

Management’s Responsibility for Financial Reporting

This Management’s Discussion and Analysis (“MD&A”) for Ortho Regenerative Technologies Inc. (the “Corporation” or “Ortho RTI”) provides an overview of the Corporation’s operations, performance and financial results for the quarter and fiscal year ended on January 31, 2019 and compares those of the same periods in 2018 and is the responsibility of management and has been reviewed and approved by its Board of Directors. The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the MD&A. The Board of Directors carries out this responsibility principally through its Audit Committee. The Audit Committee is appointed by the Board of Directors and is comprised of financially literate directors. This report was reviewed by the Corporation’s Audit Committee on May 29, 2019 and approved by Ortho RTI’s Board of Directors on May 29, 2019 and should be read in conjunction with the financial statements for the year ended January 31, 2019. Unless otherwise noted, all amounts are presented in thousands of Canadian dollars, except for share and per share amounts.

The ability of the Corporation to fulfill its obligations and finance its future activities depends on its ability to raise capital and the continuous support of its creditors. The Corporation believes its efforts to raise sufficient funds to support its activities will be successful, however, there is no assurance that funds will continue to be raised on acceptable terms. This indicates the existence of a material uncertainty that may cast a significant doubt about the ability of the Corporation to continue as a going concern without obtaining additional financial resources. Failure to obtain such additional financing could result in delay or indefinite postponement of the Corporation’s strategic goals. These financial statements do not include any adjustments to the amounts and classification of assets and liabilities that would be necessary should the Corporation be unable to continue as a going concern. Such adjustments could be material.

Forward-looking statements

The information contained in this MD&A may contain some forward-looking statements. Forward-looking information is not limited to information with respect to our future financial and operating performance, future development activities and adequacy of financial resources. Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience. Our forward-looking statements are based on the reasonable beliefs, expectations and opinions of management on the date of this management analysis. Although we have attempted to identify important factors that could cause actual results to differ from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking information.

GLOSSARY OF ABBREVIATIONS

Abbreviation	Calendar & Financial
FY-19	The Fiscal Year ended on January 31, 2019
FY-18	The Fiscal Year ended on January 31, 2018
G&A	General and Administrative
ITC	Investment tax credits
Q1-19	First quarter 2019
Q2-19	Second quarter 2019
Q3-19	Third quarter 2019
Q4-19	Fourth quarter 2019
Q1-18	First quarter 2018
Q2-18	Second quarter 2018
Q3-18	Third quarter 2018
Q4-18	Fourth quarter 2018
R&D	Research and Development
YTD	Year to date

Abbreviation	Corporate & Operations
cGMP	current Good Manufacturing Practice
CMO	Contract Manufacturing Organization
FDA	US Food and Drug Administration
IND	Investigational New Drug application with the FDA
MRI	Magnetic Resonance Imaging
Ortho RTI	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
Polytechnique	Ecole Polytechnique de Montreal
PRP	Platelet-rich plasma

Ortho Regenerative Technologies Inc.



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

Overview of the Business

Ortho RTI has been incorporated under the Canada Business Corporations Act. The Company's head office and principal address and registered office is located at 16,667 Hymus Blvd., Kirkland, Quebec, Canada. The Corporation's shares are publicly traded on the Canadian Securities Exchange ("CSE") under the symbol "ORTH." The Corporation has 24,752,424 common shares that are issued and fully paid as of January 31, 2019 of which 6,905,329 shares are held in escrow.

Ortho RTI is an emerging Orthopaedic and Sports Medicine biologics company dedicated to the development of novel therapeutic soft tissue technologies to dramatically improve the success rate of sports medicine repair surgeries. Our proprietary biopolymer has been specifically designed to increase the healing rates of sports related injuries to tendons, meniscus, ligaments and cartilage. The polymer can be directly placed into the site of injury by a surgeon during a routine operative procedure without significantly extending the time of the surgery and without further intervention.

The Corporation's technology was developed at Ecole Polytechnique de Montreal, and senior researchers at Polytechnique are still actively involved in the day-to-day development of Ortho RTI's pipeline.

Development Pipeline

Ortho RTI's pipeline includes four active R&D projects, composed of two active development-stage projects:

- **Ortho-R** - Assessing the clinical efficacy of our biopolymer for Rotator Cuff repair, and
- **Ortho-M** - Testing the efficacy of our biopolymer for bilateral meniscus repair,

as well as two research-stage projects

- **Ortho-C** - Feasibility research on a freeze-dried matrix with ultra-high porosity designed to augment bone marrow stimulation procedures for articular cartilage repair, including microfracture and drilling, and
- **Ortho-V** - Feasibility research on a freeze-dried biopolymer formulation tailored for intra-articular injections and visco-supplementation applications such as the reduction of Osteoarthritis pain.

Considering the significant bioactivity and residency of our proprietary biopolymer, Ortho RTI also continues to assess the potential for applying its proprietary biopolymer for uses outside of the soft tissue repair.

Ortho-R for Rotator Cuff repair

Ortho-R is a freeze-dried formulation that contains a biopolymer, a lyoprotectant and a clot activator. This freeze-dried formulation can be solubilized in platelet-rich plasma ("PRP") to form injectable implants that coagulate after implantation. Extensive in vitro testing has allowed the Corporation to identify specific formulations that meet the criteria for optimal commercial products:

- (i) rapid and complete solubilization in PRP;
- (ii) biopolymer-PRP mixtures which have the paste-like handling properties desired by surgeons;
- (iii) biopolymer-PRP mixtures that coagulate rapidly to form solid biopolymer-PRP hybrid implants;
- (iv) biopolymer-PRP 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 in conjunction with suturing techniques produced promising histological findings in small and large animal models, which is expected to translate into superior rotator cuff repair. No adverse events were found in any of the above-mentioned animal studies, which suggests a high level of safety.

Additional information relating to the Corporation can be found on SEDAR at www.sedar.com.

2019 Highlights

The Corporation's main activities for FY-19 consisted in funding development activities in relation to its lead project Ortho-R. Significant progress has taken place in 2019 which culminated with the start of a 6-month pivotal animal study in January 2019 as well as a pre-IND meeting with the FDA (in February 2019) to formalize the requirements for the filing of our application to commence Phase I/II human clinical trials on Ortho-R.

Other notable development and corporate highlights during the year included:

In April 2018, the Corporation announced positive preliminary MRI outcomes data from a study examining its Ortho-R technology in the biologic repair of rotator cuff injuries. Conducted by Polytechnique, the pilot dose escalation study used MRI outcomes, to compare the results of Ortho-R versus standard of care in a non-clinical rotator cuff injury model in sheep. In this study, treatment with Ortho-R was shown to significantly improve healing, as measured by gap reduction between the tendon and bone, versus standard of care, with the highest Ortho-R dose having the greatest effect.

In June 2018, the Corporation announced positive outcomes data from a study examining its Ortho-R technology in the biologic repair of rotator cuff injuries. Conducted by researchers from Polytechnique, the dose ranging study used histopathology, the microscopic examination of biological tissues, to compare the results of Ortho-R versus standard of care in a non-clinical rotator

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2019 Highlights – cont'd

cuff injury model in sheep. In this study, treatment with Ortho-R was shown to improve healing versus standard of care, with the highest Ortho-R dose having the greatest effect. Treatment with Ortho-R showed improvements in the structural organization of the tendon and the structural appearance of the tendon insertion site. In addition, clinical signs and histopathology showed no treatment-specific adverse effects, suggesting high safety of Ortho-R.

In August 2018, the Corporation signed a letter of agreement with Polytechnique for a three-year collaborative research and development contract for a total amount of \$887 payable over 3 years commencing September 1, 2018.

In September 2018, Ortho RTI announced that it entered into an agreement with a leading CMO to commence work for providing the Corporation with cGMP grade material of Ortho-R required for clinical trials and strategic partnering initiatives.

On December 19, 2018 the Corporation signed a short-term loan agreement to finance its ITC's in an amount of \$364. The loan is secured by a first-rank moveable hypothec on all assets, and bears interest at a fixed rate of 1.5% per month.

In January 2019, Ortho RTI initiated a 6-month pivotal animal study on Ortho-R for rotator cuff repair. The pivotal study is designed and powered to show statistically significant healing for rotator cuff repair by way of MRI and Histopathology. The study is also designed to assess whether the repair could be accelerated or further improved with a higher dose of Ortho-R. This study represents the last development step prior to being able to file an IND with the FDA in order to start human trials on Ortho-R.

Selected Fiscal Year Financial Data

The following table sets forth financial information for the Corporation for the periods indicated and should be read in conjunction with the audited financial statements for the year ended January 31, 2019.

	2019	2018	Change	Change
	\$	\$	\$	%
Expenses				
R&D	1,082	652	430	+66%
G&A	1,223	1,136	87	8%
Financial	94	234	(140)	-60%
Total Operating Expenses	2,399	2,022	377	19%
Net loss and comprehensive loss	2,399	2,022	377	19%

Revenue

There was no revenue generated for FY-19, and FY-18.

Expenses

Operating expenses were \$2,399 for the year as compared to \$2,022 for the prior year representing a 19% increase. R&D expenses increased as Ortho RTI continued to progress towards the commencement of its first human clinical program planned for 2020. R&D activities in 2019 included the initiation of scale-up and manufacturing activities of cGMP grade Ortho-R material, as well as the start of a large animal study representing the final step prior to filing an IND in the US. G&A expenses remained stable with a nominal 8% increase. The nominal increase related to more active investor relations activities.

Research and development costs

For the respective periods, R&D costs consisted of:

	2019	2018	Change	Change
	\$	\$	\$	%
Research costs	28	461	(433)	-94%
Development costs	1,036	316	720	+228%
Patent costs	189	86	103	+120%
Amortization – intangible asset	32	24	8	+33%
Depreciation – equipment	57	-	57	+100%
Total	1,342	887	455	+51%
Investment tax credit	(260)	(235)	(25)	+11%
Total	1,082	652	430	+66%

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Research and development costs – cont'd

Research costs included amounts paid under a contract with Polytechnique for work conducted on Ortho-C and Ortho-V. Research costs were \$28 for the year as the Ortho-C contract was completed in May 2018, which represents four months in FY-19 compared to twelve months in FY-18.

Development costs included costs related to work performed under a Collaborative Research and Development contract with Polytechnique for Ortho R and Ortho M as well as expenses related to third party development, manufacturing, and regulatory work, which included the initiation of a large animal study before the end of the period.

Patent prosecution costs increased by \$103 year over year as our patent portfolio continued to progress in the various jurisdictions included the commencement of national phases in Europe.

Depreciation costs were \$57 for FY-19 as scientific equipment previously purchased by the Corporation is now in use.

The timing of R&D costs per project since inception is as follows:

	Ortho R	Ortho M	Ortho C	Total
	\$	\$	\$	\$
Expenditures incurred in prior years	944	800	496	2,240
Additional expenditures in FY-19	998	37	28	1,063
Total accumulated expenditures	1,942	837	524	3,303

The table above demonstrates that emphasis put by Ortho RTI's management on moving Ortho-R forward as the first indication for the Corporation's biopolymer platform.

General and administrative expenses

For the respective periods, G&A expenses consisted of:

	2019	2018	Change	Change
	\$	\$	\$	%
Professional and consulting	370	286	85	+29%
Office and administrative	719	645	74	+11%
Share-based compensation	134	205	(71)	-35%
Total G&A expenses	1,223	1,136	88	+8%

Overall G&A expenses increased by \$88 as compared to the year-ago period. Professional and consulting fees increased by \$85 due to an increase in investor relations activities and fees paid to outside firms. The Corporation retained the services of these firms to seek guidance and assistance in developing market strategies to broaden its shareholder base.

Office and administrative expenses increased due partly to a severance paid to the former chief financial officer. Share-based compensation was lower when comparing the YTD periods. The decrease in the period was due to the fact that fewer options were granted in the current period.

Financial charges

For the respective periods, financial charges consisted of:

	2019	2018	Change	Change
	\$	\$	\$	%
Interest and bank charges	54	52	2	+4%
Interest on convertible loan	98	75	23	+31%
Change in fair value of Class "A" shares	-	107	107	-100%
Gain on debt extinguishment	(58)	-	(58)	+100%
Total	94	234	(140)	-60%

Polyvalor had an agreement with the Corporation that would require it to redeem Polyvalors' shares of the Corporation at fair value, if those shares were not listed on a recognized stock exchange by June 19, 2022. On October 10, 2017, the Corporation listed its shares on the CSE and therefore, these shares met the criteria for classification to equity. On this date the Corporation determined that the fair value of the shares as \$ 0.50, and a loss was recorded when these equity instruments were reclassified from a financial liability to equity in FY-18.

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Financial charges – cont'd

In FY-19, a gain was recorded on debt extinguishment when the Corporation determined that the revised terms of the extension of the convertible debt were substantially different than the original terms of the loan. As a result, the Corporation accounted for the loan as an extinguishment of the original loan and the recognition of a new financial liability.

Excluding the aforementioned items, financial charges increased in FY-19 as compared to the year ago period as a result of an additional period of interest accretion on the convertible debt.

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 FY-19.

	2019	2018	Change	Change
	\$	\$	\$	%
Cash	524	450	74	+16%
Current assets	998	649	349	+54%
Investment tax credits (ITC) (current & non-current)	378	403	(25)	-6%
Intangible Assets	428	460	(32)	-7%
Non-current assets	606	863	(257)	-30%
Total assets	1,604	1,512	92	+6%
Liabilities - current	1,338	758	580	+77%
Liabilities - non-current	854	607	247	+41%
Total liabilities	2,192	1,365	827	+61%
Common shares	5,430	3,843	1,587	+41%
Warrants	665	758	(93)	-12%
Contributed surplus	718	548	170	+31%
Deficit	7,401	5,003	2,398	+48%

Cash

The cash situation at the end of the period improved by 16% as compared to the previous year position, as a result of Ortho RTI securing ITC financing as well as the collection of part of the ITC filed for prior periods.

Investment Tax Credits

Total current and non-current ITC's have decreased by 6% as the Corporation collected \$285 for prior periods vs the addition of \$260 representing new claims made or to be made.

Intangible Asset

Ortho RTI is the owner of 4 patent applications filed since 2009. It also owns improvements to the technology discovered through work it funded at Polytechnique. The current patent portfolio includes the following:

- (i) 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;
- (ii) Patent Family No.2: Novel formulation of physiological biopolymer-inorganic salt solution/blood mixtures for tissue repair;
- (iii) 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;
- (iv) 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 deposition.

The \$32 reduction represents amortization for FY-19, compared to \$24 in FY-18.

Liabilities

Liabilities are comprised of accounts payable in the amount of \$974 compared to \$246 last year, ITC loans in the amount of \$364 compared to \$273 last year, a note payable of \$139 compared to \$239 last year, a convertible loan in the amount of \$652 compared to \$607 and a derivative liability of \$63 compared to nil last year as at January 31, 2018.

The large increase in accounts payable between the two year-end periods is due to the start of a large animal study in the last month of the year 2019 which led to the Corporation being invoiced for amounts totaling \$267 prior to year-end 2019.

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Liabilities – cont'd

On December 19, 2018 the Corporation signed a short-term loan agreement to finance its ITC's in an amount of \$364. The loan is secured by a first-rank moveable hypothec on all assets, and bears interest at a fixed rate of 1.5% per month.

The note payable is due to Manitex, the Corporation's largest shareholder, bears interest at 12% and matures on February 1, 2020. Also, notwithstanding the maturity date, the note shall be repayable upon closing of a private placement or other equity or loan financing with net proceeds of a minimum of \$2.5 million.

On January 31, 2019, the maturity of the convertible loan was extended to February 1, 2020. The original loan amount plus accrued interest is now repayable on February 1, 2020. As a result of this extension, the interest rate was increased from 10% to 12%. The agreement was also amended to include that any time until the maturity date, Manitex may notify in writing the Corporation of its intention to convert the loan amount, or any portion thereof, including accrued interest up until the date of such notice, into Class "A" shares of the Corporation at a price equal to the price per Class "A" share that is the lesser of (i) one (1) dollar per Class "A" share or (ii) the price per Class "A" share offered to investors in the course of an external round of financing ongoing at the time of the notice, or (iii) the price per Class "A" share that has been paid by investors in the most recent external round of financing that has closed within thirty (30) days prior to the date of the notice.

Summary of Quarterly Results

The following table sets out the Corporation's selected unaudited quarterly financial information for the eight quarters ended January 31, 2019. This information is derived from unaudited quarterly financial statements prepared by management and in accordance with IFRS and is expressed in Canadian dollars. 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.

	FY-19				FY-18			
	Q4 \$	Q3 \$	Q2 \$	Q1 \$	Q4 \$	Q3 \$	Q2 \$	Q1 \$
Net R&D costs	743	145	81	113	279	226	82	65
Share-based compensation	36	50	25	23	49	51	99	6
Other G&A expenses	149	330	339	271	248	323	263	97
Financial expenses (income)	(19)	29	39	45	65	163	(21)	27
Net loss for the quarter	909	554	484	452	641	763	423	195
Loss per share (Basic and diluted):	0.04	0.02	0.02	0.02	0.03	0.04	0.02	0.02

There are three main categories of expenses: R&D costs, G&A and financial expenses. R&D Costs represents all costs prior to taking into account the ITC's related to those costs. Net R&D costs represents the R&D costs less ITC provisions to be claimed after year-end. G&A expenses include 1) share-based compensation for the issuance of options to senior management, staff, board of directors, scientific advisory board and consultants working for the Corporation, as well as 2) salaries for non-scientific management and support staff, recurrent professional and consulting fees, expenses for audit and tax related matters, in-house counsel, fees paid to investor relations firms.

R&D costs have fluctuated from quarter to quarter depending on the timing of work performed by our partners and suppliers. The amount of R&D costs as well as ITC provisions have increased in the last quarter of FY-19 as the Corporation commenced its large pivotal animal study for testing Ortho-R for rotator cuff repair.

Share-based compensation decreased by \$71 in FY-19 to \$134 from \$204 in FY-18. This was primarily due to the options granted to the new CEO in Q2-18 and to a new employee and members of the board and the advisory board, which form part of their compensation. In Q2-19, the Corporation granted options to two consultants for services to be rendered over the next 18 months and granted options to the new chief financial officer in September 2018.

Other G&A expenses have fluctuated from quarter to quarter. During Q2-19, the Corporation made changes to its senior management team, which resulted in the termination of the then acting CFO, and nomination of a new Senior Vice president and CFO. The net effects of this change included a severance payment paid in Q3-19 to the prior CFO, the net reduction of salaries/fees paid for the CFO role starting in Q3-19. Fees for maintenance and filing of patents have been consistent over the comparable periods. Other expenses, such as rent, insurance, and office expenses, have been relatively stable and had no significant impact on the overall amount.

Financial expenses decreased significantly in FY-19 as compared to FY-18, due to the repayment of the short-term loan agreement secured by investment tax credits and by the partial repayment of the unsecured note payable due to Manitex.

In addition, the non-cash item, that being a net change in the fair value of Class "A" shares in a net amount of \$107, resulted from the shares being reclassified from a liability to equity. An equity instrument shall be measured at the carrying value of the financial liability at the date of reclassification. As of the Q3-18, the shares have been reclassified as equity at fair value.

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Cash Flows, Liquidity and Capital Resources

Sources and Uses of Cash

	2019	2018
	\$	\$
Provided by (used in):		
Operating activities	(1,384)	(1,920)
Investing activities	(76)	(196)
Financing activities	1,534	2,558
(Decrease) increase in cash	74	442
Cash, beginning of period	450	8
Cash, end of period	524	450

At the end of FY-19, the Corporation had cash resources of \$524 compared to \$450 at the end of FY-18. During FY-19, the Corporation closed a financing agreement in the amount of approximately \$1,504, prior to deducting issue costs of \$67, and used approximately \$1,384 to fund operating activities and another \$76 to purchase laboratory equipment required to complete the scale-up manufacturing of its proprietary biopolymer in anticipation of the initiation of human clinical trials for testing Ortho-R for rotator cuff repair. In addition, the Corporation repaid the short-term loan of \$279 and secured a new ITC loan for \$389.

At the end of the year, these cash resources may be insufficient to sustain operations through the end of the fiscal year in terms of funding operating activities and continuing the preclinical development plan with the CMO and CRO. Ortho RTI continues to seek financing from institutional life science investors based in Canada as well as the United States.

Future financing

As at January 31, 2019, Ortho RTI had 3,550,713 warrants outstanding exercisable at \$0.70 and 19,000 warrants outstanding exercisable at \$0.50. These warrants are currently in-the-money. All of the warrants contain a trigger provision that provides the Corporation with the discretionary ability to accelerate the expiry date to a period of 30 days: if the Corporation's weighted average share price for 30 consecutive trading days equals or exceeds \$1.00 per share, the Corporation may give notice to the warrant holders that they must exercise their warrants within a period of 30 days from the date of receipt of such notice. Any warrants not exercised during this reduced exercise period will 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 is exercised, the maximum inflow of cash to the Corporation would be approximately \$2,495. Considering the terms of the warrants outstanding at the end of FY-19, the Corporation proceeded with the extension of 905,000 warrants maturing on April 29, 2019 for an additional year. (See "Subsequent Event").

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 support operations going forward. The current focus in this regard is on securing private placements with accredited and institutional investors.

The Corporation's use of available funds over the coming year is of utmost concern to the Board. In order to secure the required capital necessary to fund its operations and development projects, the Corporation is actively attempting to raise funds through the issuance of equity or by securing strategic partners. Management continues to seek new investors from financial institutions and accredited investors.

Discussion of operating cash requirements

All four products in the Corporation's current portfolio will require a significant investment to increase their market value (through, for example, clinical trials) to attract a strategic partner. We currently estimate that an investment of at least \$35 million will be required over time to complete the R&D process, including regulatory approvals and manufacturing validations for all four products. There are several areas where duplication between product lines can be avoided, for example in the manufacture of the chitosan material, which is common across our product platform. We therefore do not need to replicate manufacturing capability, or the associated costs, for each of the four products.

Ortho-R is in a pure development phase and represents our lead product for commercialization. We anticipate filing our IND application with the FDA in the later part of fiscal year 2020. Management estimates that funds required to complete pre-clinical and scale-up activities for Ortho-R, including G&A and other recurring costs total approximately \$3 million.

Ortho-M 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

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Discussion of operating cash requirements – cont'd

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 for testing Ortho-M in human for meniscus tear repair.

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

In order to successfully advance its current R&D programs, Ortho RTI has entered on September 1, 2018 into a \$887 Collaborative R&D Agreement with Polytechnique to ensure access to Polytechnique's staff and expertise for the next three years.

Off-Balance Sheet Arrangements

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

Fourth Quarter Analysis

Results of the Corporation for the three-month periods ending on January 31 were:

	Q4-19	Q4-18	Change	Change
	\$	\$	\$	%
Expenses				
R&D	743	279	464	+166%
G&A	185	297	(112)	-38%
Financial expenses	(19)	65	(84)	-129%
Total Operating Expenses	909	641	268	+42%
Net loss and comprehensive loss	909	641	268	+42%

Revenue

There was no revenue generated for Q4-19 and Q4-18.

Expenses

R&D expenses were \$743 for Q4-19 as compared to \$279 for Q4-18. The increase relates to the initiation of large animal studies prior to year-end 2019. G&A expenses decreased as a result of lower salaries paid to senior management.

Research and development costs

For the respective periods, research and development costs consisted of:

	Q4-19	Q4-18	Change	Change
	\$	\$	\$	%
Research costs	-	169	(169)	-100%
Development costs	779	49	730	+1490%
Patent costs	105	54	51	+94%
Amortization – intangible asset	8	7	1	+14%
Depreciation – equipment	22	-	22	+100%
Total	914	279	635	+228%
Investment tax credit	(171)	-	(171)	+100%
Total	743	279	464	+166%

Research costs relate to work on Ortho-C and Ortho-V. There were no activities for these two earlier stage projects during Q4-19 as the Corporation focused on advancing its lead projects Ortho-R and Ortho-M. Development costs represented the research contracts paid to Polytechnique for Ortho R and Ortho M and costs related to the ongoing pivotal studies. Patent prosecution costs increased by \$51 on Q4-19 vs Q4-18 as two patent families advanced to national phases in Europe.

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General and administrative expenses

For the respective periods, G&A expenses consisted of:

	Q4-19	Q4-18	Change	Change
	\$	\$	\$	%
Professional and consulting fees	2	72	(70)	-97%
Office and administrative	147	176	(29)	-16%
Share-based compensation	36	49	(13)	-27%
Total	185	297	(112)	-38%

Overall G&A expenses decreased by \$112 in Q4-19 as compared to Q4-18. Professional and consulting decreased due to the reversal of \$59 in previously accrued investor relations fees. Office and administration costs were also lower in Q4-19 compared to Q4-18 following a reduction of salary expenses paid to the CFO. Share-based compensation decreased between the two periods as fewer options were granted during the year resulting in a lower expense during the period.

Financial charges

For the respective periods, financial charges consisted of:

	Q4-19	Q4-18	Change	Change
	\$	\$	\$	%
Interest and bank charges	14	16	(2)	-13%
Interest on convertible loan	25	25	-	0%
Change in fair value of Class "A" shares	-	24	(24)	-100%
Gain on settlement of debt	(58)	-	(58)	+100%
Total	(19)	65	(85)	-129%

Excluding the gain recorded last year relating to the derecognition of a liability on the Corporations class A shares and the gain recorded on the debt extinguishment, financial charges have remained stable between Q4-18 and Q4-19.

Transactions with Related Parties

The following table details the related party transactions presented in the statements of loss for the periods ended:

	2019	2018
	\$	\$
<i>Transactions with key management members and members of the Board of Directors:</i>		
Salaries and employee benefits expense	148	174
Share-based compensation to employees and directors	84	169
Consulting fees charged by a director, CEO and CFO	293	271
Consulting fees accrued for a director and acting CEO	-	10
<i>Transactions with a family member of a director and acting CEO</i>		
Consulting fees charged by the family member	-	15
<i>Transactions with Manitex, a shareholder of the Corporation:</i>		
Interest charged by Manitex	119	77
Consulting fees charged by Manitex	-	8
<i>Transaction with École Polytechnique, a partner of Polyvalor:</i>		
(Reversal of) accrued interest	-	(6)
Research and development costs	318	489

Compensation of key management includes directors, the President and CEO, and the Vice-President Finance and CFO.

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Transactions with Related Parties – cont'd

The following table presents the related party transactions, other than the loan payable and convertible loan, presented in the statement of financial position as at:

	2019	2018
	\$	\$
Accounts payable and accrued liabilities due to a director and acting CEO	-	10
Accounts payable due to Manitex, a shareholder of the Corporation	150	-
<i>Transaction with Polyvalor, holder of 1,073,333 common shares:</i>		
Amounts included in intangible asset	116	116

Use of Accounting Estimates and Judgements

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

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

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

Please refer to Note 3 of the annual audited financial statements 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.

Recently adopted accounting policies

IFRS 9, Financial Instruments

The Corporation has adopted IFRS 9, Financial Instruments ("IFRS 9") effective February 1, 2018 on a modified retrospective basis, in accordance with the transitional provisions of IFRS 9. As such, comparative figures have not been restated. IFRS 9 provides a revised model for recognition, measurement and impairment of financial instruments and includes a new model for hedge accounting aligning the accounting treatment with risk management activities. As detailed below, the Corporation has changed its accounting policy for financial instruments retrospectively, except where described below.

IFRS 9 includes a revised model for classifying financial assets, which results in classification according to a financial instrument's contractual cash flow characteristics and the business models under which they are held. At initial recognition, financial assets are measured at fair value. The following table presents the classification impacts on the financial assets and liabilities upon the adoption of IFRS 9. There was no significant impact with regards to the measurement of the financial assets and liabilities.

Asset / Liabilities	Classification under IAS 39	Classification under IFRS 9
Cash	Fair value through profit or loss	Amortized cost
Accounts payable and accrued liabilities	Other liabilities	Amortized cost
Short-term debt	Other liabilities	Amortized cost
Loan	Other liabilities	Amortized cost
Note payable	Other liabilities	Amortized cost
Convertible loan	Other liabilities	Amortized cost
Derivative liability	Other liabilities	FVTPL

Financial instruments are recognized initially at fair value, and in the case of financial liabilities, not subsequently measured at fair value, net of directly attributable transaction costs. Financial liabilities are derecognized when the obligation specified in the contract is discharged, cancelled, or expired. For financial liabilities, IFRS 9 retains most of the IAS 39 requirements. Accounts payable and accrued liabilities, short-term debt, loans, note payable and convertible loans are classified as financial liabilities to be subsequently measured at amortized cost. The adoption of IFRS 9 did not result in a change in the carrying values of any of the Corporation's financial liabilities on the transition date.

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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 the Corporation's 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

Cash flow and fair value interest rate risk

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

Currency risk

The Corporation has cash and accounts payable and accrued liabilities denominated in U.S. dollars. 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:

	USD \$	CDN equivalent \$
Cash	0.9	1.2
Accounts payable and accrued liabilities	(0.8)	(1.0)

For the comparative period the amount is not material.

If the foreign exchange rate had been 1% higher or lower, all other variables held constant, the impact of the foreign exchange gain or loss would not have been material.

(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, including interest payments, as at year end 2019, and 2018:

As at January 31, 2019	Carrying value \$	Contractual cash flows \$	Less than 60 days \$	60 days to 12 months \$	More than 12 months \$
Financial liabilities					
Accounts payable and accrued liabilities	974	974	603	371	-
ITC Loan	364	433	-	261	172
Note payable	139	155	-	-	155
Convertible loan	652	795	-	-	795
	2,130	2,358	603	632	1,122

As at January 31, 2018	Carrying value \$	Contractual cash flows \$	Less than 60 days \$	60 days to 12 months \$	More than 12 months \$
Financial liabilities					
Accounts payable and accrued liabilities	246	246	246	-	-
ITC Loan	273	279	-	279	-
Note payable	239	277	124	154	-
Convertible loan	559	706	-	-	706
	1,317	1,508	370	432	706

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(d) Capital risk management

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

Commitments

- a) On June 19, 2015, the Corporation entered into three long term research service agreements with École Polytechnique. When the Corporation’s product is commercialized, it must make non-refundable payments to Polyvalor equal to 1.5% of net sales.
- b) Effective January 1, 2018, the Corporation signed a sublease agreement for the period January 1, 2018 to December 31, 2021. The sublease agreement does not contain any contingent rent clause and both parties may terminate the sublease agreement by giving a two-month notice after the initial term of 6 months.
- c) In August 2018, the Corporation signed a letter of agreement with Polytechnique for a three-year collaborative research and development contract for a total amount of \$887 payable over 3 years commencing September 1, 2018.

The following table presents the minimum obligation over the next five years:

Year ending January 31,	Occupancy costs	R&D contract	Total
2020	24	444	468
2021	24	294	318
2022	22	74	96
	70	812	882

Subsequent events

- a) On February 27, 2019 the Corporation announced the results of a Pre-IND meeting with the FDA. Ortho RTI confirmed that its development program was on track to initiate its first human clinical trial on Ortho-R for Rotator Cuff repair before year-end 2020. The Corporation also confirmed that its product characterization, safety and toxicology were found to be in order, thus requiring no further developments.
- b) On April 29, 2019, a total of 905,000 warrants were extended from their original expiry date of April 29, 2019 to April 29, 2020. These warrants were issued in 2016 and 2017 and were originally issued as part of private placements.