extended from Novembre 30, 2023 to February 1, 2025. No significant impact resulted from the warrants' extension.

12. Advances from shareholders

During the year ended January 31, 2023, the Corporation received an advance of \$750 from a shareholder, which is not-interest bearing. During the six months ended July 31, 2023, the Corporation received additional advances of \$517 from various shareholders, which are also not-interest bearing. The Corporation settled these advances by the issuance of Units in the non-brokered private placement mentioned in Note 11.

13. Loss per share

Basic

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

	Six month	Six months ended,	
	July 31, 2023	July 31, 2022	
Net loss for the period	312	2,213	
Weighted average number of common shares outstanding	64,209,464	45,423,158	
Basic (income) loss per share	0.00	0.05	

The effect of dilution from stock options, warrants and convertible debentures was excluded from the calculation of weighted average number of shares outstanding for diluted (income) loss per share for the six-month period ended July 31, 2023 and for the year ended January 31, 2023 as they are anti-dilutive.

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14. Supplemental Cash Flow Information

	Six months	ended,
	July 31, 2023	July 31, 2022
Net change in non-cash operating working capital items		
Sales tax receivable and other receivables	9	(19)
Prepaid expenses and deposits	-	(40)
Investment tax credits receivable	(56)	34
Accounts payable and accrued liabilities	1,203	165
Total	1,156	140

15. Research and Development Expenses

	Three months ended,		Six months ended,	
	July 31, 2023	July 31, 2022	July 31, 2023	July 31, 2022
Development costs	204	468	613	1,161
Patent costs	18	3	34	33
Depreciation – equipment	3	6	6	12
Amortization – intangible assets	8	8	16	16
	233	485	669	1,222
Investment tax credit	(38)	(41)	(56)	(103)
Government grants (i)	-	-	-	(12)
Total	195	444	613	1,107

(i) During the year ended January 31, 2022, the Corporation received a grant of \$75 which was recognized as a reduction of the expenses on a systematic basis over the period in which the related development costs are incurred. During the six-month period ended July 31, 2022, \$12 was recognized in the consolidated statement of loss and comprehensive loss as a reduction of the related R&D expenses and nil during the six-month period ended July 31, 2023 as nil remain recorded on the consolidated statement of financial position as government grants since July 31, 2022. When the Corporation receives government grant, it is recognized on a systematic basis over the period in which the related research and development costs are incurred as a reduction of these expenses. No grants were recognized during the six-month period ended July 31, 2023 (\$12 during the six-month period ended July 31, 2022).

16. General and Administrative Expenses

	Three months ended,		Six months ended,	
	July 31, 2023	July 31, 2022	July 31, 2023	July 31, 2022
Office and administrative (i)	248	290	761	737
Professional and investor's relations fees	97	194	168	314
Total	345	484	929	1,051

(i) Includes consulting fees paid to management in lieu of salary.

17. Financial Expenses

	Three months ended,		Six months ended,	
	July 31, 2023	July 31, 2022	July 31, 2023	July 31, 2022
Interest on notes and debentures	98	166	254	350
Effective interest on notes and debentures	70	155	230	322
Amortization – financing cost	-	31	-	55
Gain on foreign exchange	(44)	(3)	(21)	(27)
Total	124	349	463	700

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18. Income Taxes

As at July 31, 2023, 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	2,950	2,982
2043	4,391	4,400
	15,044	14,995

19. Financial Instruments

During the six-month period ended July 31, 2023, conversion options and warrants issued as part of the notes in December 2021 and the convertible debentures conversion options are still being carried at faire value through profit and loss ("FVTPL"). During the year ended January 31, 2023, the conversion option resulting from the Amendment of the non-convertible debentures was classified as liability and carried at FVTPL. The Corporation has no financial instruments carried at fair value through other comprehensive income ("FVTOCI") as at July 31, 2023 and January 31, 2023.

As at July 31, 2023:	FVTPL	Amortized cost
Financial asset:		
Cash	-	33
Financial liabilities:		
Accounts payable and accrued liabilities	-	2,237
Accrued interest on debentures and notes	-	369
Notes	-	480
Long-term loan	-	40
Convertible debentures	-	3,131
Conversion options classified as liability	352	-
Warrants classified as liability	1	-

As at January 31, 2023:	FVTPL	Amortized cost
Financial asset:		
Cash	-	108
Financial liabilities:		
Accounts payable and accrued liabilities	-	1,793
Accrued interest on debentures and notes	-	328
Notes	-	750
Long-term loan	-	480
Convertible debentures	-	40
Non-convertible debentures	-	5,044
Conversion options classified as liability	2,094	-
Warrants classified as liability	52	-

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 tran saction 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, other than warrants classified as liability, approximate their carrying values due to their short-term nature.

All financial instruments at fair value of the Corporation were considered a Level 2, except for the embedded derivative which is a Level 3. The Corporation's policy is to recognize transfers between the different hierarchy levels as of the date of the event or change in circumstances that caused the transfer.

20. 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 instrum ents 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

ChitogenX 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, 2023		January 31, 2023	
	Foreign Currency	CAD equivalent	Foreign Currency	CAD equivalent
Cash – USD	11	15	(6)	(7)
Accounts payable and accrued liabilities – USD	1,039	1,369	975	1,301
Accounts payable and accrued liabilities – EUR	10	15	8	12

A plus or minus 5% variation in exchange rate, all else being held equal, would result in a foreign exchange gain or loss of \$70for the six-month period ended July 31, 2023 (\$65 for the year ended January 31, 2023).

(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, 2023:	Carrying value	Contractual cash flows	Less than 12 months	Greater than 12 months
Financial liabilities				
Accounts payable and accrued liabilities	2,237	2,237	2,237	-
Accrued interest on debentures and notes	369	369	369	-
Long-term loan	40	40	40	-
Convertible debentures	3,131	4,090	940	3,150
Notes	480	480	480	-
Total	6,257	7,216	4,066	3,150

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As at January 31, 2023:	Carrying value	Contractual cash flows	Less than 12 months	Greater than 12 months
Financial liabilities				
Accounts payable and accrued liabilities	1,793	1,793	1,793	-
Accrued interest on debentures and notes	328	328	328	-
Long-term loan	40	40	40	-
Convertible debentures	750	750	750	-
Non-convertible debentures	5,044	6,515	3,165	3,350
Notes	480	486	486	-
Total	8,435	9,912	6,562	3,350

(d) Capital risk management

The Corporation's objective when managing capital is to maintain its ability to continue as a going concern 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. The Corporation's overall strategy with respect to capital risk management remains unchanged since the year ended January 31, 2023.

21. Related Party Transactions

The following table presents the related party transactions presented in the consolidated statement of loss and comprehensive for the years ended:

	Three months ended		Six months ended	
	July 31, 2023	July 31, 2021	July 31, 2023	July 31, 2022
Transactions with key management and members of the Board of				
Directors:				
Share-based compensation	43	153	98	183
Consulting fees	222	279	568	592
Interest earned on debentures	9	81	62	153
Interest earned on debentures by Manitex, a shareholder of the Corporation:	-	49	58	115
R&D expenses incurred with Polytechnique, a partner of Polyvalor	163	192	244	318

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

	July 31, 2023	January 31, 2023
Key management and directors:		
Accounts payable and accrued liabilities	502	500
Debentures and notes	154	1,214
Conversion options classified as embedded derivatives	22	348
Warrants classified as liability	-	29
Accrued interest on debentures and notes	51	50
Manitex Capital, a shareholder of the Corporation:		
Debentures and notes		931
Conversion options classified as liability	-	63
Warrants classified as liability	-	10
Accrued interest on debentures and notes	-	76
Polyvalor, a shareholder of the Corporation:		
Accounts payable due to École Polytechnique, a partner of Polyvalor	193	-

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22. Commitments

a) Polytechnique contract

In June 2015, the Corporation entered into collaborative research agreement with École Polytechnique 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) Platelet-rich plasma Project

In April 2021, the Corporation entered into a collaborative research agreement with École Polytechnique and two industrial partners to delineate the Platelet-rich plasma (PRP) components, the distinct impact of each component and their collective action towards tissue repair. The Corporation's contribution to the PRP project totals \$240 over 2 years.

c) Axelys Project

In May 2022, the Corporation entered into a research and financing agreement with Axelys and École Polytechnique whereby Axelys, a non-for-profit organization, agreed to grant the Corporation and Poly, a sum of \$524 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 \$139 over 2 years, of which \$69 was disbursed during the year ended January 31, 2023. The project commenced on August 1, 2022.

d) NSERC

On February 16, 2023, the Corporation secured, a \$3,472 million grant from The Natural Sciences and Engineering Research Council of Canada ("NSERC") and Prima Québec in partnership with Polytechnique. The 4-year grant will be used to advance the scientific development, expand the scope of indications, develop new biomaterials for regenerative medicine and accelerate the commercial readiness of the Company's flagship ORTHO-R technology platform. The Corporation's contribution to the NSERC Project totals \$940 over 5 years but eliminates any contractual obligations under the Poly contract. (See 22.a)