

First Quarter Report

March 31, 2023



MANAGEMENT'S DISCUSSION & ANALYSIS

March 31, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This discussion and analysis should be read in conjunction with our unaudited condensed interim consolidated financial statements and notes thereto as at and for the three months ended March 31, 2023, and should also be read in conjunction with the audited consolidated financial statements and Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") contained in our annual report for the year ended December 31, 2022. The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Unless otherwise indicated, all references to "\$" and "dollars" in this discussion and analysis mean Canadian dollars.

All references in this MD&A to "the Company," "Oncolytics," "we," "us," or "our" and similar expressions refer to Oncolytics Biotech Inc. and the subsidiaries through which it conducts its business unless otherwise indicated.

FORWARD-LOOKING STATEMENTS

The following discussion contains forward-looking statements, within the meaning of Section 21E of the United States Securities Exchange Act of 1934, as amended and forward-looking information under applicable Canadian securities laws (such forward-looking statements and forward-looking information are collectively referred to herein as "forward-looking statements"). Forward-looking statements, including: our belief as to the potential and mode of action of pelareorep, an intravenously delivered immunotherapeutic agent, as a cancer therapeutic; our expectation that we will incur substantial losses and will not generate significant revenues until and unless pelareorep becomes commercially viable; our business strategy, goals, focus and objectives for the development of pelareorep, including our immediate primary focus on advancing our programs in hormone receptor-positive / human epidermal growth factor 2-negative metastatic breast cancer and advanced/ metastatic pancreatic ductal adenocarcinoma (PDAC) to a phase 3 licensure-enabling study; our exploration of opportunities for registrational programs in other gastrointestinal cancers through our GOBLET platform study; the impact of the COVID-19 pandemic, the global political conflict in Ukraine, and recent bank failures on our research and development activities, business operations and financial condition; our expectations regarding the delivery of additional clinical data, the timing thereof and the anticipated benefits and value to us of such additional clinical data; our current clinical development approach; our plan to manage the development of our clinical trial program, our preclinical and collaborative programs, our manufacturing process and pelareorep supply; our plans respecting regulatory approval for pelareorep; our expectations as to the purpose, design, outcomes and benefits of our current or pending clinical trials involving pelareorep; our expectations regarding enrollment under our clinical trials; our planned 2023 development program for pelareorep and primary 2023 clinical objectives; our 2023 manufacturing program; our belief that we have sufficient existing cash resources to fund our operations for at least twelve months; our plans respecting the maintenance of adequate cash reserves to support our planned activities; our plans for funding our capital expenditure requirements; our approach to credit rate, interest rate, foreign exchange and liquidity risk mitigation; the effectiveness of our internal control systems; and other statements that are not historical facts or which are related to anticipated developments in our business and technologies. In any forward-looking statement in which we express an expectation or belief as to future results, such expectations or beliefs are expressed in good faith and are believed to have a reasonable basis, but there can be no assurance that the statement or expectation, or belief will be achieved. Forward-looking statements involve known and unknown risks and uncertainties, which could cause our actual results to differ materially from those in the forward-looking statements. We may be impacted by business interruptions resulting from COVID-19 coronavirus and the global political conflict in Ukraine. It is unknown whether and how the Company may be affected if the COVID-19 pandemic and the global political conflict in Ukraine persist for an extended period of time. Recent bank failures could impair our ability to access our existing cash, cash equivalents, and marketable securities and to timely pay key vendors and others. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results, and financial condition.

Such risks and uncertainties include, among others, the need for and availability of funds and resources to pursue research and development projects, the efficacy of pelareorep as a cancer treatment, the success and timely completion of clinical studies and trials, our ability to successfully commercialize pelareorep, uncertainties related to the research, development, and manufacturing of pelareorep, uncertainties related to competition, changes in technology, the regulatory process, and general changes to the economic environment.

With respect to the forward-looking statements made within this MD&A, we have made numerous assumptions regarding, among other things: our ability to recruit and retain employees, our continued ability to obtain financing to fund our clinical

development plan, our ability to receive regulatory approval to commence enrollment in the clinical studies which are part of our clinical development plan, our ability to maintain our supply of pelareorep and future expense levels being within our current expectations.

Investors should consult our quarterly and annual filings with the Canadian and U.S. securities commissions for additional information on risks and uncertainties relating to the forward-looking statements. Forward-looking statements are based on assumptions, projections, estimates, and expectations of management at the time such forward-looking statements are made, and such assumptions, projections, estimates and/or expectations could change or prove to be incorrect or inaccurate. Investors are cautioned against placing undue reliance on forward-looking statements. We do not undertake any obligation to update these forward-looking statements except as required by applicable law.

Company Overview

We are a clinical-stage biopharmaceutical company developing pelareorep, a safe and well-tolerated intravenously delivered immunotherapeutic agent that activates the innate and adaptive immune systems and weakens tumor defense mechanisms. This improves the ability of the immune system to fight cancer, making tumors more susceptible to a broad range of oncology treatments.

Pelareorep is a proprietary isolate of a naturally occurring, non-pathogenic double-stranded RNA (dsRNA) virus commonly found in environmental waters, known as reovirus. Pelareorep has demonstrated the ability to create a more permissive tumor microenvironment (TME) and conditions the tumor for multiple treatment combinations, including chemotherapies, checkpoint inhibitors, and other immuno-oncology drugs, like CAR T therapies, bispecific antibodies, and CDK4/6 inhibitors. Pelareorep creates a new army of tumor-reactive T cells, helps these cells to infiltrate the tumor through an inflammatory process, and promotes the overexpression of PD-1/PD-L1. By priming the immune system with pelareorep, we believe we can increase the proportion of patients who respond to immunotherapies and other cancer treatments, especially in cancers where immunotherapies have failed or provided limited benefit.

As our clinical development program advances, we anticipate pelareorep's ability to enhance innate and adaptive immune responses within the TME will play an increasingly important role. This greatly increases opportunities for expanding our clinical program, business development, and partnering opportunities to address a broad range of cancers in combination with various other therapies. We believe this approach has the most promise for generating clinically impactful data and offers the most expeditious path to regulatory approval.

Our primary focus is to advance our programs in hormone receptor-positive / human epidermal growth factor 2-negative (HR+/HER2-) metastatic breast cancer (mBC) and advanced/metastatic pancreatic ductal adenocarcinoma (PDAC) to phase 3 licensure-enabling studies. In addition, we are exploring opportunities for registrational programs in other gastrointestinal cancers through our GOBLET platform study.

We have not been profitable since our inception and expect to continue to incur substantial losses as we continue research and development efforts. We do not expect to generate significant revenues until and unless pelareorep becomes commercially viable. As at March 31, 2023, we had cash, cash equivalents, and marketable securities of \$29,670. We believe we have sufficient existing cash resources to fund our presently planned operations for at least the next twelve months.

First Quarter 2023 Pelareorep Development Update

Clinical Trial Program



*mBC: Metastatic Breast Cancer; Adv: Advanced; L: Line; 1L#: First-line MSI-high focused; mCRC: Metastatic Colorectal Cancer

Breast cancer program

Co-development Agreement with Pfizer Inc. and Merck KGaA, Darmstadt, Germany: BRACELET-1 study

In 2019, we entered into a co-development agreement with Merck KGaA, Darmstadt, Germany and Pfizer Inc. to co-develop pelareorep in combination with paclitaxel and avelumab (Bavencio®), a human anti-PD-L1 antibody, for the treatment of HR+/HER2- mBC. This phase 2 clinical trial is jointly funded by Oncolytics and Pfizer. The study, known as BRACELET-1, is a randomised open-label study that enrolled 48 patients into three cohorts: paclitaxel alone, paclitaxel in combination with pelareorep, and paclitaxel in combination with both pelareorep and avelumab. PrECOG LLC, a leading cancer research network, is managing the BRACELET-1 study. We completed patient enrollment in the second quarter of 2022.

The study is examining the expression of immune-related biomarkers to identify changes in the T cell population between pretreatment and on-treatment biopsies and seeks to confirm our previously identified biomarker. It is designed to assess efficacy in terms of overall response rate at week 16 per RECIST 1.1. Key secondary and exploratory endpoints include the safety of the combination along with progression-free survival and overall survival. The results of this study may provide an opportunity to add an arm to our proposed registration study that includes a checkpoint inhibitor in addition to the chemotherapy-pelareorep combination. Furthermore, the results of the BRACELET-1 study may provide important confirmatory data in the same patient population as our IND.213 study, for which we presented a statistically significant near doubling of overall survival with pelareorep treatment in HR+/HER2- mBC. These endpoints, including the biomarker data, are expected to de-risk our contemplated registration study further, permitting for a smaller study with a higher likelihood of clinical success.

In the first quarter of 2023, we continued to evaluate the safety and efficacy of the treatment regimen for each cohort while preparing to present this data at the 2023 American Society of Clinical Oncology Annual Meeting. We monitored patients still on-study treatment and continued to follow patients through the survival follow-up timepoint.

Gastrointestinal cancer program

Collaboration with Roche and AIO-Studien-gGmbH: GOBLET platform study

Our GOBLET platform study is a collaboration with Roche and AIO-Studien-gGmbH, a leading academic cooperative medical oncology group based in Germany. The study is investigating the use of pelareorep, in combination with Roche's anti-PD-L1 checkpoint inhibitor atezolizumab (Tecentriq®), in patients with first-line advanced/metastatic PDAC, first- and third-line metastatic colorectal, and advanced anal cancers. Approximately 55 patients are planned for enrollment across these four separate cohorts, and the study is being conducted at 14 centers in Germany. The study's co-primary endpoints are safety and

objective response rate (ORR) at week 16. Key secondary and exploratory endpoints include additional efficacy assessments and evaluation of potential blood-based biomarkers (T cell clonality and CEACAM6). In 2022, we received clearance from the Paul Ehrlich Institute (PEI; Germany's medical regulatory body) for full enrollment of the trial's four cohorts. We also received the U.S. Food and Drug Administration (FDA) Fast Track designation for the treatment of advanced/metastatic PDAC using pelareorep in combination with atezolizumab, gemcitabine, and nab-paclitaxel. Fast Track designation is designed to facilitate the development and expedite the review of therapies to treat serious conditions and fill an unmet medical need. A clinical program that receives Fast Track designation may benefit from more frequent meetings and communications with the FDA to discuss development plans and ensure the collection of appropriate data needed to support approval.

In the first quarter of 2023, we monitored patients still on-study treatment in our advanced/metastatic PDAC cohort, and we continued enrolling and treating patients in our first- and third-line metastatic colorectal and advanced anal cancer cohorts. In addition, we progressed patient sample analysis activities.

Manufacturing and Process Development

During the first quarter of 2023, we completed a process development production run and continued various manufacturing process and analytical development projects. We also continued analytical testing, storage, and distribution activities to maintain our product supply. While we currently have sufficient drug product supply to support our clinical development program, we continued our activities to maintain our production capabilities. Ongoing bulk manufacturing and expanded filling capabilities are both part of the planned process validation. Continued process validation is required to ensure that the resulting product meets the required specifications and quality standards and will form part of our submission to regulators, including the FDA, for product approval.

Intellectual Property

At the end of the first quarter of 2023, we had been issued over 236 patents, including 21 U.S. and 11 Canadian patents, as well as issuances in other jurisdictions. We have an extensive patent portfolio covering the oncolytic reovirus and formulations that we use in our clinical trial program. These patent rights extend to at least the end of 2031.

Financing Activity

U.S. at-the-market (ATM) equity distribution agreement

During the three months ended March 31, 2023, we sold 2,663,036 common shares for gross proceeds of \$5,552 (US\$4,100) at an average price of \$2.08 (US\$1.54). We received proceeds of \$5,385 (US\$3,977) after commissions of \$167 (US\$123). In total, we incurred share issue costs (including commissions) of \$180.

Cash Resources

We ended the first quarter of 2023 with cash, cash equivalents, and marketable securities of \$29,670 (see "Liquidity and Capital Resources").

Global Business Conditions

General market conditions resulting from high inflation, high interest rates, global supply chain issues, the Russia-Ukraine conflict, COVID-19, bank failures, general economic uncertainty and other macroeconomic factors, as well as market conditions affecting companies in the life sciences industry in general, may make it difficult for us to obtain financing from the capital markets on attractive terms, or at all.

We face various risks related to public health issues, including epidemics, pandemics, and other outbreaks, such as the lingering effects of the COVID-19 pandemic. The effects and potential effects of the COVID-19 pandemic, including, but not limited to, its impact on general economic conditions, trade and financing markets, changes in customer behavior and continuity in business operations, creates significant uncertainty. In addition, the COVID-19 pandemic may cause an increase in costs resulting from our efforts to mitigate the effects. The extent to which the COVID-19 pandemic may continue to affect our business will depend on continued developments, including the duration of the pandemic and the extent of any further resurgences in cases in geographic areas that we operate, the emergence of new variants, some of which have been, and may be in the future, more transmissible or virulent than the initial strain, the timing, availability and acceptance of effective medical treatments and vaccines, the impact on capital and financial markets and the related impact on consumer confidence and spending, all of which are uncertain and cannot be predicted. Even if the COVID-19 pandemic subsides, we may continue to

suffer an adverse impact on our business due to the global economic effect of the pandemic, including any economic recession that has occurred or may occur in the future.

In late February 2022, Russia launched significant military action against Ukraine. The extent and duration of the military action, sanctions, and resulting market disruptions could be significant and could potentially have a substantial negative impact on the global economy and/or our business for an unknown period of time. The ramifications of the hostilities and sanctions may not be limited to Russia, Ukraine, and Russian or Ukrainian companies, and may spill over to and negatively impact other regional and global economic markets (including Europe and the United States), companies in other countries (particularly those that have done business with Russia and Ukraine) and on various sectors, industries and markets for securities and commodities globally. Any such volatility and disruptions may also magnify the impact of other financial market risks and uncertainties described herein.

Recent bank failures could impair our ability to access our existing cash, cash equivalents, and marketable securities and to timely pay key vendors and others. For example, on March 10, 2023, Silicon Valley Bank (SVB) was placed into receivership with the Federal Deposit Insurance Corporation (FDIC), which resulted in all funds held at SVB being temporarily inaccessible by SVB's customers. Although we did not have any funds in SVB or other institutions that have been closed, we cannot guarantee that the banks or other financial institutions that hold our funds will not experience similar issues. If other banks and financial institutions with whom we have banking relationships enter receivership or become insolvent in the future, we may be unable to access, and we may lose, some or all of our existing cash, cash equivalents, and marketable securities to the extent those funds are not insured or otherwise protected by the FDIC or Canadian Deposit Insurance Corporation (CDIC). In addition, in such circumstances we might not be able to timely pay key vendors and others. We regularly maintain cash balances that are not insured or are in excess of the FDIC/CDIC's insurance limit. Any delay in our ability to access our cash, cash equivalents, and marketable securities (or the loss of some or all of such funds) or to timely pay key vendors and others could have a material adverse effect on our operations and cause us to need to seek additional capital sooner than planned.

In addition, investor concerns regarding the U.S. or international financial systems could result in less favorable commercial financing terms, including higher interest rates or costs and tighter financial and operating covenants, or systemic limitations on access to credit and liquidity sources, thereby making it more difficult for us to acquire financing on terms favorable to us, or at all, and could have material adverse impacts on our liquidity, our business, financial condition or results of operations.

Pelareorep Development for the Remainder of 2023

Our primary 2023 clinical objectives will focus on delivering interim data from our BRACELET-1 and GOBLET clinical studies and assessing our clinical data to help form the nature of our registration strategy, our path to approval, and other possible clinical development opportunities.

Our 2023 manufacturing program will focus on progressing a process development program implementing single-use equipment for our drug substance production process and executing a manufacturing production run. We also expect to fill product and perform the associated analytical testing, as well as labeling, packaging, and distribution of pelareorep to our various clinical sites for ongoing and upcoming activities. Additionally, we will advance other product and analytical development activities toward registration readiness. Finally, our intellectual property program includes filings for additional patents and monitoring activities required to protect our patent portfolio.

Subsequent Events

On April 26, 2023, we announced that we have been selected for an oral presentation on our BRACELET-1 results at the American Society of Clinical Oncology Annual Meeting, which is taking place from June 2 - 6, 2023.

Results of Operations

Comparison of the three months ended March 31, 2023, and 2022:

Unless otherwise indicated, all amounts below are presented in thousands of Canadian dollars, except for share amounts.

Net loss for the three months ended March 31, 2023, was \$6,437 compared to \$6,779 for the three months ended March 31, 2022.

Research and Development Expenses ("R&D")

Our R&D expenses decreased by \$169 from \$3,708 for the three months ended March 31, 2022, to \$3,539 for the three months ended March 31, 2023. The following table summarizes our R&D expenses for the three months ended March 31, 2023, and 2022:

	Thr				
		2023		2022	Change
Clinical trial expenses	\$	909	\$	1,093	\$ (184)
Manufacturing and related process development expenses		872		703	169
Intellectual property expenses		143		205	(62)
Translational science expenses		_		109	(109)
Personnel-related expenses		1,380		1,226	154
Share-based compensation expense		194		359	(165)
Other expenses		41		13	28
Research and development expenses	\$	3,539	\$	3,708	\$ (169)

The decrease in our R&D expenses for the three months ended March 31, 2023, was primarily due to the following:

- Decreased clinical trial expenses as a result of lower BRACELET-1 study costs as the trial was in the patient follow-up
 phase throughout the first quarter of 2023, compared to the patient enrollment and treatment phase throughout the
 same period the previous year; and
- Decreased share-based compensation expense reflecting the impact of the vesting of options granted in prior periods.

The above decreases were partly offset by the following:

- Increased manufacturing and related process development expenses associated with the completion of a process development production run; and
- Increased personnel-related expenses caused by a change in salary level, the strengthening of the U.S. dollar, and an
 increase in headcount.

General and Administrative Expenses ("G&A")

Our G&A expenses increased by \$593 from \$2,602 for the three months ended March 31, 2022, to \$3,195 for the three months ended March 31, 2023. The following table summarizes our G&A expenses for the three months ended March 31, 2023, and 2022:

	Thr				
	2023			2022	 Change
Public company-related expenses	\$	2,201	\$	1,564	\$ 637
Office expenses		774		660	114
Share-based compensation expense		123		280	(157)
Depreciation - property and equipment		21		24	(3)
Depreciation - right-of-use assets		76		74	2
General and administrative expenses	\$	3,195	\$	2,602	\$ 593

The increase in our G&A expenses for the three months ended March 31, 2023, was primarily due to increased public company-related expenses due to higher investor relations activities. The increase was partly offset by lower share-based compensation expense reflecting the impact of the vesting of options granted in prior periods.

Foreign Exchange

Our foreign exchange gain for the three months ended March 31, 2023, was \$1 compared to a loss of \$474 for the three months ended March 31, 2022. The foreign exchange impact mainly reflected the fluctuation of the U.S. dollar versus the Canadian dollar throughout the respective periods. For the three months ended March 31, 2022, the foreign exchange loss was primarily due to unrealized translation losses on U.S. dollar-denominated cash balances.

Summary of Quarterly Results

Historical patterns of expenditures cannot be taken as an indication of future expenditures. Our current and future expenditures are subject to numerous uncertainties, including the duration, timing, and costs of R&D activities ongoing during each period and the availability of funding from investors and prospective partners. As a result, the amount and timing of expenditures and, therefore, liquidity and capital resources may vary substantially from period to period.

	2023		2022				2021	
	March	Dec. ⁽³⁾	Sept.	June	March	Dec.(3)	Sept.	June
Revenue	_	_	_	_	_	_	_	_
Net loss ⁽¹⁾⁽²⁾	(6,437)	(8,554)	(4,407)	(5,095)	(6,779)	(7,751)	(4,872)	(7,246)
Basic and diluted loss per common share ⁽¹⁾⁽²⁾	\$ (0.10) \$	(0.14) \$	(0.08) \$	(0.09)	\$ (0.12)	\$ (0.14)	\$ (0.09)	\$ (0.13)
Total assets ⁽⁴⁾	35,328	37,334	38,959	40,239	44,446	45,880	52,593	56,309
Total cash, cash equivalents, and marketable securities ⁽⁴⁾	29,670	32,138	32,362	33,689	39,483	41,262	48,087	50,799
Total long-term debt	_	_	_	_	_	_	_	_
Cash dividends declared ⁽⁵⁾	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

- (1) Included in consolidated net loss and loss per common share are share-based compensation expenses of \$317, \$749, \$500, \$490, \$639, \$1,129, \$1,007, and \$1,032, respectively.
- (2) Included in consolidated net loss and loss per common share are foreign exchange gain (loss) of \$1, \$(274), \$1,526, \$888, \$(474), \$(326), \$1,212, and \$(631), respectively.
- (3) Included in consolidated net loss and loss per common share were annual short-term incentive awards.
- (4) We issued 2,663,036 common shares for net cash proceeds of \$5.4 million in 2023 (2022 6,284,125 common shares for net cash proceeds of \$12.6 million).
- (5) We have not declared or paid any dividends since incorporation.

Liquidity and Capital Resources

As a clinical-stage biopharmaceutical company, we have not been profitable since our inception. We expect to continue to incur substantial losses as we continue our research and development efforts. We do not expect to generate significant revenues until and unless pelareorep becomes commercially viable. To date, we have funded our operations mainly through issuing additional capital via public offerings, equity distribution arrangements, and the exercise of warrants and stock options. For the three months ended March 31, 2023, we were able to raise funds through our U.S. ATM.

We have no assurances that we will be able to raise additional funds through the sale of our common shares. Consequently, we will continue to evaluate all types of financing arrangements. On June 16, 2022, we renewed our short form base shelf prospectus (the "Base Shelf") that qualifies for distribution of up to \$150.0 million of common shares, subscription receipts, warrants, or units (the "Securities") in either Canada, the U.S. or both. Under a Base Shelf, we may sell Securities to or through underwriters, dealers, placement agents, or other intermediaries. We may also sell Securities directly to purchasers or through agents, subject to obtaining any applicable exemption from registration requirements. The distribution of Securities may be affected from time to time in one or more transactions at a fixed price or prices, which may be subject to change, at market prices prevailing at the time of sale or at prices related to such prevailing market prices to be negotiated with purchasers and as set forth in an accompanying Prospectus Supplement.

Renewing our Base Shelf provides additional flexibility when managing our cash resources as, under certain circumstances, it shortens the time required to close a financing and is expected to increase the number of potential investors that may be prepared to invest in the Company. Funds received from using our Base Shelf would be used in line with our Board approved budget and multi-year plan. Our renewed Base Shelf will be effective until July 16, 2024.

Our Base Shelf allowed us to enter our ATM equity distribution agreements (see Note 6 of our condensed interim consolidated financial statements). We use these equity arrangements to assist us in achieving our capital objective. These arrangements provide us with the opportunity to raise capital and better manage our cash resources.

As at March 31, 2023, and December 31, 2022, we had cash and cash equivalents, marketable securities, and working capital ratios as follows:

	March 31, 2023	December 31, 2022
Cash and cash equivalents	\$ 15,872	\$ 11,666
Marketable securities	\$ 13,798	\$ 20,472
Working capital ratio	13.88	9.05

We define working capital ratio as current assets divided by current liabilities, as presented on our condensed interim consolidated statement of financial position. We have no debt other than accounts payable and accrued liabilities and lease liabilities. We have commitments and contingent obligations relating to completing our research and development of pelareorep.

The following table summarizes our cash flows for the periods indicated:

	Th	ree Months E		
		2023	2022	Change
Cash used in operating activities	\$	(7,829)	\$ (6,252)	\$ (1,577)
Cash provided by (used in) investing activities		6,669	(36)	6,705
Cash provided by financing activities		5,271	5,014	257
Impact of foreign exchange on cash and cash equivalents		95	 (505)	 600
Increase (decrease) in cash and cash equivalents	\$	4,206	\$ (1,779)	\$ 5,985

Cash used in operating activities

The change reflected higher net operating activities and non-cash working capital changes.

Cash used in operating activities for the three months ended March 31, 2023, consisted of a net loss of \$6,437 less non-cash adjustments of \$163 and non-cash working capital changes of \$1,555. Non-cash items primarily included share-based compensation expense and unrealized foreign exchange gain. Non-cash working capital changes mainly reflected an increased use of cash to decrease accounts payable and accrued liabilities.

Cash used in operating activities for the three months ended March 31, 2022, consisted of a net loss of \$6,779 less non-cash adjustments of \$1,184 and non-cash working capital changes of \$657. Non-cash items primarily included share-based compensation expense and unrealized foreign exchange loss. Non-cash working capital changes were mainly due to cash used to increase prepaid expenses partly offset by a decrease in other receivables and liabilities related to our BRACELET-1 codevelopment agreement.

Cash provided by (used in) investing activities

The change was primarily related to the maturities of marketable securities in the first quarter of 2023.

Cash provided by financing activities

The change was mainly due to our U.S. ATM activities. During the three months ended March 31, 2023, we sold 2,663,036 common shares for gross proceeds of \$5,552 (US\$4,100) at an average price of US\$1.54. During the three months ended March 31, 2022, we sold 2,431,300 common shares for gross proceeds of \$5,267 (US\$4,174) at an average price of US\$1.72.

We desire to maintain adequate cash reserves to support our planned activities, including our clinical trial program, product manufacturing, administrative costs, and intellectual property protection. To do so, we estimate our future cash requirements by preparing a budget and a multi-year plan annually for review and approval by our Board. The budget establishes the approved activities for the upcoming year and estimates the associated costs. The multi-year plan estimates future activity along with the potential cash requirements and is based on our assessment of our current clinical trial progress along with the expected results from the coming year's activity. Budget to actual variances are prepared and reviewed by management and are presented quarterly to the Board.

We continue to manage our research and development plan to ensure optimal use of our existing resources as we expect to fund our expenditure requirements and commitments with existing working capital. Additional activities continue to be subject to adequate resources, and we believe we will have sufficient existing cash resources to fund our presently planned operations for at least the next twelve months. Factors that will affect our anticipated cash usage for which additional funding might be required include, but are not limited to, expansion of our clinical trial program, the timing of patient enrollment in our approved clinical trials, the actual costs incurred to support each clinical trial, the number of treatments each patient will receive, the timing of R&D activity with our clinical trial research collaborations, the number, timing and costs of manufacturing runs required to conclude the validation process and supply product to our clinical trial program, and the level of collaborative activity undertaken.

We are not subject to externally imposed capital requirements, and there have been no changes in how we define or manage our capital in 2023.

Contractual Obligations and Commitments

The following table summarizes our significant contractual obligations as at March 31, 2023:

	Total	Le	ss than 1 year	2	2 -3 years	4	- 5 years	More than 5 years
Accounts payable and accrued liabilities	\$ 2,232	\$	2,232	\$	_	\$	— \$	_
Lease obligations	711		257		374		80	
Total contractual obligations	\$ 2,943	\$	2,489	\$	374	\$	80 \$	_

In addition, we are committed to payments totaling approximately \$16.6 million for activities mainly related to our clinical trial and manufacturing programs, which are expected to occur over the next three years. We are able to cancel most of these agreements with notice. The ultimate amount and timing of these payments are subject to changes in our research and development plan.

Off-Balance Sheet Arrangements

As at March 31, 2023, we had not entered into any off-balance sheet arrangements.

Transactions with Related Parties

During the three months ended March 31, 2023, and 2022, we did not enter into any related party transactions other than compensation paid to key management personnel. Key management personnel are those persons having authority and responsibility for planning, directing, and controlling our activities as a whole. We have determined that key management personnel comprise the Board of Directors, Executive Officers, President, and Vice Presidents.

	 2023	2022
Compensation and short-term benefits	\$ 1,000	\$ 794
Share-based compensation expense	 229	452
	\$ 1,229	\$ 1,246

Critical Accounting Policies and Estimates

In preparing our condensed interim consolidated financial statements, we use IFRS as issued by the IASB. IFRS requires us to make certain estimates, judgements, and assumptions that we believe are reasonable based on the information available in applying our accounting policies. These estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the condensed interim consolidated financial statements, and the reported amounts of revenue and expenses during the reporting periods presented. Actual results could differ from those estimates, and such differences could be material.

Our critical accounting policies and estimates are described in our audited consolidated financial statements for the year ended December 31, 2022, and available on SEDAR at www.sedar.com and contained in our annual report on Form 20-F filed on EDGAR at www.sec.gov/edgar.

There were no material changes to our critical accounting policies in the three months ended March 31, 2023.

Adoption of New Accounting Standards

IAS 1 Presentation of Financial Statements

In February 2021, the IASB issued amendments to IAS 1 *Presentation of Financial Statements* and IFRS Practice Statement 2 *Making Materiality Judgements*, in which it provides guidance and example to help entities apply materiality judgements to accounting policy disclosures. The amendments became effective on January 1, 2023. Adopting the amendments did not have a material impact on our condensed interim consolidated financial statements.

IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors

In February 2021, the IASB issued amendments to IAS 8, in which it introduces a new definition of 'accounting estimates'. The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies, and the correction of errors. Also, the amendments clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments became effective on January 1, 2023. Adopting the amendments did not have a material impact on our condensed interim consolidated financial statements.

IAS 12 Income Taxes

In May 2021, the IASB issued amendments to IAS 12, which narrows the scope of the initial recognition exception under IAS 12, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences. The amendments became effective on January 1, 2023. Adopting the amendments did not have a material impact on our condensed interim consolidated financial statements.

Financial Instruments and Other Instruments

Our financial instruments consist of cash and cash equivalents, marketable securities, other receivables, accounts payable and accrued liabilities, and warrant derivative. As at March 31, 2023, the carrying amount of our cash and cash equivalents, marketable securities, other receivables, and accounts payable and accrued liabilities approximated their fair value due to their short-term maturity. The warrant derivative is a recurring Level 2 fair value measurement as these warrants have not been listed on an exchange and therefore do not trade on an active market. As at March 31, 2023, the fair value of our warrant derivative was \$48 (December 31, 2022 - \$79). We use the Black-Scholes valuation model to estimate fair value.

Credit risk

Credit risk is the risk of a financial loss if a counterparty to a financial instrument fails to meet its contractual obligations. We are exposed to credit risk on our cash and cash equivalents, marketable securities, and other receivables from Pfizer in connection with the BRACELET-1 study (see Note 4 of our condensed interim consolidated financial statements) in the event of non-performance by counterparties, but we do not anticipate such non-performance. Our maximum exposure to credit risk at the end of the period is the carrying value of our cash and cash equivalents, marketable securities, and other receivables from Pfizer.

We mitigate our exposure to credit risk connected to our cash and cash equivalents by maintaining our primary operating and investment bank accounts with Schedule I banks in Canada. For our foreign-domiciled bank accounts, we use referrals or recommendations from our Canadian banks to open foreign bank accounts. Our foreign bank accounts are used solely for the purpose of settling accounts payable and accrued liabilities or payroll.

We also mitigate our exposure to credit risk by restricting our portfolio to investment-grade securities with short-term maturities and monitoring counterparties' credit risk and credit standing.

Interest rate risk

Interest rate risk is the risk that a financial instrument's fair value or future cash flows will fluctuate because of changes in market interest rates. We hold our cash and cash equivalents in bank accounts or high-interest investment accounts with variable interest rates. Our marketable securities have fixed interest rates. We mitigate interest rate risk through our investment policy that only allows the investment of excess cash resources in investment-grade vehicles while matching maturities with our operational requirements.

Fluctuations in market interest rates do not significantly impact our results of operations due to the short-term maturity of the investments held.

Foreign exchange risk

Foreign exchange risk arises from changes in foreign exchange rates that may affect the fair value or future cash flows of our financial assets or liabilities. We are primarily exposed to the risk of changes in the Canadian dollar relative to the U.S. dollar, as a portion of our financial assets and liabilities are denominated in such currency. The impact of a \$0.01 increase in the value of the U.S. dollar against the Canadian dollar would have decreased our net comprehensive loss in 2023 by approximately \$231.

We mitigate our foreign exchange risk by maintaining sufficient foreign currencies by purchasing foreign currencies or receiving foreign currencies from financing activities to settle our foreign accounts payable.

Significant balances in foreign currencies at March 31, 2023, were as follows:

	 U.S. dollars
Cash and cash equivalents	\$ 9,245
Marketable securities	10,196
Accounts payable and accrued liabilities	 (1,123)
	\$ 18,318

Liquidity risk

Liquidity risk is the risk that we will encounter difficulty in meeting obligations associated with financial liabilities. We manage liquidity risk by managing our capital structure as outlined in Note 10 of our condensed interim consolidated financial statements. Accounts payable and accrued liabilities are all due within the current operating period.

Other MD&A Requirements

We have 64,092,904 common shares outstanding at May 4, 2023. If all of our options (5,938,235) and common share purchase warrants with a US\$0.90 exercise price (64,035) were exercised, we would have 70,095,174 common shares outstanding.

Our 2022 annual report on Form 20-F is available on SEDAR at www.sedar.com and EDGAR at www.sec.gov/edgar.

Disclosure Controls and Procedures

Disclosure controls and procedures ("DC&P") are designed to provide reasonable assurance that information required to be disclosed by the Company in its reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in the securities legislation and include controls and procedures designed to ensure that information required to be disclosed by the Company in its reports filed or submitted under securities legislation is accumulated and communicated to the Company's management, including its certifying officers, as appropriate to allow timely decisions regarding required disclosure. There were no changes in our DC&P during the three months ended March 31, 2023, that materially affected or are reasonably likely to materially affect, our DC&P.

Internal Controls over Financial Reporting

The Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") are responsible for designing internal controls over financial reporting ("ICFR") or causing them to be designed under their supervision in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The CEO and CFO have designed, or caused to be designed under their supervision, ICFR to provide reasonable assurance that: (i) material information relating to the Company is made known to the Company's CEO and CFO by others; and (ii) information required to be disclosed by the Company in its reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time period specified in securities legislation. The Committee of Sponsoring Organizations of the Treadway Commission ("COSO") 2013 framework provides the basis for management's design of internal controls over financial reporting. There were no changes in our ICFR during the three months ended March 31, 2023, that materially affected or are reasonably likely to materially affect, our ICFR.

Management, including the CEO and CFO, does not expect that our internal controls and procedures over financial reporting will prevent all errors and all fraud. A control system can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of

simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving our stated goals under all potential future conditions. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Risks and Uncertainties

We are a clinical-stage biopharmaceutical company. Prospects for biotechnology companies in the research and development stage should generally be regarded as speculative. It is not possible to predict, based on studies in animals, or early studies in humans, whether a new therapeutic will ultimately prove to be safe and effective in humans or whether necessary and sufficient data can be developed through the clinical trial process to support a successful product application and approval. If a product is approved for sale, product manufacturing at a commercial scale and significant sales to end users at a commercially reasonable price may not be successful. There can be no assurance that we will generate adequate funds to continue development or will ever achieve significant revenues or profitable operations. Many factors (e.g., competition, patent protection, appropriate regulatory approvals) can influence the revenue and product profitability potential. In developing a pharmaceutical product, we rely on our employees, contractors, consultants and collaborators, and other third-party relationships, including the ability to obtain appropriate product liability insurance. There can be no assurance that this reliance and these relationships will continue as required. In addition to developmental and operational considerations, market prices for securities of biotechnology companies generally are volatile, and may or may not move in a manner consistent with the progress we have made or are making.

Investment in our common shares involves a high degree of risk. An investor should carefully consider, among other matters, the risk factors in addition to the other information in our annual report on Form 20-F filed with the U.S. Securities and Exchange Commission (the "SEC"), as well as our other public filings with the Canadian securities regulatory authorities and the SEC, when evaluating our business because these risk factors may have a significant impact on our business, financial condition, operating results or cash flow. If any of the described material risks in our annual report or in subsequent reports we file with the regulatory authorities actually occur, they may materially harm our business, financial condition, operating results or cash flow. Additional risks and uncertainties that we have not yet identified or presently consider to be immaterial may also materially harm our business, financial condition, operating results, or cash flow. For information on risks and uncertainties, please refer to the "Risk Factors" section of our most recent annual report on Form 20-F and our other public filings available on www.secdar.com and www.sec.gov/edgar.

Condensed Interim Consolidated Financial Statements (unaudited)

Oncolytics Biotech® Inc.

For the three months ended March 31, 2023

ONCOLYTICS BIOTECH INC. CONDENSED INTERIM CONSOLIDATED STATEMENTS OF FINANCIAL POSITION (unaudited)

(in thousands of Canadian dollars, except share amounts)

Current assets Cash and cash equivalents (note 4) Marketable securities Other receivables (note 4) Prepaid expenses (note 4) Total current assets Property and equipment Right-of-use assets (note 5) Prepaid expenses (note 4) Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liabilities Contract liabilities Contract liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	15,872 13,798 730 3,861 34,261	\$ 11,666 20,472 521
Cash and cash equivalents (note 4) Marketable securities Other receivables (note 4) Prepaid expenses (note 4) Total current assets Property and equipment Right-of-use assets (note 5) Prepaid expenses (note 4) Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liabilities Contract liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	13,798 730 3,861	\$ 20,472
Marketable securities Other receivables (note 4) Prepaid expenses (note 4) Total current assets Property and equipment Right-of-use assets (note 5) Prepaid expenses (note 4) Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	13,798 730 3,861	\$ 20,472
Other receivables (note 4) Prepaid expenses (note 4) Total current assets Property and equipment Right-of-use assets (note 5) Prepaid expenses (note 4) Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liabilities (note 5) Total liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	730 3,861	
Prepaid expenses (note 4) Total current assets Property and equipment Right-of-use assets (note 5) Prepaid expenses (note 4) Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	3,861	521
Total current assets Property and equipment Right-of-use assets (note 5) Prepaid expenses (note 4) Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	<u> </u>	
Property and equipment Right-of-use assets (note 5) Prepaid expenses (note 4) Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	34,261	 3,025
Right-of-use assets (note 5) Prepaid expenses (note 4) Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)		35,684
Prepaid expenses (note 4) Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	339	356
Total assets Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	501	296
Liabilities and Shareholders' Equity Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	227	998
Current liabilities Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	35,328	\$ 37,334
Accounts payable and accrued liabilities (note 4) Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)		
Lease liabilities (note 5) Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)		
Warrant derivative (note 11) Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	2,232	\$ 3,650
Total current liabilities Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	189	216
Contract liability Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	48	79
Lease liabilities (note 5) Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	2,469	3,945
Total liabilities Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	6,730	6,730
Commitments and contingencies (note 9) Shareholders' equity Share capital (note 6)	378	157
Shareholders' equity Share capital (note 6)	9,577	10,832
Share capital (note 6)		
Authorized: unlimited Issued: March 31, 2023 – 63,990,950 December 31, 2022 – 61,327,914	409,412	404,040
Contributed surplus (note 7)	40,368	40,051
Accumulated other comprehensive income	659	662
	(424,688)	(418,251)
Total shareholders' equity	25,751	26,502
Total liabilities and shareholders' equity \$	35,328	\$ 37,334

ONCOLYTICS BIOTECH INC. CONDENSED INTERIM CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS (unaudited)

(in thousands of Canadian dollars, except share amounts)

For the three months ended March 31,	2023	2022			
Expenses					
Research and development (note 13)	\$ 3,539	\$ 3,708			
General and administrative (note 13)	3,195	2,602			
Loss before the following	(6,734)	(6,310)			
Change in fair value of warrant derivative (note 11)	31	(13)			
Foreign exchange gain (loss)	1	(474)			
Interest income, net	265	18			
Net loss	(6,437)	(6,779)			
Other comprehensive loss items that may be reclassified to net loss					
Translation adjustment	 (3)	(47)			
Net comprehensive loss	\$ (6,440)	\$ (6,826)			
Basic and diluted loss per common share (note 8)	\$ (0.10)	\$ (0.12)			
Weighted average number of shares (basic and diluted) (note 8)	62,344,544	56,576,462			

ONCOLYTICS BIOTECH INC. CONDENSED INTERIM CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (unaudited)

(in thousands of Canadian dollars)

	Sha	re Capital	Warrants	(Contributed Surplus	Accumulated Other Comprehensive Income	A	Accumulated Deficit	Total
As at December 31, 2021	\$	391,348	\$ 3,618	\$	34,161	\$ 388	\$	(393,416)	\$ 36,099
Net loss and other comprehensive loss		_	_		_	(47)		(6,779)	(6,826)
Issued pursuant to stock option plan (notes 6, 7)		19	_		(7)				12
Issued pursuant to incentive share award plan (notes 6, 7)		46			(46)				_
Issued pursuant to "At the Market" Agreement (note 6)		5,267			_	_			5,267
Share issue costs (note 6)		(176)	_		_				(176)
Share-based compensation expense (note 7)			<u> </u>		639			<u> </u>	639
As at March 31, 2022	\$	396,504	\$ 3,618	\$	34,747	\$ 341	\$	(400,195)	\$ 35,015
As at December 31, 2022	\$	404,040	\$ 	\$	40,051	\$ 662	\$	(418,251)	\$ 26,502
Net loss and other comprehensive loss		_	_		_	(3)		(6,437)	(6,440)
Issued pursuant to "At the Market" Agreement (note 6)		5,552			_				5,552
Share issue costs (note 6)		(180)			_	_			(180)
Share-based compensation expense (note 7)			_		317			<u> </u>	317
As at March 31, 2023	\$	409,412	\$ 	\$	40,368	\$ 659	\$	(424,688)	\$ 25,751

ONCOLYTICS BIOTECH INC. CONDENSED INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS (unaudited)

(in thousands of Canadian dollars)

For the three months ended March 31,	2023	2022		
Operating Activities				
Net loss for the period	\$ (6,437)	\$ (6,779)		
Depreciation - property and equipment (note 13)	21	24		
Depreciation - right-of-use-assets (note 13)	76	74		
Share-based compensation expense (notes 7, 13, 14)	317	639		
Interest (income) expense, net	(96)	24		
Unrealized foreign exchange (gain) loss	(124)	410		
Change in fair value of warrant derivative (note 11)	(31)	13		
Change in non-cash working capital (note 12)	(1,555)	(657)		
Cash used in operating activities	(7,829)	(6,252)		
Investing Activities				
Acquisition of property and equipment	(5)	(36)		
Maturities of marketable securities	6,674	_		
Cash provided by (used in) investing activities	6,669	(36)		
Financing Activities				
Proceeds from exercise of stock options (note 7)	_	12		
Proceeds from "At the Market" equity distribution agreement (note 6)	5,372	5,091		
Payment of lease liabilities	(101)	(89)		
Cash provided by financing activities	5,271	5,014		
Increase (decrease) in cash and cash equivalents	4,111	(1,274)		
Cash and cash equivalents, beginning of period	11,666	41,262		
Impact of foreign exchange on cash and cash equivalents	95	(505)		
Cash and cash equivalents, end of period	\$ 15,872	\$ 39,483		

For the three months ended March 31, 2023 (in thousands of Canadian dollars, except share amounts and where indicated)

Note 1: Nature of Operations

Oncolytics Biotech Inc. was incorporated on April 2, 1998, under the Business Corporations Act (Alberta) as 779738 Alberta Ltd. On April 8, 1998, we changed our name to Oncolytics Biotech Inc. We are a limited company incorporated and domiciled in Canada. Our shares are publicly traded on the Nasdaq Capital Market and the Toronto Stock Exchange. Our principal place of business is located at 804, 322 11th Avenue S.W., Calgary, Alberta, Canada.

We are a clinical-stage biopharmaceutical company developing pelareorep, a safe and well-tolerated intravenously delivered immunotherapeutic agent that activates the innate and adaptive immune systems and weakens tumor defense mechanisms. This improves the ability of the immune system to fight cancer, making tumors more susceptible to a broad range of oncology treatments. Our primary focus is to advance our programs in hormone receptor-positive / human epidermal growth factor 2-negative (HR+/HER2-) metastatic breast cancer and advanced/metastatic pancreatic ductal adenocarcinoma to phase 3 licensure-enabling studies. In addition, we are exploring opportunities for registrational programs in other gastrointestinal cancers through our GOBLET platform study.

We have not been profitable since our inception and expect to continue to incur substantial losses as we continue our research and development efforts. As at March 31, 2023, we had an accumulated deficit of \$424,688. We do not expect to generate significant revenues until, and unless, pelareorep becomes commercially viable. To date, we have funded our operations mainly through issuing additional capital via public offerings, equity distribution arrangements, and the exercise of warrants and stock options. There can be no assurance that we will be able to raise additional funds through the sale of our common shares. Failure to raise additional capital would have a material adverse impact on our business, results of operations, and financial condition. As at March 31, 2023, we had cash and cash equivalents and marketable securities of \$29,670. We believe we have sufficient existing cash resources to fund our presently planned operations for at least the next twelve months.

The full extent to which external factors outside of our control, including those related to the coronavirus infectious disease 2019 ("COVID-19") pandemic, the global political conflict in Ukraine, and financial institution failures, may directly or indirectly impact our business, results of operations and financial condition, including our ability to finance our operations, expenses, clinical trials, and research and development costs, will depend on future developments that are evolving and highly uncertain. We considered the potential impact of these events, including global supply chain disruptions, inflation, rising interest rates, and liquidity, when making certain estimates and judgments relating to the preparation of these condensed interim consolidated financial statements. While there was no material impact to our condensed interim consolidated financial statements as at and for the three months ended March 31, 2023, our future assessment of the magnitude and duration of COVID-19, conflict in Ukraine, and bank failures, as well as other factors, could result in a material impact to our consolidated financial statements in future reporting periods.

Note 2: Basis of Presentation

Statement of compliance

These condensed interim consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") and in compliance with International Accounting Standard ("IAS") 34 *Interim Financial Reporting* as issued by the International Accounting Standards Board ("IASB").

Our condensed interim consolidated financial statements for the three months ended March 31, 2023, were authorized for issue in accordance with a resolution of the Board of Directors on May 4, 2023.

Basis of presentation

These condensed interim consolidated financial statements have been prepared on the historical cost basis, except for certain assets and liabilities measured at fair value as explained in the notes to these financial statements.

The notes presented in these condensed interim consolidated financial statements include only significant events and transactions occurring since our last fiscal year end and are not fully inclusive of all matters required to be disclosed in our annual audited consolidated financial statements. Accordingly, these condensed interim consolidated financial statements

For the three months ended March 31, 2023 (in thousands of Canadian dollars, except share amounts and where indicated)

should be read in conjunction with our most recent annual audited consolidated financial statements for the year ended December 31, 2022.

Our condensed interim consolidated financial statements include our financial statements and the financial statements of our subsidiaries, Oncolytics Biotech (Barbados) Inc. and Oncolytics Biotech (U.S.) Inc., and are presented in Canadian dollars, our functional currency.

Use of estimates

The preparation of our condensed interim consolidated financial statements in conformity with IFRS requires management to make judgments, estimates, and assumptions that affect the amounts reported in the condensed interim consolidated financial statements and accompanying notes. Actual results could differ from such estimates.

Note 3: Material Accounting Policies

The accounting policies applied in these condensed interim consolidated financial statements are the same as those applied in our audited consolidated financial statements for the year ended December 31, 2022.

Adoption of New Accounting Standards

IAS 1 Presentation of Financial Statements

In February 2021, the IASB issued amendments to IAS 1 *Presentation of Financial Statements* and IFRS Practice Statement 2 *Making Materiality Judgements*, in which it provides guidance and example to help entities apply materiality judgements to accounting policy disclosures. The amendments became effective on January 1, 2023. Adopting the amendments did not have a material impact on our condensed interim consolidated financial statements.

IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors

In February 2021, the IASB issued amendments to IAS 8, in which it introduces a new definition of 'accounting estimates'. The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies, and the correction of errors. Also, the amendments clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments became effective on January 1, 2023. Adopting the amendments did not have a material impact on our condensed interim consolidated financial statements.

IAS 12 Income Taxes

In May 2021, the IASB issued amendments to IAS 12, which narrows the scope of the initial recognition exception under IAS 12, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences. The amendments became effective on January 1, 2023. Adopting the amendments did not have a material impact on our condensed interim consolidated financial statements.

Note 4: Balance Sheet Details

Cash equivalents

Cash equivalents consist of interest-bearing deposits with our bank totaling \$13,833 as at March 31, 2023 (December 31, 2022 – \$9,501).

Other receivables

In 2019, we entered into a co-development agreement with Merck KGaA, Darmstadt, Germany, and Pfizer Inc ("Pfizer"), known as BRACELET-1. This phase 2 clinical trial is jointly funded by Oncolytics and Pfizer. As at March 31, 2023, we recorded \$626 (US\$463) (December 31, 2022 - \$488 (US\$360)) in other receivables related to BRACELET-1 cost due from Pfizer.

For the three months ended March 31, 2023 (in thousands of Canadian dollars, except share amounts and where indicated)

Prepaid expenses

In 2022, we paid deposits to our manufacturer related to the production of pelareorep required for our clinical trial program. We classify the related prepaid expenses as current or non-current based on the timing of when we expect to receive services. As at March 31, 2023, we recorded \$2,004 in current prepaid expenses and \$227 in non-current prepaid expenses (December 31, 2022 - \$1,327 and \$998, respectively).

Accounts payable and accrued liabilities

	rch 31, 2023]	December 31, 2022
Trade payables	\$ 528	\$	2,252
Accrued liabilities	 1,704		1,398
	\$ 2,232	\$	3,650

Note 5: Leases

Our portfolio of leases consists of office spaces with initial lease terms generally between 3 to 6 years. We currently do not have leases with residual value guarantees or leases not yet commenced to which we are committed. We have variable lease payments related to office space lease operating costs that are not material. Lease liabilities have been measured by discounting future lease payments using our incremental borrowing rate, as rates implicit in the leases were not readily determinable. The weighted-average rate applied was 15%.

During the three months ended March 31, 2023, we extended the office lease for one of our subsidiaries, for which we recorded an addition of \$282 to the lease liability and right-of-use asset. Under the terms of the lease, we have the option to extend the lease term for an additional three years. We did not include the extension option in the lease term as we were not reasonably certain to exercise the option.

Our total undiscounted lease liabilities as at March 31, 2023, were as follows:

	M	arch 31, 2023
Less than one year	\$	257
One to five years		454
More than five years		
Total undiscounted lease liabilities	\$	711

For the three months ended March 31, 2023 (in thousands of Canadian dollars, except share amounts and where indicated)

Note 6: Share Capital

Authorized

Unlimited number of no par value common shares

	Shares		
	Number		Amount
As at December 31, 2021	55,043,789	\$	391,348
Issued pursuant to stock option plan	8,333		20
Issued pursuant to incentive share award plan	40,560		98
Issued pursuant to "At the Market" (ATM) equity distribution agreement(a)(b)	6,235,232		13,338
Share issue costs	<u> </u>		(764)
As at December 31, 2022	61,327,914	\$	404,040
Issued pursuant to "At the Market" (ATM) equity distribution agreement(b)	2,663,036		5,552
Share issue costs	<u> </u>		(180)
As at March 31, 2023	63,990,950	\$	409,412

- (a) On March 5, 2021, we entered into an ATM equity distribution agreement with Canaccord Genuity Inc. The ATM allowed us to issue common shares, at prevailing market prices, with an aggregate offering value of up to US\$80,000 over a 16-month period through the facilities of the Nasdaq Capital Market in the United States. This distribution agreement was terminated on June 16, 2022. During the three months ended March 31, 2022, we sold 2,431,300 common shares for gross proceeds of \$5,267 (US\$4,174) at an average price of \$2.17 (US\$1.72). We received proceeds of \$5,109 (US\$4,049) after commissions of \$158 (US\$125). In total, we incurred share issue costs (including commissions) of \$176.
- (b) On June 17, 2022, we entered into an ATM equity distribution agreement with Canaccord Genuity Inc. The ATM allows us to issue common shares, at prevailing market prices, with an aggregate offering value of up to US\$65,000 over a 25-month period through the facilities of the Nasdaq Capital Market in the United States. During the three months ended March 31, 2023, we sold 2,663,036 common shares for gross proceeds of \$5,552 (US\$4,100) at an average price of \$2.08 (US\$1.54). We received proceeds of \$5,385 (US\$3,977) after commissions of \$167 (US\$123). In total, we incurred share issue costs (including commissions) of \$180.

For the three months ended March 31, 2023 (in thousands of Canadian dollars, except share amounts and where indicated)

Note 7: Share-Based Compensation

We have granted stock options to acquire common stock through our stock option plan. Our stock option activity for the three months ended March 31 was as follows:

	2023		203	22
	Stock Options	Weighted Average Exercise Price \$	Stock Options	Weighted Average Exercise Price \$
Outstanding, beginning of the period	5,963,185	2.91	5,334,420	3.53
Granted	_	_	50,000	1.70
Forfeited	_	_	(27,699)	3.57
Expired		_	(247,559)	7.41
Exercised		_	(8,333)	1.45
Outstanding, end of the period	5,963,185	2.91	5,100,829	3.33
Exercisable, end of the period	4,745,482	3.03	3,359,589	3.52

The following table summarizes information about the stock options outstanding and exercisable at March 31, 2023:

Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price \$	Number Exercisable	Weighted Average Exercise Price \$
\$0.54 - \$1.89	1,002,498	1.52	1.39	824,998	1.41
\$1.90 - \$3.05	1,724,442	3.06	2.34	1,001,738	2.37
\$3.06 - \$3.29	1,532,500	1.70	3.17	1,532,500	3.17
\$3.30 - \$3.75	1,393,131	2.62	3.42	1,075,632	3.42
\$3.76 - \$27.46	310,614	1.95	7.39	310,614	7.39
	5,963,185	2.29	2.91	4,745,482	3.03

Option grants vest either immediately or annually over periods ranging from one to three years.

We use the Black-Scholes valuation model to estimate fair value. We use historical data to estimate the expected dividend yield and expected volatility of our stock in determining the fair value of the stock options. The risk-free interest rate is based on the Government of Canada benchmark bond yield rates in effect at the time of grant. The expected life of the options represents the estimated length of time the options are expected to remain outstanding.

The estimated fair value of stock options granted during the three months ended March 31 were determined using the following weighted average assumptions:

	2023	2022
Risk-free interest rate	n/a	1.17%
Expected hold period to exercise	n/a	3.0 years
Expected share price volatility	n/a	115.43%
Expected dividend yield	n/a	Nil
Weighted average fair value of options	n/a	\$1.17

For the three months ended March 31, 2023 (in thousands of Canadian dollars, except share amounts and where indicated)

We have reserved 6,399,095 common shares for issuance relating to our outstanding equity compensation plans. Our share-based compensation expense was \$317 for the three months ended March 31, 2023 (March 31, 2022 - \$639).

Note 8: Loss Per Common Share

Loss per common share is calculated by dividing net loss for the period by the weighted average number of common shares outstanding for the three months ended March 31, 2023, of 62,344,544 (March 31, 2022 - 56,576,462). The effect of any potential exercise of our stock options and warrants outstanding during the period has been excluded from the calculation of diluted loss per common share, as it would be anti-dilutive.

Note 9: Commitments

We are committed to payments totaling approximately \$16,600 for activities mainly related to our clinical trial and manufacturing programs, which are expected to occur over the next three years. We are able to cancel most of these agreements with notice.

Note 10: Capital Disclosures

Our objective when managing capital is to maintain a strong statement of financial position. We achieve our objective by obtaining adequate cash resources to support planned activities, including our clinical trial program, product manufacturing, administrative costs, and intellectual property expansion and protection. We include shareholders' equity, cash and cash equivalents, and marketable securities in the definition of capital.

	March 31, 2023		December 31, 2022	
Cash and cash equivalents	\$ 15,872	\$	11,666	
Marketable securities	\$ 13,798	\$	20,472	
Shareholders' equity	\$ 25,751	\$	26,502	

We have no debt other than accounts payable and accrued liabilities and lease liabilities. We also have commitments and potential contingent obligations relating to completing our research and development of pelareorep.

In managing our capital, we estimate our future cash requirements by preparing a budget and a multi-year plan annually for review and approval by our Board. The budget establishes the approved activities for the upcoming year and estimates the associated costs. The multi-year plan estimates future activity along with the potential cash requirements and is based on our assessment of our current clinical trial progress along with the expected results from the coming year's activity. Budget to actual variances are prepared and reviewed by management and are presented quarterly to the Board.

Historically, funding for our plan is primarily managed through the issuance of additional common shares and common share purchase warrants that are converted to common shares upon exercise. Management regularly monitors the capital markets attempting to balance the timing of issuing additional equity with our progress through our clinical trial program, general market conditions, and the availability of capital. There are no assurances that funds will be made available to us when required.

On June 12, 2022, we renewed our short form base shelf prospectus (the "Base Shelf") that qualifies for distribution of up to \$150,000 of common shares, subscription receipts, warrants, or units (the "Securities") in either Canada, the U.S. or both. Under a Base Shelf, we may sell Securities to or through underwriters, dealers, placement agents, or other intermediaries. We may also sell Securities directly to purchasers or through agents, subject to obtaining any applicable exemption from registration requirements. The distribution of Securities may be affected from time to time in one or more transactions at a fixed price or prices, which may be subject to change, at market prices prevailing at the time of sale, or at prices related to such prevailing market prices to be negotiated with purchasers and as set forth in an accompanying Prospectus Supplement.

Renewing our Base Shelf provides additional flexibility when managing our cash resources as, under certain circumstances, it shortens the time required to close a financing and is expected to increase the number of potential investors that may be

For the three months ended March 31, 2023 (in thousands of Canadian dollars, except share amounts and where indicated)

prepared to invest in the Company. Funds received from using our Base Shelf would be used in line with our Board approved budget and multi-year plan. Our renewed Base Shelf will be effective until July 16, 2024.

Our Base Shelf allowed us to enter our ATM equity distribution agreements (see Note 6). We use these equity arrangements to assist us in achieving our capital objective. These arrangements provide us with the opportunity to raise capital and better manage our cash resources.

We are not subject to externally imposed capital requirements, and there have been no changes in how we define or manage our capital in 2023.

Note 11: Financial Instruments

Fair value of financial instruments

Our financial instruments consist of cash and cash equivalents, marketable securities, other receivables, accounts payable and accrued liabilities, and warrant derivative. As at March 31, 2023, the carrying amount of our cash and cash equivalents, marketable securities, other receivables, and accounts payable and accrued liabilities approximated their fair value due to their short-term maturity. The warrant derivative is a recurring Level 2 fair value measurement as these warrants have not been listed on an exchange and therefore do not trade on an active market. As at March 31, 2023, the fair value of our warrant derivative was \$48 (December 31, 2022 - \$79). We use the Black-Scholes valuation model to estimate fair value.

Financial risk management

Credit risk

Credit risk is the risk of a financial loss if a counterparty to a financial instrument fails to meet its contractual obligations. We are exposed to credit risk on our cash and cash equivalents, marketable securities, and other receivables from Pfizer in connection with the BRACELET-1 study (see Note 4) in the event of non-performance by counterparties, but we do not anticipate such non-performance. Our maximum exposure to credit risk at the end of the period is the carrying value of our cash and cash equivalents, marketable securities, and other receivables from Pfizer.

We mitigate our exposure to credit risk connected to our cash and cash equivalents by maintaining our primary operating and investment bank accounts with Schedule I banks in Canada. For our foreign-domiciled bank accounts, we use referrals or recommendations from our Canadian banks to open foreign bank accounts. Our foreign bank accounts are used solely for the purpose of settling accounts payable and accrued liabilities or payroll.

We also mitigate our exposure to credit risk by restricting our portfolio to investment-grade securities with short-term maturities and monitoring counterparties' credit risk and credit standing.

Interest rate risk

Interest rate risk is the risk that a financial instrument's fair value or future cash flows will fluctuate because of changes in market interest rates. We hold our cash and cash equivalents in bank accounts or high-interest investment accounts with variable interest rates. Our marketable securities have fixed interest rates. We mitigate interest rate risk through our investment policy that only allows the investment of excess cash resources in investment-grade vehicles while matching maturities with our operational requirements.

Fluctuations in market interest rates do not significantly impact our results of operations due to the short-term maturity of the investments held

Foreign exchange risk

Foreign exchange risk arises from changes in foreign exchange rates that may affect the fair value or future cash flows of our financial assets or liabilities. We are primarily exposed to the risk of changes in the Canadian dollar relative to the U.S. dollar, as a portion of our financial assets and liabilities are denominated in such currency. The impact of a \$0.01 increase in the value of the U.S. dollar against the Canadian dollar would have decreased our net comprehensive loss in 2023 by approximately \$231.

For the three months ended March 31, 2023 (in thousands of Canadian dollars, except share amounts and where indicated)

We mitigate our foreign exchange risk by maintaining sufficient foreign currencies by purchasing foreign currencies or receiving foreign currencies from financing activities to settle our foreign accounts payable.

Significant balances in foreign currencies at March 31, 2023, were as follows:

	 U.S. dollars
Cash and cash equivalents	\$ 9,245
Marketable securities	10,196
Accounts payable and accrued liabilities	 (1,123)
	\$ 18,318

Liquidity risk

Liquidity risk is the risk that we will encounter difficulty in meeting obligations associated with financial liabilities. We manage liquidity risk by managing our capital structure as outlined in Note 10. Accounts payable and accrued liabilities are all due within the current operating period.

Note 12: Additional Cash Flow Disclosures

Change in Non-Cash Working Capital

	 2023	2022
Change in:		
Other receivables	\$ (209) \$	764
Prepaid expenses	(65)	(1,175)
Accounts payable and accrued liabilities	(1,418)	61
Other liabilities	_	(352)
Non-cash impact of foreign exchange	 137	45
Change in non-cash working capital related to operating activities	\$ (1,555) \$	(657)

Other Cash Flow Disclosures

	20	023	2022	
Cash interest received	\$	171	\$	42

For the three months ended March 31, 2023 (in thousands of Canadian dollars, except share amounts and where indicated)

Note 13: Components of Expenses

Research and development expenses	2023	 2022
Clinical trial expenses	\$ 909	\$ 1,093
Manufacturing and related process development expenses	872	703
Intellectual property expenses	143	205
Translational science expenses		109
Personnel-related expenses	1,380	1,226
Share-based compensation expense	194	359
Other expenses	41	 13
	\$ 3,539	\$ 3,708
General and administrative expenses		
Public company-related expenses	\$ 2,201	\$ 1,564
Office expenses	774	660
Share-based compensation expense	123	280
Depreciation - property and equipment	21	24
Depreciation - right-of-use assets	76	74
	\$ 3,195	\$ 2,602

Our research and development personnel-related expenses included employee compensation and benefits of \$1,380 for the three months ended March 31, 2023 (March 31, 2022 - \$1,186).

Our general and administrative office expenses included employee compensation and benefits of \$666 for the three months ended March 31, 2023 (March 31, 2022 - \$574).

Note 14: Related Party Transactions

Compensation of Key Management Personnel

Key management personnel are those persons having authority and responsibility for planning, directing, and controlling our activities as a whole. We have determined that key management personnel comprise the Board of Directors, Executive Officers, President, and Vice Presidents.

	20	2023		2022
Compensation and short-term benefits	\$	1,000	\$	794
Share-based compensation expense		229		452
	\$	1,229	\$	1,246

Shareholder Information

Our public company filings are available on SEDAR at www.sedar.com and EDGAR at www.sec.gov or contact us at:

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Officers

Matt Coffey, PhD, MBA
President and Chief Executive Officer
Kirk Look, CA, MSJ
Chief Financial Officer
Thomas C. Heineman, MD, PhD
Chief Medical Officer
Andrew de Guttadauro
President, Oncolytics Biotech (U.S.) Inc.

Directors

Deborah M. Brown, MBA, ICD.D
Lead, Strategic Partnerships, Eversana (Canada)
Matt Coffey, PhD, MBA
President and CEO, Oncolytics Biotech Inc.
Angela Holtham, MBA, FCPA, FCMA, ICD.D
Corporate Director
James T. Parsons, MAcc, CPA, CA
Corporate Director
Wayne Pisano, MBA
Corporate Director
Jonathan Rigby, MBA
Group CEO, Revolo Biotherapeutics
Bernd R. Seizinger, MD, PhD
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