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 consolidated operations, performance and financial results for the fourth quarter and fiscal year ended on January 31, 2023 and compares those of the same period for the fiscal year ended January 31, 2022. This MD&A is the responsibility of management and has been reviewed and approved by its Board of Directors. The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the MD&A. The Board of Directors carries out this responsibility principally through its Audit Committee. The Audit Committee is appointed by the Board of Directors and is comprised of financially literate directors. This report was reviewed by the Corporation's Audit Committee and approved by ChitogenX' Board of Directors on May 31, 2023.

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

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

Going concern uncertainty

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 audited consolidated financial statements for the year ended January 31, 2023, the Corporation is still a clinical stage R&D company and has not yet achieved profitability. During the 12-month period ended on January 31, 2023, the Corporation incurred a net loss of $6.230 million, and used cash in operations of $3.197 million. As at the end of the fiscal year 2023, the Corporation had a negative working capital balance of $6.826 million. Consequently, the Company's performance raises significant doubt about the Company's ability to continue as a going concern.

Accordingly, the ability of the Corporation to realize the carrying value of its assets and continue operations as a going concern is dependent upon its ability to obtain additional financing and ultimately on generating future profitable operations. Management anticipates that the continued advancement of its lead Ortho-R program, and the implementation of strategic initiatives 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 audited consolidated financial statements for the fiscal year ended January 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 core business that may not otherwise be apparent when relying solely on IFRS financial measures. EBITDA Loss is defined as net loss before (i) provision for (recovery of) income taxes; (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 uncertainties, many of which are beyond the ability of the Corporation to control or predict, that may cause the Corporation's actual results or performance to be materially different from actual results and are developed based on assumptions about such risks and other factors set out herein.

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

GLOSSARY TERMS

Calendar & Financial	
CDUs	Convertible Debenture Units
EBITDA (L)	EBITDA Loss
FVA	Fair Value Adjustment
FY	Fiscal Year
G&A	General and Administrative
IR	Investors Relations
ITC	Investment tax credits
NCDUs	Non-Convertible Debenture Units
Q4-23	Fourth quarter FY-23
Q3-23	Third quarter FY-23
Q2-23	Second quarter FY-23
Q1-23	First quarter FY-23
Q4-22	Fourth quarter FY-22
Q3-22	Third quarter FY-22
Q2-22	Second quarter FY-22
Q1-21	First quarter FY-22
SR&ED	Scientific Research and Experimental Development Expenses
R&D	Research and Development
YTD	Year to date
YE	Year-end
WA	Weighted Average
W/C	Working Capital, defined as short-term assets less short-term liabilities

Corporate & Operations	
API	Active Pharmaceutical Ingredient
CHGX	ChitogenX Inc. *(Previously Ortho Regenerative Technologies Inc.)*
CMC	Chemistry Manufacturing and Controls
cGMP	current Good Manufacturing Practice
CMO	Contract Manufacturing Organization
CSE	Canadian Securities Exchange
FDA	US Food and Drug Administration
IND	Investigational New Drug application with the FDA
MCRA	MCRA, LLC, a US based orthopedic specialty CRO
MRI	Magnetic Resonance Imaging
MTA	Material Transfer Agreement
NSERC	Natural Sciences and Engineering Research Council of Canada
ORTHO-C	Proprietary biopolymer for Articular Cartilage repair
ORTHO-M	Proprietary biopolymer for Proprietary Biopolymer for Meniscus repair
ORTHO-R	Proprietary biopolymer for Rotator cuff repair
ORTHO-V	Proprietary biopolymer for Osteoarthritis healing
OTCQB	US over-the-counter venture trading market
Polytechnique	Ecole Polytechnique de Montreal
PRP	Platelet-rich plasma
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 subsidiary, OR4102022 Inc. has been incorporated on April 20, 2022 and is located at 12 Penns Trail in Newtown, Pennsylvania, USA. The Corporation's shares are publicly traded on the CSE under the symbol "*CHGX*", as well as on the United States OTCQB market under the symbol "*CHNXF*".

On September 7, 2022, The Corporation changed its corporate name from Ortho Regenerative Technologies Inc. to ChitogenX Inc. to better reflect the Company's expanded clinical and commercial opportunities, mission, values, and core competencies. The Corporation product ORTHO R is positioned to provide an efficacious, safe and reliable regenerative medicine delivery mechanism to targeted body systems to aid in tissue 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 transplantation, tissue engineering and the reprogramming of cell and tissue types.

Combinations of these approaches can 1) improve the natural healing process in areas of the body 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.

Regenerative medicine is a relatively new and rapidly expanding field that brings together experts in biology, chemistry, materials and computer science, engineering, genetics, robotics, and other fields to find solutions to some of the most challenging medical problems faced by humankind. We believe ChitogenX is at the forefront of 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. Cell therapies are used in the treatment of musculoskeletal diseases such as bone tissue replacement, cartilage, tendon, and ligament repair and replacement. ChitogenX is well positioned to become the preferred regenerative medicine delivery system for this rapidly growing part of the industry.

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

Problem & Solution

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

Providing a reliable, biologically safe 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 **Drug/ Biologic/ Combination** technology platform, is a muco-adhesive CHITOSAN based biopolymer matrix, specifically designed to be combined with biologics such as Platelet-Rich Plasma (PRP), Bone Marrow Aspirate Concentrate (BMAC), or other regenerative medicine treatments to enhance healing, augment and accelerate the regeneration of new tissue in various potential indications.

For the regenerative medicine market ORTHO-R (Regenerative) is an efficacious, safe and reliable regenerative medicine delivery mechanism to targeted body systems to aid in tissue and organ repair.

BUSINESS STRATEGY

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

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

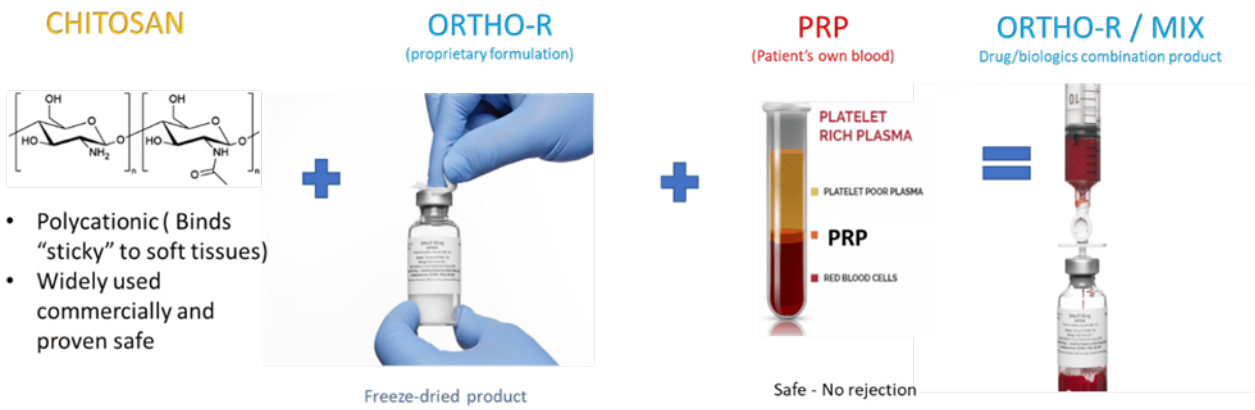
Over the recent months, the Corporation initiated scientific discussions with experts in the tissue healing, gastrointestinal, neurological, oncological, and cardiovascular markets to identify high unmet medical needs in each category what could potentially be solved by the characteristics of our technologies.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

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

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

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

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



ORTHO-R is a patent-protected freeze-dried formulation of a biopolymer, a lyoprotectant and a clot activator. ORTHO-R is solubilized in platelet-rich plasma ("PRP") to form an injectable combination of the chitosan scaffold and the PRP-biologic, and an FDA designated bioactive implant that coagulate 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 adverse 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 have set the stage for achievements of major corporate/regulatory/strategic milestones over the current and upcoming calendar years.

Market Opportunity: *(Source:Pearl Diver HealthCare Research, iData Research.) for the first clinical application in rotator cuff repair*

Close to 700K 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 patient outcomes and reduce procedure failure rate.

This market opportunity is further enhanced by the fact that surgeons all over the world know that soft tissue such as ligaments, tendons and meniscus are not well vascularized and thus when repaired with the standard of care (sutures, anchors, and staples) results in healing principally with scar tissue which is more fragile and susceptible to re-tear than native tissue. Given the belief by many that platelet rich plasma (PRP) improves the quality of tissue healing, surgeons have vocalized a desire to find a way to make PRP resident to the surgical repair site, so that the PRP can trigger the tissue repair cascade to these troublesome non-vascularized soft tissues. Surgeons have been using PRP for over a decade but are frustrated by the inability for the PRP alone to establish 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 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.

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

ORTHO-R®: Key points of differentiation

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

Regulatory:

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

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

Clinical:

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

- Our Investigational New Drug (IND) application was granted by the FDA in Q4-22.
- 10 U.S. based clinical sites have been selected for the trial, 8 have been initiated and are actively recruiting patients, one site has been closed and the last site activation is imminent.
- During Q4-22 (Calendar) ChitogenX completed the initial portion of the study that required staggered recruitment of five patients (one patient at a time). We are now in the parallel recruitment mode where all sites can treat patients simultaneously.
- Phase II recruitment is expected to be completed in mid-23 (calendar) depending on sites' enrolment rate.
- Patient assessment and Phase II scoring will take place – 12 months after surgery.
- Final report is expected during FY-24.

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

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

Meniscus

A first grant for $0.5 million has been secured to test the efficacy of ORTHO-M/PRP Drug-Biologic Implant formulation, for meniscus repair. Efficacy of our product has already been demonstrated in an animal proof of concept study. Our contracted research veterinarian expert, with the help of a major arthroscopic instrumentation company, have recently completed the surgical procedures in 20 large animals and we will have the results of this pre-clinical trial by Q2-2023 (calendar).

In February 2023, the Corporation successfully confirmed soft-tissue residency properties of its chitosan/PRP based biopolymer matrix, ORTHO-R, 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 ORTHO-R 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 12 months following completion of the meniscus study.

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

Tendinopathies

In February 2023, ChitogenX and its scientific partner Polytechnique secured a $3.472 million grant from NSERC and Prima Québec. 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 Corporation's flagship ORTHO-R technology platform.

ChitogenX Overall Value Proposition

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

Intellectual Property

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

Family	Description	Patent Status
No.1	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
No.2:	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
No.3:	Freeze-dried biopolymer scaffolds that form a hydrated microparticle dispersion after contact with blood or blood-derived fluids and stimulate anabolic wound repair processes, including angiogenesis, cell chemotaxis, tissue remodeling, and extracellular matrix.	• Issued/Allowance pending – Globally • Expiry – 2035

Q4-2023 CORPORATE HIGHLIGHTS

- November 9, 2022, ChitogenX announced having successfully completed the initial portion of its U.S. Phase I/II ORTHO-R rotator cuff tear repair clinical trial requiring staggered enrolment of 5 patients and Data Safety Monitoring Committee review and sequential clearance for each trial participant. The Corporation reported no safety issues and open recruitment at all approved U.S. clinical sites could proceed simultaneously. The U.S. Phase I/II clinical trial is a blinded, randomized controlled study investigating the safety of ORTHO-R® for rotator cuff tear repair compared with standard of care.
- On December 12, 2022, the Corporation reached an agreement with 100% holders of the non-convertible debentures ("NCDUs") expiring November 30, 2023, to amend certain terms including extending the maturity of the NCDUs and related warrants up to February 1, 2025, as well as introducing a conversion feature added to the debentures at a maximum conversion price of 0.35$ per share. The net impact of these amendments is to remove $3 million of short-term liabilities outstanding as of this date.

OTHER FISCAL YEAR 2023 CORPORATE HIGHLIGHTS

- On March 14, 2022, Claude Leduc, CEO of Ortho announced his retirement. On the same date, the Corporation announced the hiring of Philippe Deschamps as its new President and CEO. Mr. Deschamps is a seasoned public company CEO focused on the healthcare market for the past 35 years and the last 20 years as CEO of 3 healthcare companies.
- On April 5, 2022, the Corporation announced the closing of an oversubscribed non-brokered private placement of units for $3.2 million (the "Private Placement"), with approximately $560,000 of Insiders' subscriptions. The Company issued 16,000,000 Units at a price of $0.20 per Unit for total gross proceeds of $3.2 million of which an amount $2.7 million was received in cash, an amount of $0.2 million was issued as a replacement to convertible notes issued in December 2021 and the balance in compensation for accounts payable and accrued liabilities. Each Unit consists of one (1) Class A share of the Company (each, a "Common share") and one Common share purchase warrant (each a "Warrant"). Each Warrant will be exercisable into one (1) Share in the capital of the Company at the price of $0.35 per Warrant Share for a period of 24 months from closing. If the closing price of the Shares is greater or equal to $0.50 for ten (10) consecutive trading days, the Company may give notice to the Warrant holder, at any time after the statutory 4-month hold period, that it must exercise its remaining Warrants within a period of 30-days from the date of receipt of the notice, failing which the Warrants will automatically expire.
- As a result of the closing of the Private Placement, Convertible Debentures bearing interest of 10% per annum and maturing on May 1, 2023 were amended such that their conversion price was reduced from $0.30 to $0.20 to match the purchase price of Units under this Private Placement. In addition, the exercise price of the 1,075,000 warrants and the 20,625 Finder's warrants issued on December 10, 2021 issued in connection with the Convertible Note Units financing were reduced from $0.50 to $0.35 to match the exercise price of the Warrants comprised in the Units sold under this Private Placement.
- On April 8, 2022 (the "Date of Grant") the Corporation granted 2,000,000 stock purchase options (the "Options") and 551,938 Restricted Stock Units ("RSU") to its newly hired CEO, Philippe Deschamps. Half of the Options and RSU's will vest annually and equally over the first 3 years following the Date of Grant. The balance of the Options and RSU's will vest based on achievements of predetermined operational and corporate milestones.
- On April 20, 2022, the Corporation created a wholly owned subsidiary in the United States called OR4102022 Inc. This subsidiary was created in the State of Delaware where business case law is most sophisticated. The subsidiary was also registered in Pennsylvania (PA) since the CEO, Philippe Deschamps, will operate the Corporation primarily from the US office located at 12 Penns Trail, Newtown in PA. The new subsidiary also became the sponsor of the ORTHO R Phase I/II clinical trial being performed in the US.
- On May 1, 2022, the Corporation received a method and composition patent from the US Patent Office and received notice issue from Canada and European patent offices for the composition and method patents on one of its key patents for its freeze-dried polymer compositions for mixing with platelet rich plasma to form implants for tissue repair or compositions for therapeutic intra-articular injection.
- On May 4, 2022, the Corporation announced that the United States Patent and Trademark Office (the "USPTO") had issued a patent related to the Company's ORTHO-R soft tissue repair platform. The issued patent, titled, "Freeze-Dried Polymer Compositions for mixing with platelet rich plasma to form implants for tissue repair and/or composition for therapeutic intraarticular injection" (US Patent Application No. U.S. 11,285,100 B2) provides broad protection for both the composition and the method of use of our ORTHO R technology. New patent issued by USPTO to protect core IP until 2035 and positions the Corporation as leading player in the dynamic regenerative medicine market. The patent enables delivery of PRP in soft tissue repair surgery in a proprietary way.
- On May 19, 2022, the Corporation issued 500,000 warrants with an exercise price of $0.35 per Common Share and expiring July 31, 2023 as compensation to non-related parties providing social media support and other corporate services.
- On May 26, 2022, the Corporation announced that it had received, through its partnership with Polytechnique Montreal, a $0.5 million non-dilutive grant from Axelys, to advance the development of its technology platform indication for meniscus repair.
- On June 13, 2022, the Corporation announced that patient recruitment for its Phase I/II Clinical trial for testing Ortho-R for rotator cuff repair had been initiated with six of the ten sites actively recruiting patients.
- On July 27, 2022, we announced the initiation of patients' enrollment in its U.S. Phase I/II rotator cuff tear repair clinical trial.
- On September 7, 2022, The Corporation announced that it has changed its corporate name to ChitogenX Inc. to better reflect the Company's expanded clinical and commercial opportunities, mission, values, and core competencies.
- October 5, 2022, ChitogenX announced its decision to pursue sales of medical grade chitosan as a new near-term commercial revenue initiative following the completion of an internal commercial and regulatory readiness process
- October 13, 2022, the Corporation announced the launch of its second orthopedic development program in meniscus repair following the development completion of its preclinical arthroscopic surgery program.

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

- October 19, 2022, the Corporation announced a partnership with the California Medical Innovations Institute ("CALMI"), led by its founder Ghassan Kassab PhD. The first focus of the partnership will evaluate whether ChitogenX lyophilised chitosan matrix, combined with platelet rich plasma or other biologics can improve healing of a range of tissues post resection of the human pancreas to avoid leakage of damaging enzymes.

SUBSEQUENT EVENTS

- On February 9, 2023, ChitogenX announced a best-efforts private placement of units at a price of $0.225 per Unit for gross proceeds of up to $4,350,000, pursuant to the listed issuer financing exemption ("LIFE") available under Part 5A of National Instrument 45-106 – Prospectus Exemptions ("NI 45-106"). The LIFE financing was terminated in April 2023 (see below).
- On February 14, 2023, the Corporation successfully confirmed soft-tissue residency properties of its chitosan/PRP based biopolymer matrix, ORTHO-R, in large animal meniscus tear repair study. The grant-supported meniscus tear repair study confirmed the presence of tissue adherence and the aggregation of PRP regenerative cells imbedded in the tear. It represented the second orthopedic ORTHO-R 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.
- On February 16, 2023, the Corporation announced having secured, a $3,472 million grant from The Natural Sciences and Engineering Research Council of Canada ("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.
- On April 4, 2023, the Corporation announced a new non-brokered private placement offering of units at a price of $0.20 per unit for gross proceeds of $2.5 million. This offering replaced the LIFE offering previously announced on February 6, 2023.
- On April 14, 2023, the Corporation announced a change of auditor from Ernst & Young LLP to Guimond Lavallée, Chartered Professional Accountants Corporation.
- On May 1, 2023, ChitogenX amended the terms of its non-brokered private placement offering announced on April 4, 2023. The amended non-brokered private placement offering now consists of 33,333,333 units at a price of $0.15 per units for maximum gross proceeds of up to $5.0 million.
- On May 1, 2023, convertible debentures previously issued in 2019 and 2020 and totalling $3.2 million in capital and interest matured.
- On May 5, 2023, the Corporation announced the first closing of its non-brokered private placement offering of units for $3.9 million, including $1.8 million of Insiders' subscriptions. Holders of debentures that matured on May 1, 2023, opted to reinvest $2.1 million of principal and accrued interest into the private placement.

SELECTED FINANCIAL DATA

The following table sets forth financial information relating to the periods indicated and should be read in conjunction with the January 31, 2023 audited consolidated financial statements.

Statement of loss and comprehensive loss

	Q4-23	Q4-22	*Change*		FY-23	FY-22	*Change*	
			$[1]	*%*[2]			$[1]	%[2]
Expenses								
R&D	**561**	415	*146*	*35%*	**2,235**	1,549	686	44%
G&A	**509**	309	*200*	*65%*	**2,083**	1,471	612	42%
SBC	**92**	67	*25*	*37%*	**391**	237	154	65%
Financial	**1,070**	370	*700*	*189%*	**2,143**	1,307	836	64%
	2,232	1,161	*1,071*	*92%*	**6,852**	4,564	2,288	50%
Other items								
FVA embedded derivative	**-**	(279)	*279*	*-100%*	**(535)**	388	(923)	-238%
FVA on warrants	**(72)**	(31)	*(41)*	*132%*	**(87)**	(31)	(56)	181%
Net Loss and Comprehensive Loss	**2,160**	851	*1,309*	*154%*	**6,230**	4,921	1,309	27%
Loss per share								
WA # of shares outstanding	**51,038,776**	34,934,113	*16,104,663*	*46%*	**48,261,822**	34,897,265	13,364,557	38%
Basic and diluted loss per share	**0.04**	0.02	*0.02*	*74%*	**0.13**	0.14	-0.01	-8%

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

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

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 reported periods.

	Q4-23	Q4-22	*Change*		**YTD-23**	YTD-22	*Change*	
	$	$	*$*	*%*	$	$	*$*	*%*
Net loss	**(2,160)**	(851)	(1,309)	154%	**(6,230)**	(4,921)	(1,309)	27%
Add (deduct)								
Financial	**1,070**	370	700	189%	**2,143**	1,307	836	64%
FVA on embedded derivative	**-**	(279)	279	-100%	**(535)**	388	(923)	-238%
FVA on warrants	**(72)**	(31)	(41)	132%	**(87)**	(31)	(56)	181%
Depreciation	**6**	10	(4)	-40%	**26**	37	(11)	-30%
Amortization	**8**	8	-	0%	**33**	32	1	3%
EBITDA (L)	**(1,148)**	(773)	(375)	49%	**(4,650)**	(3,188)	(1,462)	46%

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	**YTD-23 vs YTD-22**
Revenues	• ChitogenX is a clinical stage company. No revenues were generated during each of FY-23 and FY-22.
R&D expenses	• R&D expenses include internal and external expenses. Internal expenses represent mostly salaries and consulting fees for our staff. External expenses include all development costs related to work performed under our Collaborative R&D contract with Polytechnique as well as specific manufacturing activities, regulatory, pre-clinical and clinical work to advance our pipeline. R&D expenses are presented net of R&D tax credits (ITCs) recoverable from the provincial government for Scientific Research and Experimental Development (SR&ED) programs. • R&D expenses are also presented net of government grants which are amortized over their respective term.
	• R&D expenses for Q4-23 increased by 35% over Q4-22 at $0.6 million compared to $0.4 million. FY-23 expenses were $2.2 million, up 44% over FY-22 reflecting the increased R&D spending related to the Phase I/II clinical study for testing Ortho-R for rotator cuff repair.
G&A expenses	• G&A expenses include salaries and consulting fees paid to non-R&D staff, professional fees, conferences, travel expenses, as well as investors relation activities.
	• G&A spending in Q4-23 increased over Q4-22 at $0.5 million compared to $0.3 million. G&A expenses for FY-23 was $2.1 million compared to $1.5 million for FY-22, a 42% increase. The respective increases compared to the prior year periods includes some additional salary charges related to the addition of a new CEO, Phil Deschamps, and severance charges to the departing CEO.
Share-based compensation (SBC)	• Represents the expense related to issuing stock options to staff, consultants and board members. Variances for the comparative quarters include non-recurrent grant to a new Board member as well contractual vesting for members of management on options already outstanding. SBC expenses in Q4-23 were similar to Q4-22. The increased in FY-23 compared to FY-22 resulted from new options issued to the new CEO and the new Medical Director, both hired during the year.
Financial expenses	• Financial expenses include interest on loans, non-convertible and convertible debentures, as well as effective interest on debentures as well as foreign exchange gain or loss.
	• Financial expenses for Q4-23 and FY-23 were up compared to Q4-22, and FY-22 at $1.1 million and $2.1 million respectively, compared to $0.4 million and $1.3 million for the corresponding prior year periods. The increase in Q4-23 and FY-23 compared to prior periods was mainly due to a one-time negative impact on converting the $3M non-convertible debt into a convertible debenture. This led to a $0.8 million loss on extinguishment of the debt. (See Consolidated Financial Statements notes 8 and 9)
Fair Value Adjustment ("FVA") of Embedded Derivative	• On October 19, 2022, the Corporation announced the amendment of three series of CDUs to extend their respective maturity dates. This led to the creation of the embedded derivative on the CDUs. • An embedded derivative comprised of the conversion options classified as liability was created following the amendment of the CDUs. Starting Q4-22, any change in the Fair Value of the Conversion Option of the CDUs ("FVCO") has to be recorded as a financial expense. • During the Q4-23 and Q4-22 periods, the change in the FVCO, led to a Fair Value Adjustment ("FVA") of the conversion option representing a nil and $0.3 million recovery. For the YTD periods, the FVA of the conversion option represented a $0.5 million recovery in FY-23 and a $0.4 million expense in FY-22.

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

Fair Value Adjustment ("Fair Value Adjustment") on warrants	• The terms of the warrants issued as part of the December 2022 Bridge financing led to the creation of a warrant liability. Until the warrants are exercised or expire, a fair value adjustment to the warrants will be recorded quarterly to reflect the change in the warrant liability. • During each of Q4-23 and FY-23, the revaluations of the Warrants' fair value as compared to the FY-22 values were nominal.
Net Loss for the period	• Net loss in Q4-23 increased by 154% over the Q4-22 period mainly due to the $0.8 million loss on extinguishment of the NCD debt, but also the increase in G&A and R&D expenses. The increase in net loss for FY-23 was 1.3 million over FY-22 at $6.2 million compared to $4.9 million, representing a 27% increase.
EBITDA (L)	• Management believes that our EBITDA (L) performance is more indicative of our operating results as it eliminates the financial costs associated with our financial structure such as CDUs and NCDA financings, and ITC financings as well as depreciation and the amortization of intangible assets.
	• After eliminating the impact of the financial expenses, as well as depreciation and amortization, but also after eliminating the impact of the combined recovery/expense on revaluation of the CDU embedded derivative and warrant liability, our EBITDA loss during Q4-23 was $1.1 million compared to $0.7 million for Q4-22, representing a 49% increase, and reflecting the increase in R&D and G&A expenses described above. • EBITDA loss during FY-23 was $4.7 million compared to $3.2 million for FY-22, representing a 46% increase.

SELECTED BALANCE SHEET HIGHLIGHTS

The following table sets forth the financial information related to the Corporation's consolidated statements of financial position for the periods indicated and should be read in conjunction with the audited consolidated financial statements for year ended January 31, 2023.

As at,	**31-Jan-23**	31-Jan-22	*Change*	
			$[1]	*%[2]*
Cash	**108**	313	*(205)*	*-65%*
Prepaid expenses and deposits	**122**	120	*2*	*2%*
Intangible assets	**299**	332	*(33)*	*-10%*
Total assets	**738**	1,123	*(385)*	*-34%*
Accounts payable and accrued liabilities	**1,793**	607	*1,186*	*195%*
Advance from a shareholder	**750**	-	*750*	*100%*
Convertible debentures (Short-term)	**2,681**	-	*2,681*	*100%*
Notes	**480**	934	*(454)*	*100%*
Convertible debentures (Long-term)	**2,363**	2,387	*(24)*	*-1%*
Embedded Derivative	**2,094**	1,582	*512*	*32%*
Non-convertible debentures	**-**	2,349	*(2,349)*	*-100%*
Total liabilities	**10,581**	8,227	*2,240*	*29%*
Common shares	**10,357**	7,891	*2,470*	*31%*
Warrants	**2,406**	1,828	*578*	*32%*
Contributed surplus	**2,551**	2,104	*447*	*21%*
Deficit	**(25,157)**	(18,927)	*(6,230)*	*33%*

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	**YE-23 vs YE-22**
Cash	• Cash at the end of FY-23 was $0.1 million compared to $0.3 million at the start of the fiscal year. Cash and net proceeds from the April 2022 financing were used to support operations.
Total Assets	• The $0.2 million decrease in cash and a reduction of tax credits receivables during FY-23 period led to a $0.4 million decrease in our total assets between YE-22 and YE-23.
Trade AP and accrued liabilities	• Trade accounts payables and accrued liabilities increased by $1.2 million during FY-23 following the increase in R&D activities that took place during the recent quarters but also due to deferral of management salaries to help finance operations.
Advance on future financing	• During Q4-23, we received a $0.75 million contribution for the private placement closed during Q2-24. (See "Subsequent Events")
Convertible debentures	• During FY-20 and FY-21, the Corporation issued $3.2 million of CDUs to fund its operations. Debentures representing $0.3 million have been converted since issuance. Considering the CDUs mature on May 1, 2023, the Convertible Debentures were presented as short-term liability as at YE-23. Subsequent to FY-23, $2.5

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

	million of CDU and interest have been converted into the private placement closed in Q2-24 (See Subsequent events).
Notes	• Notes were issued as part of the December 2021 bridge financing which matures in December 2022. The reduction since the start of the fiscal year takes into consideration the $0.2 million of notes converted into the April 2022 PIPE, as well as repayments and accretion expense for the period.
Embedded derivative	• Represents the conversion option liability for CDU maturing on May 1, 2023 (Short term) and CDU maturing on February 2025 (Long-term). • Any change in the Fair Value of the Conversion Option ("FVCO") is recorded as a financial expense in the statements of loss, as a gain or loss on the respective embedded derivative. • Changes to the FVCO takes place based on 1) reduction of the FVCO following quarterly re-evaluation of the FVCO; 2) exercise of the conversion option by the holder; or 3) repayment/maturity.
Non-convertible Debentures ("NCDU")	• During Q4-21 the Corporation secured a $3.0 million NCDU financing to fund its activities. The nominal variance between YE-22 and YE-23 represents accretion expense. 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.
Total Liabilities	• Total liabilities have increased by $2.4 million between YE-22 and YE-23. The variation included $1.2 million increase in accounts payables and a $0.75 million advance to be converted into the May 2023 private placement.
Common Shares	• Common shares have increased by $2.5 million mainly as a result of the April 2022 PIPE net of share issue costs.
Warrants	• Warrants increased by $0.6 million mainly as a result of the warrants issued as part of the April 2022 PIPE net of the allocation of share issue costs, less the impact of expired warrants.
Contributed Surplus	• The contributed surplus increased by $0.4 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-23. (See "Statement of Loss" commentaries)

SELECTED QUARTERLY FINANCIAL INFORMATION

The following table sets out the Corporation's selected unaudited quarterly financial information for the eight quarters ended January 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 audited consolidated financial statements and should be read in conjunction with those statements and their accompanying notes.

	Q4-23	Q3-23	Q2-23	Q1-23	**Q4-22**	Q3-22	Q2-22	Q1-22
Expenses								
R&D	**561**	567	444	663	**415**	591	141	402
G&A	**509**	523	484	567	**309**	357	367	438
SBC	**92**	95	162	42	**67**	43	64	63
Financial	**1,070**	373	349	351	**370**	266	332	339
FVA embedded derivative	**-**	277	(78)	(734)	**(279)**	666	-	-
FVA on warrants	**(72)**	22	2	(39)	**(31)**	-	-	-
Net (Loss)	**(2,160)**	(1,857)	(1,363)	(850)	**(851)**	(1,923)	(904)	(1,242)
(Loss) per share (Basic and diluted)	**(0.04)**	(0.04)	(0.03)	(0.02)	**(0.02)**	(0.06)	(0.03)	(0.04)
EBITDA (Loss)	**(1,148)**	(1,171)	(1,076)	(1,254)	**(773)**	(973)	(554)	(888)

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

Notes	**Valuable information**
R&D expenses (Net of ITCs and grants)	• Net R&D expenses fluctuate based on the timing of R&D activities. R&D activities have accelerated over the last year as the Corporation was getting ready to start and initiated its Phase I/II trial for testing Ortho-R for rotator cuff repair.
G&A expenses	• G&A expenses have been stable over the last 2 years. G&A expenses have fluctuated due to the impact of senior management changes that took place during the various periods. We expect G&A to be stable for the coming quarters.
Share-Based Compensation	• Share-based compensation fluctuates as a results of staff changes, and due to the timing of expense recognition associated with the vesting of the options issued. Q2-23 SBC included the impact of issuing options and RSUs to the new CEO and new Chief Medical Officer.

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

Financial expenses	• Financial expenses have increased sequentially as a result of the various financing. • The $0.7 million increase between Q3-23 and Q4-23 was mainly due to the non-recurrent loss on extinguishment of the NCDU debt.
FVA of embedded derivative	• The changes to the terms of the CDU conversion price, the introduction of a conversion feature on the NCDU (now CDUs) as well as the variation in share price during the last quarters has led to quarterly adjustments to the FVCO of the CDUs and NCDUs representing respective decreases (gains) or increases (losses) since the embedded derivative was created in Q3-22. The embedded derivative FVA did not change in Q4-23 compared to Q3-23.
FVA on warrants	• There have been nominal quarterly variations (adjustments) to the fair value of the warrants issued as part of the December 2021 bridge financing
Net loss	• Over the last few quarters, net loss reflect has been mainly impacted by the FVA of the derivative liability as well as to a lesser extent to the fluctuations of the R&D, G&A and SBC expenses. • Net loss since Q3-22 has fluctuated greatly as a result of non-cash variations of the FVA on the embedded derivative. Net loss in Q4-23 was up by $0.3 million as compared to Q3-23 due to the non-recurrent loss on extinguishment of the NCDU debt**.**Going forward net loss will be mainly driven by the level of R&D spending made to advance its R&D programs (Ortho-R, Ortho-M, and Ortho-C) as well as the financial expenses related to its capital structure include FVA of each of the embedded derivative and warrants.
EBITDA (Loss)	• EBITDA (Loss) (See "Management's Responsibility for Financial Reporting" – "Non-IFRS Financial Measures") eliminates the impact of the FVA on the CDU, NCDU, ITC and other financings which reflect the Corporation's financing strategy adopted to attract the required capital to fund its operations. • After eliminating such expenses, the EBITDA (Loss) in Q4-23 decreased slightly compared to Q3-23 reflecting a decrease in G&A and R&D activities. Fluctuations over prior quarter were directly related to variations in R&D and G&A spendings described above.

LIQUIDITIES AND CAPITAL RESSOURCES

			Change	
For the fiscal year ended on,	**31-Jan-23**	31-Jan-22	*$[1]*	*%[2]*
Operating activities:				
Net loss from operations	**(6,230)**	(4,921)	*1,309*	*27%*
Other items not affecting cash	**1,575**	1,333	*242*	*18%*
Changes in non-cash working capital	**1,458**	368	*1,090*	*293%*
Cash used in operations	**(3,197)**	(3,220)	*23*	*-1%*
Investing activities:				
Cash used in investing activities	**-**	(33)	*33*	*100%*
Financing activities:				
Cash provided by financing activities	**2,945**	1,164	*1,781*	*153%*
Effect of foreign exchange on cash	**47**	23	*24*	*104%*
Cash, beginning of period	**313**	2,379	*(2,066)*	*-87%*
Decrease in cash	**(252)**	(2,089)	*1,837*	*-88%*
Cash, end of period	**108**	313	*(205)*	*-65%*

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	**FY-23 vs FY-22**
Cash used in operations	• Cash used in operations represents the cash flows from operations, excluding income and expenses not affecting cash plus changes in non-cash working capital items.
	• Cash used in operations was the same for the last 2 fiscal years at $3.2 million. The negative impact of items not affecting cash such as the embedded derivative on CDU/NCDU was mainly offset by the increase in payables during the year.
Cash used in investing activities	• No investments during FY-23, compared to nominal investment in FY-22.
Cash provided by financing activities	• Financing activities generated $2.9 million during the FY-23 period representing the net impact of the April 2022 PIPE as well as the $0.8 million advance (converted into the May 2023 financing) compared to $1.2 million in FY-22 which included the net impact of the $1.1 million bridge financing completed in Q4-22 as well as a $0.1 million grant.

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

Cash, End of the period	• The Corporation ended FY-23 with $0.1 million of cash compared to $0.3 million at the end of FY-22. Cash decreased by $0.2 million during FY-23 as proceeds from the April 2022 PIPE were used to finance operations.

Cash, and Working Capital

As at,	**YE-23**	YE-22	*Change*	
	$	$	*$*	*%*
Cash	**108**	313	*(205)*	*-65%*
Total current assets	**396**	722	*(326)*	*-45%*
Total current liabilities	**7,222**	1,869	*5,353*	*286%*
Working Capital	**(6,826)**	(1,147)	*(5,679)*	*495%*

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 as at YE-23 was $0.1 million as compared to $0.3 million as at YE-22 representing a $0.2 million decrease. During FY-23, working capital was impacted by the reclass of the value and embedded derivative on the CDUs maturing in May 2023, which are now presented as short-term liability. Working Capital at YE-23 showed a $6.8 million deficit compared to a $1.1 million deficit at YE-22. Included in the working capital deficit is 1) the non-cash $0.7 million embedded derivative (FVCO of the CDUs) eliminated on May 1, 2023, as well as 2) $0.8 million advance converted into the May 2023 financing, and 3) $2.5 million CDUs plus interest which have been converted into the May 2023 financing (See "Subsequent Events").

Taking into account the above-described conversion of debentures and advances, the working capital deficit as at YE-23 would have been $2.8 million.

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, financing and strategic 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").

In May 2023, the Corporation closed a $3.9 million private placement. The funds collected from this financing will serve to cover operations and the short-term obligations of the Corporation.

Future financing

The Corporation's use of available funds over the coming year is of utmost concern to the Board. 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. Active discussions are ongoing.

Discussion of operating cash requirements

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

Ortho-R for the repair of rotator cuff tears is a clinical development stage program and represents our lead product for commercialization. We currently estimate that an additional investment of at least $2 million will be required to provide proof of concept in human and another $10 million to bring the same program to commercialization.

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

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 and can be renewed by mutual consent.

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

In February 2023, the Corporation announced that Polytechnique had secured a four-year $3.5 million grant to advance the development of ChitogenX programs. This grant will be used to reduce the payments to Polytechnique as well as eliminate R&D expenses related to several projects including the development of Ortho-R for tendinopathies.

Financial Risk Factors

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

(a) Credit risk

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

(b) Market risk

(i) Cash flow and fair value interest rate risk

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

(ii) Currency risk

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

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

	January 31, 2023		January 31, 2022	
	Foreign Currency	**CAD equivalent**	Foreign Currency	CAD equivalent
Cash – USD	**(6)**	**(7)**	100	128
Accounts payable and accrued liabilities – USD	**975**	**1,301**	294	374
Accounts payable and accrued liabilities – EUR	**8**	**12**	6	8

A plus or minus 5% variation in exchange rate, all else being held equal, would result in a foreign exchange gain or loss of $65 for the year ended January 31, 2023 ($25 for the year ended January 31, 2022).

(c) Liquidity risk

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

As at 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**	**-**
Advance from a shareholder	**750**	**750**	**750**	**-**
Convertible debentures	**5,044**	**6,515**	**3,165**	**3,350**
Notes	**480**	**486**	**486**	**-**
Total	**8,435**	**9,912**	**6,562**	**3,350**

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

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

(d) Capital risk management

The Corporation's objective when managing capital is to maintain its ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders. The Corporation's definition of capital includes equity, comprised of issued common shares, warrants and contributed surplus. The Corporation's primary objective with respect to its capital management is to ensure that it has enough financial resources to meet its financial obligations. To secure the additional capital necessary to carry out these plans, the Corporation will attempt to raise additional funds through the issuance of debt, equity or by securing funds from strategic partners. The Corporation is not subject to any externally imposed capital requirements. The Corporation's overall strategy with respect to capital risk management remains unchanged since the year ended January 31, 2022.

10. Related Party Transactions

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

	January 31, 2023	January 31, 2022
Transactions with key management and members of the Board of Directors:		
Share-based compensation	**363**	113
Consulting fees	**1,218**	630
Interest earned on debentures	**289**	246
Interest earned on debentures by Manitex, a shareholder of the Corporation	**217**	215
R&D expenses incurred with École Polytechnique, a partner of Polyvalor, a shareholder of the Corporation	**522**	433

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

	January 31, 2023 $	January 31, 2022 $
Key management and directors:		
Accounts payable and accrued liabilities	**500**	143
Debentures and notes	**1,214**	1,199
Conversion options classified as embedded derivatives	**348**	501
Warrants classified as liability	**29**	31
Accrued interest on debentures and notes	**50**	42
Manitex Capital, a shareholder of the Corporation:		
Debentures and notes	**931**	915
Conversion options classified as liability	**63**	548
Warrants classified as liability	**10**	13
Accrued interest on debentures and notes	**76**	30
Polyvalor, a shareholder of the Corporation:		
Accounts payable due to École Polytechnique, a partner of Polyvalor	**-**	4

Off balance sheet arrangements

The Corporation does not have any off-balance sheet arrangements as of January 31, 2023

Statement of Compliance

These audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as of January 31, 2023.

Use of Estimates and Judgements

Reference should be made to the Corporation's audited consolidated financial statements for the year ended January 31, 2023, *note 3 – use of estimates and judgment*, 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, expenses and comprehensive loss.