

#### Management's Discussion and Analysis for the three and twelve-month periods ended January 31, 2022

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

#### MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

This Management's Discussion and Analysis ("MD&A") for Ortho Regenerative Technologies Inc. (the "Corporation" or "ORT") provides an overview of the Corporation's operations, performance and financial results our fourth quarter and fiscal year ended on January 31, 2022 and compares those of the same period in fiscal year 2021. 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 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 Ortho RTI's Board of Directors on May 19, 2022. This document should be read in conjunction with the audited financial statements and notes thereto for the fiscal year ended on January 31, 2022 which have been prepared in accordance with International Financial Reporting Standards ("IFRS"). Further information about Ortho Regenerative Technologies Inc.., including the Annual Information Form, 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 annual audited financial statements, the Corporation is still a clinical stage R&D company and has not yet achieved profitability. During the year ended on January 31, 2022, the Corporation incurred a net loss of \$4,921, and used cash in operations of \$3,220. As at year-end 2022, the Corporation had a negative working capital balance of \$1,147. Consequently, the Company's performance raises significant doubt about the Company's ability to continue as a going concern.

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

#### Covid-19 pandemic

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

#### **Non-IFRS Financial Measures**

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



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which are beyond the ability of the Corporation to control or predict, that may cause the Corporation's actual results or performance to be materially different from actual results and are developed based on assumptions about such risks and other factors set out herein.

#### **GLOSSARY TERMS**

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

#### **OVERVIEW OF THE BUSINESS AND BUSINESS STRATEGY**

Ortho is a clinical stage drug 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 (See "Subsequent Events") and is located at 12 Penns Trail in Newtown, Pennsylvania, USA. The Corporation's shares are publicly traded on the CSE under the symbol "*ORTH*", as well as on the United States OTCQB market under the symbol "ORTIF".

The Corporation is developing products in the regenerative medicine market, one of the most dynamic and promising sectors of the health care industry.

Regenerative medicine, among other things, seeks to repair or replace tissue that have been damaged by disease, trauma, or congenital issues, vs. the current clinical strategy that focuses primarily on treating symptoms. The tools used to realize these outcomes are tissue engineering, cellular therapies, and medical devices or a mix of all three.

When injured, our bodies have the innate response to heal and defend itself. What if it was possible to harness the power of the body to heal and then accelerate it in a clinically relevant way? What if we could help the body heal better?

This is precisely what the proprietary **ORTHO-R / PRP Combination** regenerative tissue repair platform from Ortho Regenerative Technologies is designed to do.

ORT technologies are poised to dramatically improve the success rate of orthopedic and sports medicine surgeries. Our **ORTHO-R / PRP Combination** technology platform, is a muco-adhesive CHITOSAN based biopolymer matrix, specifically designed to be combined with biologics such as Platelet-Rich Plasma (PRP) or Bone Marrow Aspirate Concentrate (BMAC), to augment and accelerate the regeneration of new tissue in various musculoskeletal conditions. **ORTHO-R**<sup>\*</sup>, our lead CHITOSAN-PRP drug/biologic combination product, is formulated and designed to improve the healing of occupational and sports related injuries to tendons, meniscus, and ligaments. Other orthopedics indication and formulations are being developed for, chronic wound healing, and osteoarthritis treatment. The **ORTHO-R**<sup>\*</sup> polymer-biologics hybrid mix, designated as drug/biologic combination product by the FDA, 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 a Phase I/II **ORTHO-R**<sup>\*</sup> Rotator Cuff Tear Repair clinical trial at 10 US sites.



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

#### Market Opportunity: (Source:Pearl Diver HealthCare Research, iData Research.)

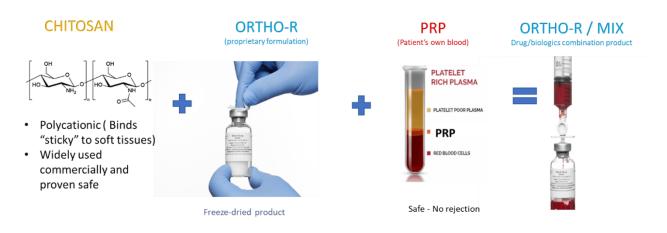
The orthopedic and sports medicine soft tissue repair market is a \$11B+ global market. The **ORTHO-R**<sup>\*</sup> product is targeting the following soft tissue repair indications: Rotator Cuff Tear Repair: 4M injuries and 600K surgeries/year (50%+ failure rate) in USA alone, Tendinopathy, 11M injuries/year, and Meniscus Tear repair: 1.2M injuries/year and 200K+ surgeries/year (40% failure rate) in USA alone. Standard of Care for these injuries is surgery alone. The orthopedic community are looking for better treatments to improve patients' 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 a tear mending principally with scar tissue which is fragile and susceptible to re-tear. They are highly anticipating finding a way to bring platelet rich plasma (PRP) and make it resident to the surgical repair site so that it can trigger the tissue repair cascade to non-vascularized soft tissues brought on by PRP. Surgeons have been using platelet rich plasma for over a decade but are frustrated by the inability for the present form to establish residency on the surgical repair site due to the highly liquid nature of PRP alone. **ORTHO R** is specifically designed to overcome the residency issue due to its unique and patented composition. Therefore, once approved a ready-made very large market can be rapidly satisfied thus reducing the investment by the company, development partner or acquirer of our technology.

In November 2017, FDA published a memo to the regenerative medicine industry stating that orthopedic regenerative products now require a Biologics License Application (BLA) from the Center for Biologics Evaluation and Research (CBER) at FDA. According to the FDA memo: "Regenerative medicine therapies have not been approved for the treatment of any orthopedic condition, such as osteoarthritis, tendonitis, disc disease, tennis elbow, back pain, hip pain, knee pain, neck pain, or shoulder pain. A Biologic License is required, and thus comprehensive pre-clinical and clinical trials required to demonstrate safety and effectiveness of orthopedic regenerative treatments, are required. ORT coincidently had already begun its pre-clinical work at that time and have already obtained an IND in December 2021. ORT is thus in the regulatory lead to bring the first biologic licensed drug/biologic orthopedic regenerative medicine to the market.

#### **ORTHO-R<sup>®</sup>: Key points of differentiation**

Unlike other natural biopolymer matrix such as Hyaluronic Acid (HA) or Collagen, the **ORTHO-R**<sup>\*</sup> 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. It is therefore a perfect combination matrix system for orthobiologics such as PRP, used in various musculoskeletal injury conditions. **ORTHO-R**<sup>\*</sup> has a fast coagulation onset, and offers with its muco-adhesive feature, 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**<sup>\*</sup> chitosan-PRP drug/biologic combination product, allowing PRP to contribute to the normal healing cascade. **ORTHO-R**<sup>\*</sup> becomes the desired solution option for the orthopedic soft tissue repair community, by addressing the actual limited clinical outcomes resulting from short lived / washed out use of PRP alone in the clinical orthopedic practice.





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Value Proposition

#### **Technology Platform**

- Proprietary, novel, multi-indications, second generation, de-risked platform
- o Strong intellectual property protection in three patent families
- Addresses significant unmet medical need in large markets (\$11B + & high surgical failure rate)
- o First solution to increase residence time of orthobiologics to augment regeneration of new tissue
- o Validated mode of action, safe and easy to use solution, adjunct to standard of care surgery
- Rapid coagulation and avoids shrinkage of implant, adheres to soft tissues
- o Demonstrated efficacy in large animal model (decreased tendon gap & improved bone structure)

#### **ORTHO-R: Unique Drug / Biologics / Device Combination Product**

- o In the US regulatory lead as the first PRP based drub/biologic product in human trials
- o Target U.S. market first with clear regulatory pathway from FDA (IND to BLA)
- Inexpensive to manufacture & provides high margin potential
- Uses autologous PRP which can be sourced quickly and easily during surgery
- Lyophilized chitosan provides long shelf life
- o Reduces healthcare stakeholders' costs by improving standard of care surgery outcomes

#### **Great Value Creation & Exit Potential**

- Phase I/II clinical trial initiated with first patients imminent.
- o Multiple material milestones expected over next 12-24 months including completion of phase I/II clinical trial.
- o NASDAQ listing to be considered for first half of 2023 calendar year
- o Regenerative medicine soft tissue repair market already created ready and clamoring for first approved effective product
- Experienced management, Board and Clinical Advisory Board with history of value creation
- Low market valuation vs. industry peers
- o Sufficient capital raised to start phase I/II study in rotator cuff indication
- Industry known for substantial orthopedics M&A transactions

#### **Intellectual Property:**

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

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

#### Development Pipeline (as at the date of this MD&A)

ORT's lead program is ORTHO-R, a Drug-PRP Biologic Implant, specifically designed to guide and accelerate the repair of various musculoskeletal conditions. The Corporation is aiming to assess the clinical safety and efficacy of Ortho-R, initially for Rotator Cuff repair. Ortho-R can also be used to accelerate the healing of other soft tissues such as ligaments and meniscus (see Ortho-M).

ORT's pipeline includes four active R&D projects:

Program	Development Stage	Indication	Details
<u>ORTHO-R</u>	Clinical Phase I/II	Rotator Cuff	Ortho-R is designated as a Drug/Biologic combination product by the FDA Office for Combination Products. The jurisdictional assignment for ORTHO-R is the Center for Biologics Evaluation and Research (CBER). A US IND was filed on April 6 <sup>th</sup> , 2022, with the FDA to obtain approval to initiate a 78 patient Phase I/II clinical trial to test Ortho-R in combination with PRP in the repair of rotator cuff tears as an adjunct to standard



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			of care surgery, versus standard of care surgery alone. The IND was granted in December 2022. See ORTHO-R Clinical Trial update below
<u>ORTHO-M</u>	Pre-Clinical	Meniscus	Testing the efficacy of ORTHO-M/PRP Drug-Biologic Implant formulation, for meniscus repair. Efficacy of our product has already been demonstrated in an animal proof of concept study. Our contracted research veterinarian expert, with the help of a major arthroscopic instrumentation company, have recently completed the development of surgical instruments tools, suitable to the sheep preclinical model. The next steps are to validate our model in large animal pilot and pivotal studies, starting in Q2-22. Human clinical trials would then follow.
<u>ORTHO-C</u>	Pre-Clinical	Cartilage repair	Testing our freeze-dried matrix with ultra-high porosity designed to augment bone marrow stimulation procedures for articular cartilage repair, including microfracture and drilling. Efficacy of our product has already been demonstrated in a preclinical pilot study.
ORTHO-V	Feasibility	Osteoarthritis	Feasibility research on a freeze-dried biopolymer formulation combined with autologous biologics, tailored for intra-articular injections to provide the combined visco-biologics supplementation of articular joints and potentially gain disease modification outcomes in applications such as Osteoarthritis.
<u>ORTHO-T</u>	Feasibility	Tendinopathy	Feasibility research on a freeze-dried biopolymer formulation combined with autologous biologics, tailored for intra-articular injections to provide the combined visco-biologics supplementation of articular joints and potentially help with tendon healing and regeneration.

Considering the significant bioactivity and residency of our proprietary biopolymer – PRP implants, ORT continues to assess its potential for therapeutic uses outside of the soft tissue repair market.

#### **Ortho-R for Rotator Cuff repair**

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 drug-biologics FDA designated bioactive implant that coagulate after implantation. Extensive in vitro testing has allowed the Corporation to identify specific formulations that meet the following criteria for optimal commercial products:

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

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

#### Preclinical:

In Q4-21, we have successfully completed the preclinical pivotal study's safety and clinical histology analysis, statistical analysis and final report. The study's final report confirmed the safety of Ortho-R as well as the evidence that our biologics hybrid implant delivered as an adjunct to standard of care surgery, improves tendon, tendon insertion site and overall repair in Rotator Cuff Tear repair compared to standard of care surgery alone. <a href="https://www.orthorti.com/cms\_files/phpfQwJvt.pdf">https://www.orthorti.com/cms\_files/phpfQwJvt.pdf</a>

#### Manufacturing & CMC:

Our cGMP clinical lot production has been successfully completed earlier in FY-22 and such material will be used in our upcoming Phase I/II human clinical trial for testing ORTHO-R in rotator cuff tear repair. The manufacturing batch will also provide sufficient material to support our Meniscus tear repair preclinical program, expected to be initiated in FY-23 shortly after the commencement of our Phase I/II Rotator cuff repair trial.

#### **Regulatory:**

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



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

#### Clinical:

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

- Our Investigational New Drug (IND) application to the FDA was submitted on April 6, 2021 and granted on December 10, 2021.
- 10 US based clinical sites have been selected for the trial.
- 6 clinical sites have been fully contracted and the last 4 sites are currently completing their contract and budget negotiations.
- 3 of the sites have been initiated and are actively recruiting patients. We expect to initiate 5 more sites to be initiated before the end of Q2-22 and the last two sites in Q3-22.
- Patient screening and enrollment has begun and we expect to randomize our first patients in Q2-22
- Phase I part of the study is expected to be completed in Q3-22
- Completion of the Phase II recruitment is expected in Q4-22/Q1-23 depending on sites' enrolment rate.
- Follow up and individual patient assessment and Phase II scoring will take place 12 months after surgery.

# Fiscal Year 2022 CORPORATE HIGHLIGHTS

#### Ortho-R Program

- On April 6, 2021, the Corporation announced that it had submitted an IND application to the FDA for the initiation of a Phase I/II clinical trial of ORTHO-R in rotator cuff tear repair.
- On June 4, 2021, the Corporation announced that it had received a clinical hold letter from the FDA related to its IND application to begin a phase I/II clinical trial for ORTHO-R. The FDA requested additional CMC related information.
- On July 20, 2021, the Corporation announced that it had provided and filed all requested CMC-related data and characterization information in a formal response to the U.S. Food and Drug Administration (FDA) aiming to address the clinical hold on its Investigational New Drug (IND) application for ORTHO-R.
- On August 20, 2021, the Corporation announced that the U.S. Food and Drug Administration ("FDA") had extended the clinical hold on the Company's Investigational New Drug ("IND") application to proceed with the initiation of a U.S. Phase I/II clinical trial of ORTHO-R in rotator cuff tear repair.
- On October 5, 2021, the Corporation held a successful Type A meeting with the U.S. Food and Drug Administration ("FDA") to discuss final requirements to clear the clinical hold clinical hold on the Company's IND application for the initiation of its ORTHO-R Phase I/II clinical trial.
- On November 12, 2021, the Corporation filed its response and the remaining information and data requested during the Type A meeting held with the FDA on October 4, 2021.
- On December 10, 2021, the Corporation was informed by the FDA that the clinical hold on its U.S. Investigational New Drug ("IND") application had been lifted and that the Corporation was cleared to proceed with its Phase I/II U.S clinical trial to evaluate the safety and efficacy of ORTHO-R as an adjunct treatment to standard of care surgery in rotator cuff tear repair.

#### Financing and Other Corporate Highlights

- On February 24, 2021 Ortho RTI announced the appointment of Patrick O'Donnell to its Board of Directors.
- On March 31, 2021, Ortho RTI announced that its common shares were eligible for electronic clearing and settlement through the Depository Trust Company ("DTC") in the United States.
- On June 15, 2021, the Corporation announced the appointment of Messrs. Howard Walthall and Tim Cunningham to its Board of Directors.
- On July 19, 2021, the Corporation announced the amendment of three series of debentures and warrants issued on October 8, 2021, December 30, 2021 and April 21, 2022 to extend their respective maturity dates and introduce an anti-dilution provision. The original maturity dates of the 10% unsecured convertible debentures and share purchase warrants of the Company were extended from 24 months after their respective dates of issuance to May 1, 2023.



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- On September 21, 2021, the Corporation extended its ongoing collaborative research agreement with Ecole Polytechnique until August 2022. The Corporation previously entered into an initial research service agreements with École Polytechnique on June 19, 2015, 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.
- On December 13, 2021, the Corporation closed a private placement and issued 1,075 Note Units at a price of \$975 per Note Unit for total gross proceeds of \$1.05 million. Each Note Unit consisted of one (1) unsecured convertible note of the Company in the principal amount of \$1,000 (each a "Note") and 1,000 Class "A" share purchase warrants (each a "Warrant"). The Notes bear interest at a rate of 10% per annum from the date of issue, payable in cash, semi-annually in arrears and will mature (the "Maturity Date") on the earlier of (i) 12 months following the closing date of the Private Placement, or (ii) 20 days following the closing of a capital raise in the form of an equity or debt financing of at least \$5 Million (the "Capital Raise"). Any unpaid interest payments will accrue and be added to the principal amount of the Notes. Should the Company complete a Capital Raise prior to the Maturity Date, the holder of a Note will have the option, but not the obligation, to convert the outstanding value of the Note and any accrued and unpaid Interest thereon, into the equity securities and/or debt instrument to be issued pursuant to the Capital Raise, at the same terms and conditions. Each Warrant will entitle the holder thereof to purchase one Class A Share (each, a "Share") at an exercise price of \$0.50 at any time up to 24 months following December 13, 2021. The Notes and the Warrants are subject to a statutory hold period. The Company has paid \$21 in commissions and issued 21,700 finders' warrants in connection with the Capital Raise.

#### Subsequent Events

- 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 with Mr. Leduc agreeing to assist in the transition. Mr. Deschamps is a seasoned
  public company CEO focused on the healthcare market for the past 20 years. Mr. Deschamps' most relevant past experience was as
  co-founder of Helius Medical Technologies Inc. where he guided the company from the Canadian Securities Exchange to the NASDAQ
  and raised over a \$100M in the process. Mr. Deschamps' initial priorities will be to drive the advancement of the Ortho-R Phase I/II
  clinical trial for rotator cuff repair, as well as focus on investors relation activities in anticipation of the Corporation's upcoming clinical
  and corporate milestones.
- 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. The Common Shares and the Warrants are subject to a statutory 4-months hold period under the applicable securities laws and in such case the certificates evidencing the Shares and the Warrants will bear a legend to that effect, as applicable. The Company has paid \$129,430 in commissions and issued 647,150 finders' warrants. As a result of the closing of the Private Placement, the Company has an obligation to amend the terms of certain of its previously issued securities based on anti-dilution provisions governing these securities. Therefore, the Convertible Debentures bearing interest of 10% per annum and maturing on May 1, 2023 were amended such that their conversion price was reduced from \$0.30 to \$0.20 to match the purchase price of Units 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/ PRP Combination 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.



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- 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.
- Effective May 18, 2022, Mr. Deschamps hired Dr. Jonathan Sackier as the Corporation's new Chief Medical Officer. Dr Sackier is an experienced surgeon and serial entrepreneur having developed and commercialized several of his inventions by taking them through the US FDA regulatory process. Dr. Sackier has also deep experience at designing and executing clinical trials.
- On May 19, 2022, the Corporation issued 500,000 warrants with an exercise price of \$0.35 per Common Share and expiring April 30, 2023 as compensation to non-related parties providing social media support and other corporate services.

#### 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, 2022 Audited financial statements.

#### **Statements of Loss**

	Q4-22	Q4-21	Change		YTD-22	YTD-21	Chang	e	
	\$	\$	<b>\$</b> 1	% <sup>2</sup>	\$	\$	<b>\$</b> <sup>1</sup>	% <sup>2</sup>	
Expenses									
R&D	415	390	25	6%	1,549	1,141	408	36%	
G&A	309	472	(163)	-35%	1,471	1,507	(36)	-2%	
Share-based compensation	67	112	(45)	-40%	237	282	(45)	-16%	
Financial	370	294	76	26%	1,307	842	465	55%	
	1,161	1,268	(107)	-8%	4,564	3,772	792	21%	
FV adjustment embedded derivative	(279)	-	(279)	-100%	388	-	388	100%	
FV adjustment on warrants	(31)	-	(31)	-100%	(31)	-	(31)	-100%	
Net (Loss) and Comprehensive loss	(851)	(1,268)	417	-33%	(4,921)	(3,772)	(1,149)	30%	
Weighted average number of shares outstanding	34,934,113	34,034,411	899,702	3%	34,897,265	28,748,551	6,148,714	21%	
Basic and diluted loss per share	0.02	0.04	(0.02)	-50%	0.14	0.13	0.01	8%	

**EBITDA Loss (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 Q4-22 as compared to Q4-21, as well as for FY-21 and FY-22.

	Q4-22	Q4-21	Change		FY-22	FY-21	Change	
	\$	\$	<b>\$</b> 1	% <sup>2</sup>	\$	\$	\$1	% <sup>2</sup>
Net loss	(851)	(1,268)	417	-33%	(4,921)	(3,772)	(1,149)	30%
Add (deduct)								
Financial Expense	370	294	76	26%	1,307	842	465	55%
FV adjustment embedded derivative	(279)	-	(279)	-100%	388	-	388	100%
FV adjustment on warrants	(31)	-	(31)	-100%	(31)	-	(31)	-100%
Depreciation	10	11	(1)	-9%	37	46	(9)	-20%
Amortization	8	8	-	0%	32	24	8	33%
EBITDA (L)	(773)	(955)	182	-19%	(3,188)	(2,860)	(328)	11%

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



# Management's Discussion and Analysis for the three and twelve-month periods ended January 31, 2022

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

The following commentaries provides a discussion and analysis of our results.

	Q4-22 vs Q4-21	FY-22 vs FY-21					
Revenues	<ul> <li>The Corporation is a clinical stage company. Therefore, th and FY-21.</li> </ul>	nere were no revenues generated during each of FY-22					
	<ul> <li>R&amp;D expenses include internal and external expenses. Interfees for our staff. External expenses include developmen Polytechnique as well as specific manufacturing, regulator</li> <li>R&amp;D expenses are presented net of R&amp;D tax credits (I' Scientific Research and Experimental Development (SR&amp;E which are recognized in reduction of R&amp;D costs and amo was secured.</li> </ul>	t costs related to our Collaborative R&D contract with y, pre-clinical and clinical work to advance our pipeline. TCs) recoverable from the provincial government for ED) programs and presented net of government grants					
R&D Expenses	• R&D expenses for Q4-21 and Q4-22 were relatively stable at \$0.4 million for each quarter, or 6% increase in Q4-22 compared to the prior year period. During the quarter the R&D spending related mainly to pre-enrollment clinical trial costs such as clinical sites qualification and training, as well as several other pre-enrollment activities.	<ul> <li>R&amp;D expenses for FY-22 have increased by 36% over FY-21 at \$1.5 million compared to \$1.1 million. The R&amp;D spending has increased in FY-22 compared to FY-21 due to the increase in clinical trial activities as the Corporation was getting ready to commence its Ortho-R Phase I/II clinical trial for rotator cuff tear repair.</li> </ul>					
	• G&A expenses include salaries and consulting fees paid to	o non-R&D staff, professional fees, travel expenses, as					
G&A expenses	<ul> <li>well as investors relation activities.</li> <li>G&amp;A spending in Q4-22 was \$0.3 million compared to \$0.5 million for the Q4-21 period representing a 35% decrease. The reduction related mainly to a reduction in IR expenses and professional fees.</li> </ul>	• G&A spending in FY-22 was stable compared to the FY-21 period at \$1.5 million for each period.					
Share-based compensation (SBC)	<ul> <li>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.</li> </ul>						
	<ul> <li>Over the last years, the Corporation financed its operations such as CDUs, NCDUs, convertible notes and ITC loans.</li> </ul>	s mainly via the issuance of interest-bearing instruments					
	• Financial expenses increased in Q4-22 compared to Q4- 21 at \$0.4 million compared to \$0.3 million representing	• Financial expenses totaled \$1.3 million for the FY- 22 period compared to \$0.8 million for FY-21.					
Financial expenses	<ul> <li>a 26% increase.</li> <li>The increase in interest expenses in Q4-22, related to the \$3.0 million NCDU financing secured in Q4-21 that was outstanding for the full quarter in Q4-22 as compared to only a part of Q4-21. Also, the Company completed a bridge financing of convertible notes in December 2021 which contributed to increase the interest expense for Q4-22.</li> </ul>	<ul> <li>Same as for the Q4-22 analysis, the increase was due to the \$3.0 million NCDU financing secured in Q4-21 that was outstanding for the full year in FY- 22 as compared to only a few months in FY-21. Also, the Company completed a bridge financing of convertible notes in December 2021 which contributed to increase the interest expense for FY- 22.</li> </ul>					
	<ul> <li>On July 19, 2022, the Corporation announced the amendr maturity dates. (See "Balance Sheet Highlights" for more of An Embedded derivative comprised of the conversion of</li> </ul>	details).					
Fair Value of Embedded	<ul> <li>An Embedded derivative comprised of the conversion of amendment of the CDUs.</li> <li>Starting Q4-22, any change in the Fair Value of the Conver a financial expense.</li> </ul>	· · · ·					
Derivative	• During Q4-22, the change in share price has led to a reduction of the Fair Value of the Conversion Option of the CDUs ("FVCO"), thus creating a \$0.3 million gain.	• For the FY-22, the Fair Value of the Conversion Option of the CDUs ("FVCO") reflected the embedded derivative fair value created following the amendment to the terms of the CDU less the change in FVCO recorded in Q4-22.					
Fair Value adjustments on warrants	<ul> <li>The Fair value adjustments to the warrants ("FVAW") issurecorded as a liability in Q4-22 (See "Balance Sheet section these warrants and the end of Q4-22 was recorded as a going forward until the warrants are exercised or expired.</li> </ul>	ned as part of the December 2021 bridge financing was on"). The change in FV between the date of issuance of ain and will be recorded as a gain or expense quarterly					



# Management's Discussion and Analysis for the three and twelve-month periods ended January 31, 2022

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Net Loss for the period.	• Net loss decreased by 33% between Q4-21 and Q4-22 at \$0.9 million compared to \$1.3 million. The decrease in net loss reflected mainly the favorable impact of the FVCO and FVAW.	• Net loss for the FY-22 period has increased over FY- 21 due to the increase in financial expenses, the impact of the FVCO and FVAW.
EBITDA (L)	<ul> <li>Management believes that our EBITDA (L) performance is the financial costs associated with our financial structure as assets.</li> </ul>	
	• After eliminating the impact of the financial expenses, FVCO, FVAW as well as depreciation, and amortization our EBITDA loss during Q4-22 was \$0.8 million down 19% compared to \$1.0 million for Q4-21.	• EBITDA loss for the FY-22 period was \$3.2 million compared to \$2.9 million for the FY-21 representing a 11% increase for the reasons cited above.

## **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 audited financial statements for fiscal year ended January 31, 2022.

As at,	31-Jan-22	31-Jan-21	Change		
	\$	\$	\$ <sup>1</sup>	% <sup>2</sup>	
Cash	313	2,379	(2,066)	-87%	
Prepaids and deposits	120	258	(138)	-53%	
Intangible Assets	332	364	(32)	-9%	
Total assets	1,123	3,277	(2,154)	-66%	
Trade accounts payable and accrued liabilities	607	291	316	109%	
Convertible notes - Short term	934	-	934	100%	
Convertible Debentures - Short term	-	1,848	(1,848)	-100%	
Convertible Debentures - Long term	2,387	628	1,759	280%	
Non-Convertible Debentures	2,349	2,099	250	12%	
Warrants classified as liability	139	-	139	100%	
Embedded derivative (Conversion options)	1,582	-	1,582	100%	
Total liabilities	8,227	5,078	3,149	62%	
Common shares	7,891	7,706	185	2%	
Warrants	1,828	2,080	(252)	-12%	
Equity Components of convertible debentures	-	469	(469)	-100%	
Contributed surplus	2,104	1,605	499	31%	
Deficit	(18,927)	(13,661)	(5,266)	39%	

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	January 31, 22 vs January 31, 21
Cash	• Cash at the end of Q4-22 was \$0.3 million compared to \$2.4 million at the end of FY-21. During the FY-22 period, our liquidities have been used to fund operations and have reduced by \$2.1 million. See "Subsequent Events" for details regarding additional financings.
Prepaids and deposits	• Prepaids and deposits, have decreased by 53% between YE-21 and YE-22 at \$0.1 million compared to \$0.3 million. The decrease in mainly due to the elimination of a \$0.2 million deposit at the end of FY-21 that was used to pay for the manufacturing of our Phase I/II clinical lot in the first part of FY-22.
Intangible Asset	• Intangible assets reflect the net book value of our patents and biopolymer technology acquired from Polyvalor. The nominal reduction between YE-21 and YE-22 results from amortization charges which were not offset by new investments as prosecution of our patents was expensed.
Total assets	• The decrease in cash and deposits during FY-22 led to a 66% decrease in our total assets at the end of FY-22 as compared to the end of FY-21.
Trade payables and accrued liabilities	• Trade accounts payables and accrued liabilities have increased by 109% since the start of the FY-22 and reflected the increase in R&D spending in the later part of the FY-22 compared to the prior year. R&D activities which involved mainly the Phase I/II pre-enrollment activities, increased in the later part of Q4-22 following the granting of our IND by the FDA in December 2021.



## Management's Discussion and Analysis for the three and twelve-month periods ended January 31, 2022

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Convertible Notes	• Convertible notes were issued as part of the bridge financing announced December 2021. \$0.2 million of these notes have been converted into the \$3.2 million Private placement secured in April 2022 (See "Subsequent events"). Unless previously converted, the balance is due at maturity in December 2022.
Convertible debentures units	• On July 19, 2022, the Corporation announced the amendment of three series of CDUs to extend their respective maturity dates. The original maturity dates of the 10% CDUs and share purchase warrants were extended from 24 months after their respective dates of issuance to May 1, 2023. In addition to the extension, the terms of the CDUs were amended to introduce an anti-dilution clause should the Corporation issue shares below the initial conversion price of the CDUs prior to their maturity. Finally, the maturity date of the amended CDUs may be accelerated should the Corporation raise a minimum of \$10 million cumulative financing before their conversion/maturity.
(CDU)	<ul> <li>As a result of this amendment all CDUs were presented as long-term liabilities.</li> <li>Also, as a result of amending the terms of the CDU described above, the Corporation determined that the conversion option of the CDUs had to be considered as an embedded derivative and be classified as a liability instrument. Therefore, the Corporation derecognized the \$0.5 million carrying amount of the conversion option initially classified as an equity component and recorded the fair value of the conversion option as a liability. (See "Embedded Derivative" below).</li> </ul>
Non-convertible Debentures (NCDU)	• During Q4-21 the Corporation secured a \$3.0 million NCDU financing. The YE-21 balance represented the net proceeds from the financing less the fair value of the warrants issued as part of the transaction plus accretion expense between the date of the financing and YE-21. The increase of \$0.3 million between YE-21 and YE-22 represents accretion expense for the FY-22 period.
Warrants classified as liability	• This item represents the \$0.2 million Fair Value of the warrants issued as part of the December 2021 bridge financing less the gain on reevaluation of the warrants between the date of issuance and YE-22. (See "Audited Financial Statements - note 10b").
Embedded Derivative	<ul> <li>In July 2021, a \$1.2 million embedded derivative representing the related conversion options was created following the amendment of the CDUs.</li> <li>Any change in the Fair Value of the Conversion Option of the CDUs ("FVCO") is recorded as a financial expense in the statements of loss, as a gain or loss on embedded derivative related to CDUs.</li> <li>Changes to the FVCO takes place based on the following 3 scenarios: 1) reduction of the FVCO following quarterly re-evaluation of the FVCO; 2) exercise of the conversion option by the holder; and 3) repayment or maturity.</li> <li>During Q4-22, the FVCO decreased by \$0.4 million.</li> </ul>
	<ul> <li>During C4-22, the FVCO decreased by \$0.4 million.</li> <li>During FY-22, the FVCO increased by \$0.4 million since the initial evaluation of the FVCO in July 2021.</li> </ul>
Total Liabilities	• Total liabilities have increased by \$3.1 million between FY-21 and FY-22 mainly as a result of 1) \$0.3 million increase in accounts payable and accrued liabilities, 2) \$1.1 million from the issuance of convertible notes as part of the December 2021 Bridge financing (Convertible Notes and Warrant liability), and 3) the impact of the CDU extension which led to the creation of a \$1.6 million embedded derivative as at January 31, 2022.
Common Shares	• Common shares have increased by \$0.2 million during FY-22 due to the conversion of some CDUs for \$0.1 million as well as \$0.1 million from the exercise of warrants.
Warrants	• Warrants decreased by \$0.3 million following the exercise and expiry of warrants during FY-22.
Equity component of CDUs	• The equity component of the convertible debentures represented the fair value of the conversion features of these CDUs at inception. The equity component was eliminated following the amendment of the CDUs and replaced by the embedded derivative classified as long-term liability. (See CDUs above)
Contributed Surplus	• The \$0.5 million increase relates to net impact for stock options issued during FY-22 representing \$0.2 million, as well as the expiry of warrants representing \$0.3 million.
Deficit	• The increase in FY-22 reflects the performance of the Corporation for the period as well as the accounting treatment of financing transactions. (See "Statement of Loss" commentaries)



## Management's Discussion and Analysis for the three and twelve-month periods ended January 31, 2022

(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 January 31, 2022. This information is derived from unaudited quarterly financial statements prepared by management in accordance with IFRS. The following quarterly information is presented on the same basis as the audited financial statements and should be read in conjunction with those statements and their accompanying notes.

	Q4-22	Q3-22	Q2-22	Q1-22	Q4-21	Q3-21	Q2-21	Q1-21
R&D Expenses (Net)	415	591	141	402	390	191	195	365
G&A expenses	309	357	367	438	472	342	186	507
Share-based compensation	67	43	64	63	112	101	49	20
Financial expenses (income)	370	266	332	339	294	179	201	168
FV adjustment embedded derivative	(279)	667	-	-	-	-	-	-
FV adjustment on warrants	(31)	-	-	-	-	-	-	-
Net Loss	(851)	1,924)	(904)	(1,242)	(1,268)	(813)	(631)	(1,060)
Loss per share (Basic and diluted):	(0.02)	(0.06)	(0.03)	(0.04)	(0.04)	(0.03)	(0.03)	(0.04)
EBITDA (Loss)	(773)	(973)	(554)	(888)	(955)	(611)	(413)	(862)

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

Notes	Valuable information
R&D expenses (Net of ITCs and Grants)	<ul> <li>During Q4-22, R&amp;D expenses decreased by 30% compared to the prior Q3-22 quarter. The quarter over quarter R&amp;D expenses fluctuated during the past quarters as the Corporation was preparing itself for its US based Ortho-R Phase I/II clinical trial by addressing FDA issues for most of FY-22 up to the lifting of the clinical hold in Q4-22.</li> <li>R&amp;D activities picked up in Q4-21 and Q1-21 as the Corporation completed its CMC batch manufacturing and other IND related activities.</li> <li>We expect R&amp;D expenses to increase over the coming quarters as activities related to our Phase I/II clinical trial for Rotator cuff repair are expected to increase and fluctuate in line with patient recruitment.</li> </ul>
G&A expenses	<ul> <li>There has been nominal variation in G&amp;A expenses over the past several quarters as the Corporation was prioritizing its R&amp;D activities.</li> <li>The Q1-21 amount includes a non-recurring \$0.3 million salary adjustment paid to senior management for having agreed to receive non-cash remuneration between July 2019 and April 2020.</li> </ul>
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	<ul> <li>Financial expenses have increased starting Q4-21 following the implementation of the \$3.0 million NCDU.</li> <li>The increase in Q4-22 related to the issuance of Convertible Notes as part of the December 2021 Bridge Financing – \$0.2 million of which has been converted into the April 2022 private placement.</li> <li>Interest charges on the CDUs may go down over time as CDU holders opt to convert their debenture prior to maturity.</li> <li>ITC loans have been repaid in Q4-21.</li> </ul>
FV adjustment of embedded derivative	• The variation in share price during the last 2 quarters has led to an increase in the Fair Value of the Conversion Option of the CDUs ("FVCO") representing \$0.7 million in Q3-22, as well as a decrease in the FVCO of \$0.3 million in Q4-22. There was no embedded derivative prior to Q3-22.
Fair Value adjustments on warrants	<ul> <li>The Fair value adjustments to the warrants ("FVAW") issued as part of the December 2021 bridge financing was recorded as a liability in Q4-22 (See "Balance Sheet section").</li> <li>The change in FV between the date of issuance and the year of Q4-22 was recorded as a gain and will be recorded as a gain or expense quarterly going forward until the warrants are exercised or expired.</li> </ul>
Net loss	• Our net loss is 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 and also the impact of the FVCO.
EBITDA (Loss)	<ul> <li>EBITDA (Loss) (See "Management's Responsibility for Financial Reporting" – "Non-IFRS Financial Measures") eliminates the impact of the CDU, NCDU, FV adjustments, ITC and other financings which reflect the Corporation's financing strategy adopted to attract the required capital to fund its operations.</li> <li>After eliminating such expenses, the EBITDA (Loss) has fluctuated with the level of G&amp;A and R&amp;D expenses. The EBITDA loss in Q4-22 has decreased by 21% over Q3-22 due to respective decreases in R&amp;D and G&amp;A spendings.</li> </ul>



# Management's Discussion and Analysis for the three and twelve-month periods ended January 31, 2022

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

## LIQUIDITIES AND CAPITAL RESSOURCES

			Change	
For the 12-month period ended on,	31-Jan-22	31-Jan-21	\$1	% <sup>2</sup>
Operating activities:			-	
Net loss from operations	(4,921)	(3,772)	(1,149)	30%
Other items not affecting cash	1,333	1,543	(210)	-14%
Changes in non-cash working capital	368	(752)	1,120	-149%
Cash used in operations	(3,220)	(2,981)	(239)	8%
Investing activities:				
Cash used in investing activities	(33)	(3)	(30)	100%
Financing activities:				
Cash provided by financing activities	1,164	5,051	(3,887)	-77%
Cash, beginning of year	2,379	302	2,077	688%
Increase (decrease) in cash	(2,089)	2,067	(4,156)	-201%
Effect of foreign exchange on cash	23	10	13	130%
Cash, end of year	313	2,379	(2,066)	-87%
Additional Information <sup>3</sup>				
Adjusted Cash end of the year Balance - Pro-forma	2,838	2,379	459	19%

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

3. Adjusted cash, end of year takes into consideration, the net proceeds from the April 5, 2022 Private Placement (See "Subsequent Events")

	Q4-22 vs Q4-21
Cash used in operations	<ul> <li>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.</li> </ul>
	• Cash used in operations has increased by 8% at \$3.2 million for the FY-22 period as compared to \$3.0 million for FY-21 period. The \$0.2 million increase results from a \$1.1 million increase in net loss, a \$0.2 million decrease in items not affecting cash, but more importantly a \$1.1 million positive impact from changes in non-cash working capital which included the restatement of the short term portion of the CDU to long term for \$1.8 million less the \$0.9 million impact of the December 2021 Bridge financing.
Cash used in investing activities	• The Corporation used \$33 to acquire equipment during FY-22 compared to almost nil for FY-21. The equipment will be used by the clinical trial centers to perform work required as per our Clinical trial protocol for the upcoming Ortho-R Phase I/II trial.
Cash provided by financing activities	• Financing activities contributed \$1.2 million during FY-22 period including \$1.0 million from the December Bridge financing, \$0.1 million government grant to support R&D work, as well as \$0.1 million from the exercise of warrants. This compares to \$5.1 million for FY-21 which included \$2.5 million proceeds from the issuance of shares and \$3.3 million from the issuance of debentures.
Cash, End of the year	• The Corporation ended FY-22 with \$0.3 million of cash compared to \$2.4 million at the end of FY-21 representing a \$2.1 million decrease.
Adjusted Cash Balance end of year	• Adjusted cash, end of year takes into consideration, the net proceeds from the April 5, 2022 Private Placement (See "Subsequent Events")
Pro-Forma	• Taking into consideration the closing of the April 5, 2022 financing, cash at the end of the year would have been \$2.8 million instead of \$0.3 million.
	• On April 5, 2022, the Corporation announced the closing of an oversubscribed non-brokered private placement of units for total gross proceeds of \$3.2 million of which \$2.7 million was received in cash, \$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. The net proceeds following payment of finders' fees and other financing costs was \$2.5 million.



# Management's Discussion and Analysis for the three and twelve-month periods ended January 31, 2022

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

#### Cash, and Working Capital

As a	at,
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As at,			Change	
	31-Jan-22	31-Jan-21	\$1	% <sup>2</sup>
Cash	313	2,379	(2,066)	-87%
Total current assets	722	2,840	(2,118)	-75%
Accounts payable and accrued liabilities	607	291	316	109%
Convertible debentures - Short term	-	1,848	(1,848)	-100%
Convertible notes	934	-	934	100%
Warrants presented as a liability	139	-	139	100%
Total current liabilities	1,869	2,311	(442)	-19%
Working Capital	(1,147)	529	(1,676)	-317%

Additional Information - Incorporates the net Impact of the April 5, 2022 Unit Offering

Adjusted Cash - Pro-forma <sup>3</sup>	2,838	2,379	459	19%
Working Capital - Pro-forma <sup>4</sup>	1,679	529	1,150	217%

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

Percentage change is presented in relative values 2.

3. Incorporate the net impact of the April 5, 2022 Unit Offering (See Subsequent Events" note).

The impacts resulting from the Unit Offering on the pro-forma Working Capital were measured as of January 31, 2022 and were therefore not 4. discounted to the transaction date. Discounting between January 31, 2022 and April 5, 2022 has not been taken into account as the impact would be insignificant.

Cash at the end of FY-22 was \$0.3 million as compared to \$2.4 million at the end of YE-21. However, after giving effect to the net impact of the April 5, 2022 Private Placement (See "Subsequent events") the Cash at the end of FY-22 would have been \$2.8 million.

During FY-22, the Corporation has raised \$1.2 million of financing as compared to \$5.1 million during the prior FY-21. As a result of the lower financings completed in FY-22 compared to the prior year, and as we used cash during FY-22 to fund operations, our working capital has deteriorated by \$1.7 million between YE-21 and YE-22. However, the extension of the CDUs has contributed to improve our working capital by \$1.8 million. All CDUs are now maturing on May 1, 2023. After giving effect to the net impact of the April 5, 2022 Private Placement (See "Subsequent events") our working capital at the end of FY-22 would have been \$1.7 million.

ORT continued to make significant progress towards the start of its first human trial on Ortho-R for rotator cuff repair. Despite some operational delays due to our interaction with the FDA, the Corporation expects to meet this important corporate milestone in FY-22. 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 (See "Subsequent event" for details of the April 5, 2022 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. ORT has adequate financial resources to start its Ortho-R rotator cuff tear repair clinical program following the approval of its IND by the FDA (See "Overview of the Business" and "Going concern").

#### **Future financing**

As at January 31, 2022, ORT had 17.4 million warrants outstanding with an weighted average exercise price of \$0.52 of which 14.7 million warrants are subject to an acceleration clause. If the average VWAP of the Corporation's shares over any twenty (20) consecutive trading days is greater or equal to \$1.00, the Corporation may give notice to the warrant holder that it must exercise its remaining warrants within a period of 30 days from the date of receipt of the notice, failing which the warrants will automatically expire. The extent to which these warrants are exercised will be a function of the market price of the Corporation's underlying common shares and investors' view of the opportunity for shareholder value creation over the investment time for each individual investor. If the acceleration clause had been exercised for all warrants outstanding at the end of Q4-22 and for which the acceleration clause applied, the maximum influx of cash to the Corporation would have been approximately \$7.3 million. Assuming all warrants are exercised prior to their maturity a total of \$9.5 million could be raised.

On April 5, 2022, the Corporation completed a private placement and 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 \$2,702 was received in cash, an amount of \$220 was issued as a replacement to convertible notes issued in December 2021 and the balance in compensation for accounts payable and accrued liabilities. Each Unit consists of one (1) Class A share of the Company (each, a "Common share") and one Common share purchase warrant (each a "Warrant"). Each Warrant is 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-



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days from the date of receipt of the notice, failing which the Warrants will automatically expire. Assuming such warrants are accelerated, the total proceeds from the full exercise of the warrants would be \$5.6 million.

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/US based institutional or accredited investors. The Corporation is also actively promoting its technologies to strategic partners.

#### Discussion of operating cash requirements

All programs in the Corporation's current portfolio will require a significant investment to increase their market value (through, for example, clinical trials) or to attract a strategic partner. 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 \$20 million will be required to complete a Phase III Clinical trial prior to seek US regulatory approval for 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 expected to take place in the coming fiscal year. Ortho-M's development pathway and plan will be similar to Ortho-R and will benefit from all cGMP activities performed on scaling-up Ortho-R. Consequently, management estimates that \$1.5 million will be required prior to submitting an IND application prior to testing Ortho-M in human for meniscus tear repair. Ortho-C and Ortho-V are currently at earlier stage of development and management does not intend to commit any sums to the advancement of these projects until its successfully advances Ortho-R and Ortho-M in human clinical testing.

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.

In order to successfully advance its current R&D programs, ORT entered on into a Collaborative R&D Agreement with Polytechnique on June 19, 2015 to ensure access to Polytechnique's staff, expertise and laboratories. The agreement was amended twice to extend the term up to August 15, 2022. A new agreement is being negotiated and should be implemented prior to the maturity of the existing agreement.

#### **Related Party Transactions**

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

	January 31, 2022	January 31, 2021
Transactions with key management and members of the Board of Directors:		
Share-based compensation	113	211
Consulting fees	630	713
Interest earned on debentures	246	188
Interest earned on debentures by Manitex, a shareholder of the Corporation	215	203
R&D expenses incurred with École Polytechnique, a partner of Polyvalor, a shareholder of the Corporation	433	277

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

	January 31, 2022	January 31, 2021
Key management and directors:		
Accounts payable and accrued liabilities	143	62
Debentures and notes	1,199	1,018
Conversion options classified as embedded derivatives	501	-
Warrants classified as liability	31	-
Accrued interest on debentures and notes	42	50
Manitex Capital, a shareholder of the Corporation:		
Debentures and notes	915	861
Conversion options classified as liability	548	-
Warrants classified as liability	13	-
Accrued interest on debentures and notes	30	29
Polyvalor, a shareholder of the Corporation:		
Accounts payable due to École Polytechnique, a partner of Polyvalor	4	74



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#### **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, 2022		January 31, 2021	
	Foreign Currency CAD equivalent		Foreign Currency	CAD equivalent
Cash – USD	100	128	810	1,035
Accounts payable and accrued liabilities – USD	294	374	51	65
Accounts payable and accrued liabilities – EUR	6	8	1	1

A plus or minus 5% variation in exchange rate, all else being held equal, would result in a foreign exchange gain or loss of \$25 (\$55 in fiscal 2021).

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

As at January 31, 2021	Carrying value	Contractual cash flows	Less than 12 months	Greater than 12 months
Financial liabilities				
Accounts payable and accrued liabilities	291	291	291	-
Accrued interest on debentures	172	172	172	-
Long-term loan	40	40	-	40
Convertible debentures	2,476	3,134	2,354	780
Non-convertible debentures	2,099	3,850	300	3,550
Total	5,078	7,487	3,117	4,370



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#### (d) Capital risk management

The Corporation's objective when managing capital is to ensure that it has enough financial resources to meet its financial obligations 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. 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.

#### Off balance sheet arrangements

The Corporation does not have any off-balance sheet arrangements.

#### **Statement of Compliance**

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

#### **Use of Estimates and Judgements**

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