

Management's Discussion and Analysis for the three and nine-month periods ended Oct 31, 2021

(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 for the third quarter of fiscal year 2022, ended on October 31, 2021, and compares those of the same period in the fiscal year 2021. This MD&A is the responsibility of management and has been reviewed by the Corporation's Audit Committee and approved by ORT's Board of Directors on December 21, 2021. 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, majority of which are independent. This document should be read in conjunction with the unaudited financial statements and notes thereto for the fiscal quarter ended on October 31, 2021, which have been prepared in accordance with International Financial Reporting Standards ("IFRS"). Unless otherwise noted, all amounts are presented in thousands of Canadian dollars, except for share and per share amounts. Further information about ORT, including the Annual Information Form, is available online on SEDAR at www.sedar.com.

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 nine months ended on October 31, 2021, the Corporation incurred a net loss of \$4.1 million and used cash in operations of \$2.2 million. Considering the above, and the working capital deficit of \$0.2 million as of October 31, 2021, the Corporation's performance raises significant doubt about its 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 quarter and year-to-date period ended October 31, 2021, 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. Management believes that the progress made in the US in fighting the pandemic will trigger an acceleration of the elective orthopedic surgeries which have been subject to delays over the last year. Elective surgeries levels are key to ensure enrollment in our US Phase I/II clinical trial on rotator cuff tear repair.

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 & Financial

CDU	Convertible Debenture Units
EBITDA (L)	EBITDA Loss
FV	Fair Value
FY	Fiscal Year
G&A	General and Administrative
IR	Investors Relations
ITC	Investment tax credits
NCDUs	Non-Convertible Debenture Units
Q3-22	Third quarter FY-22
Q2-22	Second quarter FY-22
Q1-22	First quarter FY-22
Q4-21	Fourth quarter FY-21
Q3-21	Third quarter FY-21
Q2-21	Second quarter FY-21
Q1-21	First quarter FY-21
Q4-20	Fourth quarter FY-20
SR&ED	Scientific Research and Experimental Development Expenses
R&D	Research and Development
YTD	Year to date
YE	Year-end
W/C	Working Capital, defined as short-term assets less short-term liabilities

Corporate & Operations

API	Active Pharmaceutical Ingredient
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
ORT	Ortho Regenerative Technologies Inc.
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

ORT has been 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. 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 an emerging Orthopaedic and Sports Medicine biologics company dedicated to the development of novel therapeutic soft tissue repair technologies to dramatically improve the success rate of orthopaedic and sports medicine surgeries. The Corporation’s proprietary biopolymer has been specifically designed to increase the healing rates of occupational and sports related injuries to tendons, ligaments, meniscus, and cartilage. The biopolymer – autologous PRP combination implant, can be directly placed into the site of injuries by surgeons during routine operative procedures without significantly extending the duration of surgeries and without further interventions. The Corporation’s technology was developed at Polytechnique by senior researchers at the Biomaterials and Cartilage Laboratory and are still actively involved in the day-to-day development of ORT’s pipeline.

ORT is the owner of 4 patent families. Our patent portfolio includes the following:

- Patent Family 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.
- Patent Family No.2: Novel formulation of physiological biopolymer-inorganic salt solution/blood mixtures for tissue repair. *This patent family was abandoned on November 9, 2019*. The company’s Freeze-Dried platform patents (family 3-4, covers all applications found in the Patent Family No.2 plus many other claims, such as faster coagulation onset time, easier use for the clinicians and a much longer commercially viable shelf life.
- Patent Family No.3: Freeze-dried polymer compositions for mixing with platelet rich plasma to form implants for tissue repair or compositions for therapeutic intra-articular injection.
- Patent Family No.4: 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.

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Development Pipeline

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	<p>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 has been filed on April 6th, 2021, with the FDA to obtain approval to initiate a 78 patient Phase I/II clinical trial to test Ortho-R in the repair of rotator cuff tears as an adjunct to standard of care surgery, versus standard of care surgery alone. (See “Regulatory and Clinical update – Ortho-R for Rotator Cuff Repair” section below for details of our ongoing interaction with FDA related to our IND application).</p> <p>After clearance of our IND by the FDA and clinical site’s Ethical Review Board’s approval, enrollment will start at clinical sites. Eight clinical sites have already been qualified, budget negotiations have started and 4 more are undergoing the same processes, with the goal to secure 10 sites total. Patient enrollment is expected to start within 4-6 weeks of our IND approval by the FDA, and to be completed 6 to 8 months after, depending on sites’ enrolment rate. (See “Subsequent Events”)</p>
<u>ORTHO-M</u>	Pre-Clinical	Meniscus	<p>Testing the efficacy of ORTHO-M/PRP Drug-Biologic Implant formulation, for meniscus repair. Efficacy of our product has already been demonstrated in a 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 FY-23. Human clinical trials would then follow.</p>
<u>ORTHO-C</u>	Pre-Clinical	Cartilage repair	<p>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.</p>
<u>ORTHO-V</u>	Feasibility	Osteoarthritis	<p>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.</p>

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.

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Preclinical:

In Q3-21, 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. https://www.orthorti.com/cms_files/phpfQwJvt.pdf

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 & Clinical:

During FY-21, we received from the US FDA Office of Combination Products, the ORTHO-R product designation as a Drug/Biologics combination product. ORTHO-R has physicochemical interacting actions on various cell types and other PRP components, therefore supporting a Drug/Biologic combination product. The ORTHO-R reconstituted in PRP Drug/biologic implant is delivered through accessory Devices. The product's jurisdictional assignment is to the FDA's Center for Biologics Evaluation and Research (CBER). There are multiple merits of a Drug/Biologics therapeutic combination product. One of them is the ability to have a multiple mode of action label, related to the various interactions between our proprietary biopolymer and PRP, which may justify the scientific rationale behind the product's therapeutic effect.

The following summarizes our interaction with the FDA with respect to the filing and ongoing review of the ORTHO-R Investigational New Drug (IND) application:

- Our Investigational New Drug (IND) application to the FDA was submitted on April 6, 2021.
- On June 4, 2021, the Corporation received a clinical hold letter from the FDA relating to its IND application. FDA requested five additional clarification and requests, related to Chemistry, Manufacturing, and Control ("CMC").
- On July 19, 2021, The Corporation provided a formal response to the FDA's clinical hold letter, to address the requested CMC-related data and characterization information.
- On August 17, 2021, The Company received, a "Second Clinical Hold" letter from the FDA. In our July response, the three most complex addressed issues were accepted by the FDA. The second FDA Clinical Hold letter referred to further clarification on CMC Elemental impurity testing method and a request to use a different testing method for small molecule impurity testing.
- The Company worked with its U.S. CMC testing experts on the new FDA requests related to advanced methods of elemental and small-molecule impurities characterization testing used in the CMC processes. On September 2, 2021, The Company responded to the Second Clinical Hold letter first request, by submitting additional clarification on elemental impurities identification and quantification testing methods to the FDA. The Company addressed the second request, by accepting the FDA's recommendation to use GC-LC-MS for small molecule impurities testing instead of HCLP-PAD used by our CMC manufacturer and final satisfaction of the FDA.
- Concurrently as a proactive step, the Company has requested a type A meeting with the FDA, should the FDA still request further clarification on the proposed elemental impurities testing method. This meeting would involve the participation of our U.S. CMC testing experts that use the same IPC-MS testing method for their other Biopharma industry clients for drugs and biologics when submitting INDs to the FDA.
- On October 1, 2021, the Company received a letter from the FDA related to the two final pending CMC elements for which more information was required, in which the FDA cleared the small-molecule impurity testing issue, with Ortho committing to using a GC-LC-MS testing method.
- On October 5, 2021, the Company had a successful type A meeting with the FDA regarding the last pending topic, which was related to elemental impurity testing method. The FDA requested the use of standard reference material and provided a list of certified standards to consider. The Company reached a mutual agreement with the FDA during the Type-A meeting and committed to performing the requested recovery study using one of the suggested standard reference materials.

While waiting for our IND clearance (granted by the FDA on December 10, 2021 - See "Subsequent Events"), we continued working on our Phase I/II clinical trial preparation activities to ensure we minimize the impact on our overall timelines. Current activities focus mainly on surgery and study protocol, patients' assessment EDC system, MRI procedure protocol and systems qualification and clinical sites considerations and qualifications.

Ortho Regenerative Technologies Inc.



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So far, eight sites have already been qualified, budget negotiation have started, and Clinical Review Board (CRB) applications have started to be submitted. Four other U.S. sites are still being qualified, with the goal to reach 10 clinical sites to participate in our Rotator Cuff Tear repair clinical trial.

Following clearance of our IND application by the FDA (See “Subsequent Events”) patients’ screening and enrollment would be expected to start within 4 to 6 weeks after Clinical Review Boards (CRB) approvals from the various U.S. clinical testing centers involved in our Phase I/II study.

Over the past quarters, the Corporation has tried to mitigate the impact of the COVID-19 pandemic as much as possible. We believe that the significant progress made in the US fighting the pandemic will favor a substantial increase in elective rotator cuff repair surgeries across the United States in 2021 and 2022 compared to 2020. We feel this may help the investigational sites, in their patient’s screening, recruitment and inclusion selection process, to participate in our U.S. Phase I/II clinical trial.

The following tables presents a summary of the past and projected milestones based on calendar quarters/years for the 2019-2023 period, including progress as compared to prior MD&A reporting:

PROGRAMS	Calendar Year 2021-2023	2021	Q1-22	Q2-22	Q3-22	Q4-22	H1-23	H2-23	
ROTATOR CUFF REPAIR PROGRAM (Ortho-R)	US Phase I/II Clinical trial								
	IND approval	☑							Granted
	Pre-enrollment activities								
	CRO Selection	☑							Completed
	Protocol	☑							Completed
	Lead Investigator selection	☑							Completed
	Study sites selection	☑							Completed
	Clinical sites qualification	☑							Completed
	Patient Enrollment								
	Patient enrollment		→		■				
12-mth patient follow up			→					■	
Study results								■	
MENISCUS REPAIR PROGRAM (Ortho-M)	Pre-clinical studies								
	Development of surgery procedures (animal)		■						
	Pre-clinical Pilot study sheep			→		■			
	Pre-clinical Pivot study sheep					→		■	
	IND filing							→	

→ Initiation
 ■ Current Target Completion
 □ previous target last quarter
 ☑ Completed

Third quarter 2022 CORPORATE HIGHLIGHTS

ORTHO-R Program

- 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 on the Company’s IND application for the initiation of its ORTHO-R Phase I/II clinical trial. The Company reached a mutual agreement with the FDA during the Type-A meeting and committed to performing the requested recovery study using one of the suggested standard reference materials.

Financing and Other Corporate Highlights

- On September 21, 2021, the Corporation extended its ongoing collaborative research agreement with Ecole Polytechnique until May 2022. Financial commitments under the extension total \$590 including \$446 due over the next twelve month. The Corporation previously entered into an initial research service agreements with École Polytechnique on June 19, 2015 (the “Initial Poly Agreement”), 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. In 2018, the term of the Initial Poly Agreement was extended a first time up to May 15, 2021.

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Subsequent Events

- 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. The Phase I/II clinical trial will enroll 78 patients at ten clinical sites throughout the U.S. The ORTHO-R Phase I/II study is a prospective, randomized, controlled, and blinded clinical trial.
- On December 13, 2021, the Company 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 21700 finders’ warrants in connection with the Capital Raise.

SELECTED FINANCIAL DATA

The following table sets forth financial information relating to the periods indicated and should be read in conjunction with the October 31, 2021 unaudited quarterly financial statements.

Statements of Loss

	Q3-22	Q3-21	Change		YTD-22	YTD-21	Change	
	\$	\$	\$ ¹	% ²	\$	\$	\$ ¹	% ²
Expenses								
R&D	591	191	400	209%	1,134	751	383	51%
G&A	357	342	15	4%	1,162	1,035	127	12%
Share-based compensation	43	101	(58)	-57%	170	170	-	0%
Financial	266	179	87	49%	937	548	389	71%
FV adjustment of embedded derivative	666	-	666	100%	666	-	666	100%
Net Loss and Comprehensive loss	1,923	813	1,110	137%	4,069	2,504	1,565	63%
Loss per share								
Weighted average number of shares outstanding	34,855,186	31,025,327	3,829,859	12%	34,881,608	26,852,952	8,028,656	30%
Basic and diluted loss per share	0.06	0.03	0.03	111%	0.12	0.09	0.02	25%

EBITDA Loss 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 Q3-22 as compared to Q3-21.

	Q3-22	Q3-21	Change		YTD-22	YTD-21	Change	
	\$	\$	\$ ¹	% ²	\$	\$	\$ ¹	% ²
Net loss	1,923	813	1,110	137%	4,069	2,504	1,565	63%
Add (deduct)								
Financial Expense	266	179	87	49%	937	548	389	71%
FV adjustment of embedded derivative	666	-	666	100%	666	-	666	100%
Depreciation	10	15	(5)	-33%	27	46	(19)	-41%
Amortization	8	8	-	0%	24	24	-	0%
EBITDA Loss	973	611	362	59%	2,415	1,886	529	28%

1. A positive variance represents a negative impact to net loss and a negative variance represents a positive impact to net loss
2. Percentage change is presented in relative values

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

	Q3-22 vs Q3-21	YTD-22 vs YTD-21
Revenues	<ul style="list-style-type: none"> • ORT is a clinical stage company. There were no revenues generated during each of Q3-22 and Q3-21. 	
R&D Expenses	<ul style="list-style-type: none"> • R&D expenses include internal and external expenses. Internal expenses represent mostly salaries and consulting fees for our staff. External expenses include development costs related to our Collaborative R&D contract with Polytechnique as well as specific manufacturing, regulatory, pre-clinical and clinical work to advance our pipeline. • R&D expenses are presented net of R&D tax credits (ITCs) recoverable from the provincial government for Scientific Research and Experimental Development (SR&ED) programs and presented net of government grants which are recognized in reduction of R&D costs and amortized over the term of the project for which the grant was secured. 	<ul style="list-style-type: none"> • Net R&D expenses for the YTD-22 have increased by 51% over YTD-21 at \$1.1 million compared to \$0.8 million. The R&D spending has increased during the YTD period as the Company completed CMC, Regulatory and pre-enrollment activities for its Ortho-R Phase I/II trial compared to mainly CMC activities during the YTD-21 period.
G&A expenses	<ul style="list-style-type: none"> • 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 Q3-22 was \$0.4 million compared to \$0.3 million for the Q3-21 period representing a nominal 4% variance. 	<ul style="list-style-type: none"> • G&A spending for YTD-22 was \$1.2 million compared to \$1.0 million for the YTD-21 period. The increase in G&A expense was due to an increase in IR spending compared to the prior year period.
Share-based compensation (SBC)	<ul style="list-style-type: none"> • 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. 	
Financial expenses	<ul style="list-style-type: none"> • Over the last year, the Corporation financed its operations via the issuance of interest-bearing instruments such as CDUs, NCDUs and ITC loans as opposed to equity. While such financial instruments do not lead to an immediate dilution in the total number of shares outstanding in the short term, they lead to increased interest charges. • Between October 2020 and April 2021, the Corporation has completed three (3) CDU financings totalling \$3.2 million. The 3 CDUs are still outstanding and will mature on May 1, 2023 unless converted prior to maturity. • Finally, the Corporation secured a \$3.0 million non-convertible debenture in November 2020. All these transactions have impacted the financial expenses. 	<ul style="list-style-type: none"> • YTD financial expenses totaled \$0.9 million for the YTD-22 period compared to \$0.5 million for YTD-21. • The increase is due to the new \$3.0 million NCDU financing secured in Q4-21 partly offset by ITC loans reimbursed from the proceeds of the same financing.
Fair Value of Embedded Derivative	<ul style="list-style-type: none"> • On July 19, 2021, the Corporation announced the amendment of three series of CDUs to extend their respective maturity dates. (See “Balance Sheet Highlights” for more details). • An Embedded derivative was created following the amendment of the CDUs. • Starting Q3-22, any change in the Fair Value of the Conversion Option of the CDUs (“FVCO”) will be recorded as a financial expense. 	
	<ul style="list-style-type: none"> • The increase in share price during the quarter has led to an increase in the FVCO representing \$0.7 million. There was no embedded derivative as at Q3-21. 	
Net Loss for the period.	<ul style="list-style-type: none"> • Net loss increased by 137% between Q3-21 and Q3-22 at \$1.9 million compared to \$0.8 million. The increase in net loss is due to the increase in R&D 	<ul style="list-style-type: none"> • Same as for the QoQ periods, net loss for the YTD-22 period has increased over YTD-21 due to the increase in R&D activities as well as financial expenses and the impact of the FVCO.

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	activities as well as financial expenses and the impact of the FVCO.	
EBITDA (L)	<ul style="list-style-type: none"> 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 NCCA financings, and ITC financings (up until Q4-21) as well as depreciation and the amortization of intangible assets. 	
	<ul style="list-style-type: none"> After eliminating the impact of the financial expenses, FVCO, as well as depreciation, and amortization our EBITDA loss during Q3-22 was \$1.0 million up 59% compared to \$0.6 million for Q3-21. 	<ul style="list-style-type: none"> EBITDA loss for the YTD-22 period was \$2.4 million compared to \$1.9 million for the YTD-21 representing a 28% increase.

Selected Balance Sheet Highlights

The following table sets forth the financial information related to the Corporation’s statements of financial position for the periods indicated and should be read in conjunction with the unaudited financial statements for quarter ended October 31, 2021.

As at,	31-Oct-21	31-Jan-21	Change	
	\$	\$	\$ ¹	% ²
Cash	210	2,379	(2,169)	-91%
Prepays and deposits	217	258	(41)	-16%
Intangible Assets	340	364	(24)	-7%
Total assets	962	3,277	(2,315)	-71%
Trade accounts payable and accrued liabilities	609	291	318	109%
Convertible Debentures - Short term	-	1,848	(1,848)	-100%
Convertible Debentures - Long term	2,326	628	1,698	270%
Embedded derivative	1,860	-	1,860	100%
Non-Convertible Debentures	2,280	2,099	181	9%
Total liabilities	7,281	5,078	2,203	43%
Common shares	7,891	7,706	185	2%
Warrants	1,989	2,080	(91)	-4%
Equity Components of convertible debentures	-	469	(469)	-100%
Contributed surplus	1,876	1,605	271	17%
Deficit	(18,075)	(13,661)	(4,414)	32%

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	Q3-22 vs YE-21
Cash	<ul style="list-style-type: none"> Cash at the end of Q3-22 was \$0.2 million compared to \$2.4 million at the end of FY-21. During the YTD-22 period, our liquidities have been used to fund operations and have reduced by \$1.5 million. See subsequent events for details regarding additional financings.
Prepays and deposits	<ul style="list-style-type: none"> Prepays and deposits have decreased by 16% between YE-21 and the end of Q3-22 at \$0.2 million compared to \$0.3 million.
Intangible Asset	<ul style="list-style-type: none"> Intangible assets reflect the net book value of our patents and biopolymer technology acquired from Polyvalor. The nominal reduction between YE-21 and Q3-22 results from amortization charges which were not offset by new investments.
Total assets	<ul style="list-style-type: none"> The decrease in cash during YTD-22 led to a 71% decrease in our total assets as at the end of Q3-22 as compared to the end of FY-21.
Trade payables and accrued liabilities	<ul style="list-style-type: none"> Trade accounts payables and accrued liabilities have increased by 109% since the start of the FY-22 and reflecting the increase in R&D spending.
Convertible debentures units (CDU)	<ul style="list-style-type: none"> Between October 2019 and April 2020, the Corporation issued \$3.2 million worth of CDUs to fund its operations. At the end of FY-21, the short- and long-term portion of CDUs amounted to \$2.5 million, compared to \$2.3 million at the end of Q3-22. On July 19, 2021, 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 debentures prior to their maturity. Finally, the maturity date of the new CDUs may be

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	<p>accelerated should the Corporation raise a minimum of \$10 million cumulative financing before their conversion/maturity.</p> <ul style="list-style-type: none"> 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 \$1.2 million as a liability. (See “Embedded Derivative” below) Also, as a result of this amendment, and considering all CDUs are now presented as long-term liabilities, our working capital improved by \$1.8 million.
Embedded Derivative	<ul style="list-style-type: none"> The Embedded derivative was created following the amendment of the CDU described above. Going forward, any change in the Fair Value of the Conversion Option of the CDUs (“FVCO”) will be recorded as a financial expense in the statements of loss, as a gain or loss on embedded derivative related to convertible debentures. Changes to the FVCO will take 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. During Q3-22, the FVCO increased by \$0.7 million thus increasing the net value of the embedded derivative of the CDU to \$1.9 million.
Non-convertible Debentures (NCDU)	<ul style="list-style-type: none"> During Q4-21 the Corporation secured a \$3.0 million NCDU financing that enabled the repayment of ITC loans and increased the Corporation’s liquidities. The increase of \$0.2 million between YE-21 and Q3-22 represents accretion expense for the YTD-22 period.
Total Liabilities	<ul style="list-style-type: none"> Total liabilities have increased by \$2.2 million between YE-21 and Q3-22 mainly as a result of the impact of the CDU extension which led to the creation of a \$1.9 million embedded derivative. The balance of the difference is mainly due to the \$0.3 million increase in trade payables.
Common Shares	<ul style="list-style-type: none"> Common shares have increased by \$0.2 million during YTD-22 due to the conversions of some CDUs for \$0.1 million as well as \$0.1 million from the exercise of warrants.
Warrants	<ul style="list-style-type: none"> Warrants decreased by \$0.1 million following the exercised of some warrants during YTD-22.
Equity component of CDUs	<ul style="list-style-type: none"> The equity component of the convertible debentures represented the fair value of the conversion features of these CDUs. 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	<ul style="list-style-type: none"> The \$0.3 million increase relates to net impact for stock options issued during the YTD period.
Deficit	<ul style="list-style-type: none"> Increase reflects the performance of the Corporation for the YTD-22 period. (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 October 31, 2021. 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.

	Q3-22	Q2-22	Q1-22	Q4-21	Q3-21	Q2-21	Q1-21	Q4-20
R&D Expenses	591	141	402	390	191	195	365	142
G&A expenses	357	367	438	472	342	186	507	136
Share-based compensation	43	64	63	112	101	49	20	74
Financial expenses	266	332	338	294	179	201	168	125
FV adjustment of embedded derivative	666	-	-	-	-	-	-	-
Loss per share (Basic and diluted):	0.06	0.03	0.04	0.03	0.07	0.04	0.02	0.03
EBITDA Loss	1,923	904	1,241	1,268	813	631	1,060	477

(See “Management’s Responsibility for Financial Reporting” – “Non-IFRS Financial Measures”)

Notes	Valuable information
R&D expenses (Net of ITCs and Grants)	<ul style="list-style-type: none"> Net R&D expenses represent gross R&D expenses less ITC provisions related to these costs as well as the amortization of grants specific to ongoing R&D programs. During Q3-22, Net R&D expenses increased by 319% compared to the prior Q2-22 quarter mainly due to the acceleration of spending related to the Ortho-R Phase I/II clinical trial.

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	<ul style="list-style-type: none"> • R&D activities picked up late last year as the Corporation completed its CMC batch manufacturing and other IND related activities. • We expect R&D expenses to increase to support the projected Phase I/II clinical trial for Rotator cuff repair.
G&A expenses	<ul style="list-style-type: none"> • G&A expenses consist primarily of salaries or consulting fees for non-scientific management and staff, professional fees for audit and tax related matters, in-house counsel, insurance, and fees paid to IR firms. • G&A expenses have fluctuated from quarter to quarter. • There has been nominal variation in G&A expenses over the last year except for IR spending which fluctuates for quarter to quarter. • 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. • Other expenses, such as rent, insurance, and office expenses, have been relatively stable and had no significant impact on the overall spending.
Share-Based Compensation	<ul style="list-style-type: none"> • Share-based compensation are costs for the issuance of stock options to senior management, staff, board of directors, scientific advisory board and consultants working for the Corporation. • Share-based compensation fluctuates as a result of staff changes, and due to the timing of expense recognition associated with the vesting of the options issued.
Financial expenses	<ul style="list-style-type: none"> • Financial expenses are costs associated with the CDUs, NCDUs, ITC loans, term loan and notes payable. • The increase in financial expenses over the recent quarters results from the CDUs and NCDUs financings closed over the last 2 years. • Interest charges on the CDUs may go down over time as CDU holders opt to convert their debenture prior to maturity. • Financial expenses have increased since Q4-21 after the NCDU financing closed on November 30, 2020. • ITC loans have been repaid in Q4-21 and will no longer impact our financial expenses going forward.
FV adjustment of embedded derivative	<ul style="list-style-type: none"> • On July 19, 2021, the Corporation announced the amendment of three series of CDUs to extend their respective maturity dates. (See “Balance Sheet Highlights” for more details). • An Embedded derivative was created following the amendment of the CDU. Starting Q3-22, any change in the Fair Value of the Conversion Option of the CDUs (“FVCO”) will be recorded as a financial expense. • The increase in share price during the quarter has led to an increase in the FVCO representing \$0.7 million. There was no embedded derivative as at Q3-21.
Net loss	<ul style="list-style-type: none"> • ORT’s 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 style="list-style-type: none"> • EBITDA (Loss) (See “Management’s Responsibility for Financial Reporting” – “Non-IFRS Financial Measures”) eliminates the impact of 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) has fluctuated with the level of G&A and R&D expenses. The EBITDA loss has increased by 113% over the prior Q2-22 quarter due to the increase in R&D spending related to the upcoming Phase I/II Ortho-R Rotator Cuff trial.

LIQUIDITIES AND CAPITAL RESSOURCES

For the 9-month periods ended on,	2021-10-31	2020-10-31	Change	
			\$ ¹	% ²
Operating activities:				
Net loss from operations	(4,069)	(2,504)	(1,565)	63%
Other items not affecting cash	1,423	1,226	197	16%
Changes in non-cash working capital	411	(714)	1,125	-158%
Cash used in operations	(2,235)	(1,992)	(243)	12%
Investing activities:				
Cash used in investing activities	(33)	(2)	(31)	100%
Financing activities:				
Cash provided by financing activities	134	2,501	(2,367)	-95%
Effect of foreign exchange on cash	(36)	-	(36)	100%
(Decrease) increase in cash	(2,170)	507	(2,677)	-528%
Cash, beginning of period	2,379	302	2,077	688%
Cash, end of period	210	809	(600)	-74%

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

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	Q3-22 vs Q3-21
Cash used in operations	<ul style="list-style-type: none"> 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 has increased by 12% at \$2.2 million for the YTD-22 period as compared to \$2.0 million for YTD-21 period. The \$0.2 million increase results from a \$1.6 million increase in net loss, a \$0.2 million increase in items not affecting cash, but more importantly a \$1.1 million positive impact from changes in non-cash working capital.
Cash used in investing activities	<ul style="list-style-type: none"> The Corporation used \$33 to acquire equipment during YTD-22 compared to nil for YTD-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	<ul style="list-style-type: none"> Financing activities contributed \$0.1 million during YTD-22 period including government grant to support R&D work, as well as \$0.1 million from the exercise of warrants. This compares to \$2.5 million for YTD-21 which included \$2.4 million proceeds from a unit offering.
Cash, End of the period	<ul style="list-style-type: none"> The Corporation ended Q3-22 with \$0.2 million of cash compared to \$0.8 million at the end of Q3-21 representing a \$0.6 million decrease. (See “Subsequent Events” for details of the December 13, 2021, Private Placement)

Cash, and Working Capital

As at,	2021-10-31	2021-01-31	Change	
	\$	\$	\$ ¹	% ²
Cash	210	2,379	(2,169)	-91%
Total current assets	543	2,840	(2,297)	-81%
Accounts payables and accrued liabilities	609	291	318	109%
Convertible debentures – Short term	-	1,848	(1,848)	-100%
Total current liabilities	762	2,311	(1,549)	-67%
Working Capital	(219)	529	(748)	-141%
<u>Additional Information – Considering net impact of Dec. 13, 2021 Financing</u>				
Cash	1,258	2,379	(1,121)	-47%
Working Capital	808	529	279	52%

1. A positive variance represents a positive impact and a negative variance represents a negative impact
2. Percentage change is presented in relative values

Cash at the end of Q3-22 was \$0.2 million as compared to \$2.4 million at the end of YE-21. However, after giving effect to the net impact of the December 13, 2021, private placement (See “Subsequent events”) the Cash at the end of Q3-22 would have been \$1.3 million.

Despite the cash used to fund operations and no financing secured during the YTD-22 period, our working capital has only deteriorated by \$0.7 million between YE-21 and Q3-22 due to the extension of CDUs which contributed to improve our working capital by \$1.8 million. All CDUs are now maturing on May 1, 2023.

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 December 13, financing) to fund its 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 enough 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 October 31, 2021, ORT had 18.3 million warrants outstanding with an average exercise price of \$0.52. 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

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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 Q3-22 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.

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

Discussion of operating cash requirements

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

Ortho-R for the repair of rotator cuff tears is a clinical development stage program and represents our lead product for commercialization. We currently estimate that an additional investment of at least \$5 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 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.

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 in 2018 and 2021 to extend the term up to May 15, 2022.

Statement of Compliance

The unaudited interim financial statements included in this MD&A for the quarter ending October 31, 2021 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 2021 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.