Third Quarter Report

September 30, 2022

MANAGEMENT'S DISCUSSION & ANALYSIS

September 30, 2022

November 3, 2022

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

This discussion and analysis should be read in conjunction with the unaudited condensed interim consolidated financial statements of Oncolytics Biotech® Inc. as at and for the three and nine months ended September 30, 2022 and 2021, 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, 2021. 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.

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 immuno-oncolytic virus, as a cancer therapeutic, including our belief that by priming the immune system we can increase the proportion of patients who respond to immunotherapies and other cancer treatments in cancers where they have previously failed or experienced limited efficacy; our expectation that, as our clinical development program advances, pelareorep's ability to enhance innate and adaptive immune responses within the tumor microenvironment will play an increasingly important role; our expectations regarding increasing opportunities for expansion of our clinical program along with business development and partnering to address a broad range of cancers in combination with a variety of other therapies; our belief that our adopted approach has the most promise for generating clinically impactful data and offers the most expeditious path to approval; our expectations as to the purpose, design and outcomes of our current or pending clinical trials involving pelareorep and the potential opportunities that may result; our planned 2022 development activity for pelareorep; our planned 2022 manufacturing program; our drug product supply estimates; 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 program in hormone receptor-positive / human epidermal growth factor 2-negative (HR+/HER2-) metastatic breast cancer (mBC) to a phase 3 licensure-enabling study, and our plans to explore gastrointestinal registration program opportunities through our GOBLET platform study; the impact of the coronavirus infectious disease 2019 (COVID-19) pandemic and the global political conflict in Ukraine on our research and development activities, business operations and financial condition and results of operations, including our ongoing and planned clinical studies and manufacturing activities, our liquidity, and longer-term strategic development, and our ability to finance and execute our operations; our ongoing collaboration with our investigators, partners, and vendors to minimize the effect of COVID-19 and the global political conflict in Ukraine and to ensure the safety of patients and employees, minimize the effect of supply chain challenges, and maintain the advancement of our clinical programs; our expectation that the measures we are taking in response to COVID-19 and the global political conflict in Ukraine will allow us to adequately respond to any related challenges that may arise; our belief as to the opportunities for the potential expansion of our clinical program along with business development and partnering to address a broad range of cancers in combination with a variety of partner therapies; our plan to proactively manage all aspects of the development of our clinical trial program, our translational science program, our manufacturing process and pelareorep supply, and our intellectual property; our plans respecting regulatory approval for pelareorep; our expectations regarding enrollment under our various clinical trials; our expectations respecting the delivery of additional clinical data and the timing thereof; our anticipated milestones and catalysts; our belief that we will have sufficient existing cash resources to fund our presently planned operations for at least the next twelve months; our plans respecting the maintenance of adequate cash reserves to support our planned activities; the factors that will affect our anticipated cash usage; 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, including manufacturing supply chain, clinical trial and project development delays and disruptions, and market

volatility and uncertainty. It is unknown whether and how the Company may be affected if the COVID-19 pandemic and the global political conflict in Ukraine persists for an extended period of time. 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 talented 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 checkpoint inhibitors and potentially other immuno-oncology drugs, like CAR T therapies, bispecific antibodies, and CDK4/6 and PARP 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, we believe we can increase the proportion of patients who respond to immunotherapies and other cancer treatments in cancers where they have previously failed or experienced limited efficacy.

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 expansion of our clinical program along with business development and partnering to address a broad range of cancers in combination with a variety of other therapies. We believe this approach has the most promise for generating clinically impactful data and offers the most expeditious path to approval.

Our primary focus is to advance our program in hormone receptor-positive / human epidermal growth factor 2-negative (HR+/ HER2-) metastatic breast cancer (mBC) to a phase 3 licensure-enabling study. In addition, we are exploring gastrointestinal registration program opportunities 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.

Third Quarter 2022 Pelareorep Development Update

Clinical Trial Program

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 T cell population between pretreatment and on-therapy 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. The safety of the combination is also being evaluated. 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 further de-risk our contemplated registration study, permitting for a smaller study with a higher likelihood of clinical success.

In the third quarter of 2022, we continued re-treating patients still on-study, monitored those patients who came off treatment due to progression, and assisted with follow-up activities. These activities included analyzing data on the study's primary endpoint on week 16 overall response rate and secondary endpoints of progression free survival and overall survival.

Triple-negative breast cancer study combining pelareorep and retifanlimab: IRENE study
In the third quarter of 2022, we continued patient enrollment activities in our investigator-sponsored trial (IST) managed by Rutgers Cancer Institute of New Jersey. This single-arm, open-label, phase 2 trial, known as IRENE, is investigating the use of pelareorep in combination with Incyte Corporation's anti-PD-1 checkpoint inhibitor, retifanlimab, in patients with metastatic triple-negative breast cancer (TNBC). This study plans to enroll 25 patients.

The IRENE study represents an expansion of our lead breast cancer program into a new disease subtype (TNBC). In addition to investigating the safety and efficacy of pelareorep-anti-PD-1 combination treatment in TNBC patients, the study is also evaluating changes in PD-L1 expression and correlations between treatment outcomes and peripheral T cell clonality, a previously identified biomarker of pelareorep response that may enable the success of future pivotal studies by facilitating the patient selection process.

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 metastatic pancreatic, metastatic colorectal and advanced anal cancers. The study is being conducted at 14 centers in Germany. The co-primary endpoints of the study are safety and objective response rate at week 16.

In the second quarter of 2022, the pancreatic cancer cohort met the efficacy expansion criteria for Stage 1 of the trial. Per the study's Simon two-stage design, any cohort meeting a pre-specified efficacy threshold in Stage 1 (defined as achieving a minimum number of objective radiologic responses by week 16) may be expanded to enroll additional patients in an optional Stage 2 study expansion. The data from the phase 1b portion of this cohort showed a strong efficacy signal as evidenced by all patients achieving a partial response (n = 3).

Key secondary and exploratory endpoints include additional efficacy assessments and evaluation of potential blood-based biomarkers (T cell clonality and CEACAM6). Approximately 55 patients are planned for enrollment across four separate cohorts: pelareorep in combination with atezolizumab, gemcitabine, and nab-paclitaxel in 1st-line advanced/metastatic

pancreatic cancer patients, pelareorep in combination with atezolizumab in 1st-line metastatic colorectal cancer patients that are diagnosed as MSI-high (microsatellite instability), pelareorep in combination with atezolizumab and TAS-102 in 3rd-line metastatic colorectal cancer patients, and pelareorep in combination with atezolizumab in 2nd-line advanced and unresectable anal cancer patients. We received clearance from the Paul Ehrlich Institute (PEI; Germany's medical regulatory body) for full enrollment of the 1st-line metastatic pancreatic cancer and 3rd-line metastatic colorectal cancer cohorts in the first and second quarters of 2022, respectively. As the trial's anal cancer and 1st-line metastatic colorectal cancer cohorts do not include safety run-ins, all of the trial's four cohorts have been cleared for full enrollment.

In the third quarter of 2022, we continued patient screening, enrollment, and treatment activities. In addition, we also continued patient sample analysis.

Manufacturing and Process Development

During the third quarter of 2022, we continued distribution and storage activities with the product supply. While we currently have sufficient drug product supply to support our clinical development program, we continued our activities to maintain our clinical and commercial production capabilities. Ongoing bulk manufacturing and expanded filling capabilities are both part of the planned process validation. Process validation is required to ensure that the resulting product meets 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 third quarter of 2022, we had been issued over 243 patents including 24 U.S. and 11 Canadian patents, as well as issuances in other jurisdictions. We have an extensive patent portfolio covering the oncolytic reovirus product used in our clinical trial program that extends to the end of 2031.

Financing Activity

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

During the three months ended September 30, 2022, we sold 839,075 common shares for gross proceeds of US$1,024,531 at an average price of US$1.22. We received, net of commissions of US$30,736, proceeds of US$993,795. In total, we incurred share issue costs (including commissions) of $78,825.

Cash Resources

We ended the third quarter of 2022 with cash and cash equivalents totaling $32,362,063 (see *"Liquidity and Capital Resources")*.

Global Business Conditions

During the first nine months of 2022, a variety of external factors, including the ongoing coronavirus infectious disease 2019 (COVID-19) pandemic and the global political conflict in Ukraine, have touched elements of our business operations. COVID-19, including its variants, has created challenges affecting our clinical trial activities, including delayed patient enrollment related to our BRACELET-1 study and contributed to the disruption of our manufacturing supply chain, while the conflict in Ukraine has increased market volatility and uncertainty. Some challenges included, among other things, patients choosing to delay treatments, clinical sites suspending study activity temporarily, vendor and collaborator staff shortages, and raw material and components delays. While these challenges have largely impacted the timing of certain activities, we believe the impact on our overall business to date has not been significant. As well, we believe our financial condition, liquidity, and longer-term strategic development remain on track. However, these events have caused and may continue to cause significant fluctuations in stock markets, global economic activity, including inflation and rising interest rates, and healthcare systems. The scale and duration of these developments remain uncertain and could affect our ability to finance and execute our operations.

The extent to which these events might prolong and/or cause significant disruptions to our business and materially impact our results of operations, including our ongoing and planned clinical studies and manufacturing activities, will depend on future developments. These future developments are highly uncertain, cannot be predicted, and could negatively impact our business.

We will continue to monitor these events and their impact on our industry and business. We are collaborating with our investigators, partners, and vendors to minimize its effect and ensure the safety of patients and employees, minimize the effect of supply chain challenges, and maintain the advancement of our clinical programs. We expect these measures will allow us to

adequately respond to future challenges that may arise. Moving forward, we plan to remain in contact with relevant stakeholders and keep the market apprised of any new information that may materially impact clinical timelines.

Pelareorep Development for the Remainder of 2022

Our planned 2022 development activity for pelareorep focuses on our clinical development plan along with our manufacturing and intellectual property programs. Our remaining primary 2022 clinical objectives will focus on GOBLET enrollment and the assessment of our BRACELET and GOBLET clinical data to help form the nature of our registration strategy, our path to approval and other possible clinical development opportunities.

Our 2022 manufacturing program includes assessing a process development plan investigating the application of single-use equipment to our drug substance production process. We also expect to fill product and perform the associated analytical testing, carry out process development activities as well as labeling, packaging, and shipping of pelareorep to our various clinical sites for ongoing and upcoming activities. These activities are consistent with our planned process validation. Finally, our intellectual property program includes filings for additional patents along with monitoring activities required to protect our patent portfolio.

Results of Operations

Comparison of the three months ended September 30, 2022 and 2021:

Net loss for the three months ended September 30, 2022 was $4,407,183 compared to $4,872,142 for the three months ended September 30, 2021.

Research and Development Expenses ("R&D")

Our R&D expenses increased by $399,791 from $3,278,705 for the three months ended September 30, 2021 to $3,678,496 for the three months ended September 30, 2022. The following table summarizes our R&D expenses for the three months ended September 30, 2022 and 2021:

	Three Months Ended September 30,		
	2022	**2021**	**Change**
Clinical trial expenses	**$ 1,363,948**	$ 798,570	565,378
Manufacturing and related process development expenses	**650,584**	464,994	185,590
Intellectual property expenses	**59,681**	153,324	(93,643)
Translational science expenses	**109,941**	307,831	(197,890)
Personnel-related expenses	**1,187,751**	1,020,860	166,891
Share-based compensation	**273,700**	511,621	(237,921)
Other expenses	**32,891**	21,505	11,386
Research and development expenses	**$ 3,678,496**	$ 3,278,705	$ 399,791

The increase in our R&D expenses in the third quarter of 2022 was primarily due to the following:

- Increased clinical trial expenses as a result of an increase in consultant support for our data management activities as well as a net increase in our clinical study costs due to higher GOBLET patient enrollment and sample analysis activities and lower BRACELET-1 patient costs as the study enters into the re-treatment and follow-up phase upon achieving full enrollment at the end of the second quarter of 2022;
- Increased manufacturing and related process development expenses associated with higher production process and analytical activities, partly offset by lower routine testing activities as we focus on ensuring our active drug substance and finished drug product meet the regulatory specifications and standards as we advance our clinical program to licensure-enabling studies; and
- Increased personnel-related expenses as a result of higher payroll costs.

The above increases were partly offset by the following:

- Decreased share-based compensation as a result of the impact of the vesting of options granted in prior periods; and
- Decreased translational science expenses as our bispecific antibodies and CAR T studies ongoing throughout the third quarter of 2021 were largely completed by the end of the first quarter of 2022.

General and Administrative Expenses ("G&A")

Our G&A expenses decreased by $494,899 from $2,876,312 for the three months ended September 30, 2021 to $2,381,413 for the three months ended September 30, 2022. Public company related expenses include costs associated with investor relations, business development and financial advisory activities, legal and accounting fees, corporate insurance, director fees, and transfer agent and other fees relating to our Canadian and U.S. stock listings. Office expenses include compensation costs (excluding share-based compensation), rent related to short-term leases, and other office-related costs. The following table summarizes our G&A expenses for the three months ended September 30, 2022 and 2021:

	Three Months Ended September 30,		
	2022	**2021**	**Change**
Public company related expenses	**$ 1,370,501**	$ 1,700,773	$ (330,272)
Office expenses	**686,870**	595,717	91,153
Share-based compensation	**226,224**	495,299	(269,075)
Depreciation - property and equipment	**22,989**	11,089	11,900
Depreciation - right-of-use assets	**74,829**	73,434	1,395
General and administrative expenses	**$ 2,381,413**	$ 2,876,312	$ (494,899)

The decrease in our G&A expenses in the third quarter of 2022 was primarily due to the following:

- Decreased public company related expenses as a result of lower investor relations activities, partly offset by increased travel expenses with the easing of COVID-19-related restrictions and higher board of directors advisory costs; and
- Decreased share-based compensation as a result of the impact of the vesting of options granted in prior periods.

Foreign Exchange Gain

Our foreign exchange gain was $1,525,514 for the third quarter of 2022 compared to a gain of $1,212,070 for the third quarter of 2021. The foreign exchange gain incurred in the third quarters of 2022 and 2021 was primarily due to unrealized translation gains on U.S. dollar-denominated cash balances.

Comparison of the nine months ended September 30, 2022 and 2021:

Net loss for the nine months ended September 30, 2022 was $16,280,513 compared to $18,553,023 for the nine months ended September 30, 2021.

Research and Development Expenses ("R&D")

Our R&D expenses increased by $1,349,564 from $9,240,900 for the nine months ended September 30, 2021 to $10,590,464 for the nine months ended September 30, 2022. The following table summarizes our R&D expenses for the nine months ended September 30, 2022 and 2021:

	Nine Months Ended September 30,		
	2022	**2021**	**Change**
Clinical trial expenses	**$ 3,674,955**	$ 2,576,886	1,098,069
Manufacturing and related process development expenses	**1,670,765**	1,277,050	393,715
Intellectual property expenses	**415,834**	524,763	(108,929)
Translational science expenses	**250,204**	450,515	(200,311)
Personnel-related expenses	**3,592,412**	2,906,119	686,293
Share-based compensation	**910,973**	1,470,569	(559,596)
Other expenses	**75,321**	34,998	40,323
Research and development expenses	**$ 10,590,464**	$ 9,240,900	$ 1,349,564

The increase in our R&D expenses for the nine months ended September 30, 2022 was primarily due to the following:

- Increased clinical trial expenses as a result of a net increase in our clinical study costs due to higher GOBLET set-up, patient enrollment and sample analysis costs and lower AWARE-1 patient activities as study closure began in 2022, as well as an increase in our data management consultant costs;
- Increased personnel-related expenses as a result of higher payroll costs; and
- Increased manufacturing and related process development expenses associated with higher production process and analytical activities, partly offset by lower routine testing activities as we focus on ensuring our active drug substance and finished drug product meet the regulatory specifications and standards as we advance our clinical program to licensure-enabling studies.

The above increases were partly offset by the following:

- Decreased share-based compensation as a result of a lower number of options granted in 2022 and the impact of the vesting of options granted in prior periods; and
- Decreased translational science expenses as our bispecific antibodies and CAR T studies ongoing throughout 2021 were largely completed by the end of the first quarter of 2022.

General and Administrative Expenses ("G&A")

Our G&A expenses decreased by $1,713,529 from $9,539,188 for the nine months ended September 30, 2021 to $7,825,659 for the nine months ended September 30, 2022. The following table summarizes our G&A expenses for the nine months ended September 30, 2022 and 2021:

	Nine Months Ended September 30,		
	2022	**2021**	**Change**
Public company related expenses	**$ 4,787,000**	$ 6,066,646	$ (1,279,646)
Office expenses	**2,027,627**	1,890,783	136,844
Share-based compensation	**718,043**	1,226,669	(508,626)
Depreciation - property and equipment	**70,588**	106,979	(36,391)
Depreciation - right-of-use assets	**222,401**	248,111	(25,710)
General and administrative expenses	**$ 7,825,659**	$ 9,539,188	$ (1,713,529)

The decrease in our G&A expenses for the nine months ended September 30, 2022 was primarily due to the following:

- Decreased public company related expenses as a result of lower investor relations activities, partly offset by increased travel expenses with the easing of COVID-19-related restrictions and higher board of directors advisory costs; and
- Decreased share-based compensation as a result of a lower number of options granted in 2022 and the impact of the vesting of options and share awards granted in prior periods.

Foreign Exchange Gain

Our foreign exchange gain for the nine months ended September 30, 2022 was $1,939,468 compared to a gain of $190,164 for the nine months ended September 30, 2021. The foreign exchange gain in the nine months ended September 30, 2022 and 2021 was primarily due to unrealized translation gains on U.S. dollar-denominated cash balances. The change in foreign exchange gain reflected the fluctuation of the U.S. dollar versus the Canadian dollar throughout the respective periods.

Summary of Quarterly Results

(in thousands, except per share data)

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.

	2022				2021			2020
	Sept.	June	March	Dec.[3]	Sept.	June	March	Dec.[3]
Revenue	—	—	—	—	—	—	—	—
Net loss[1][2]	4,407	5,095	6,779	7,751	4,872	7,246	6,435	9,329
Basic and diluted loss per common share[1][2]	$ 0.08	$ 0.09	$ 0.12	$ 0.14	$ 0.09	$ 0.13	$ 0.13	$ 0.21
Total assets[4]	38,959	40,239	44,446	45,880	52,593	56,309	54,180	34,346
Total cash and cash equivalents[4]	32,362	33,689	39,483	41,262	48,087	50,799	50,362	31,220
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 of $499,924, $490,111, $638,981, $1,128,663, $1,006,920, $1,032,242, $658,076, and $1,704,453, respectively.
(2) Included in consolidated net loss and loss per common share are foreign exchange (gain) loss of $(1,525,514), $(888,074), $474,120, $325,800, $(1,212,070), 631,352, $390,554, and $1,052,531, respectively.
(3) Included in consolidated net loss and loss per common share were annual short-term incentive awards.
(4) We issued 3,662,653 common shares for net cash proceeds of $6.6 million in 2022 (2021 - 8,876,809 common shares for net cash proceeds of $33.4 million).
(5) We have not declared or paid any dividends since incorporation.

Liquidity and Capital Resources

As we are a clinical-stage biopharmaceutical company, 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. To date, we have funded our operations mainly through the issuance of additional capital via public offerings, equity distribution arrangements, and through the exercise of warrants and stock options. For the nine months ended September 30, 2022, 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 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, and also may 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 us with additional flexibility when managing our cash resources as, under certain circumstances, it shortens the time period 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 as a result of 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 into our US$65 million ATM equity offering sales agreement in June 2022 (see Note 5 of our condensed interim consolidated financial statements). We will use this equity arrangement to assist us in achieving our capital objective. This arrangement provides us with the opportunity to raise capital and better manage our cash resources.

As at September 30, 2022 and December 31, 2021, we had cash and cash equivalents and working capital ratios as follows:

	September 30, 2022	December 31, 2021
Cash and cash equivalents	**$ 32,362,063**	$ 41,262,044
Working capital ratio	**10.42**	16.69

We define working capital ratio as current assets divided by current liabilities, as presented on our unaudited condensed interim consolidated statement of financial position. The change in our cash and cash equivalents between September 30, 2022 and December 31, 2021 reflected the cash usage from our operating activities of $17.4 million, the cash provided by our financing activities of $6.3 million, and the impact of foreign exchange on cash and cash equivalents of $2.2 million for the nine months ended September 30, 2022. We do not have any debt other than accounts payable and accrued liabilities and lease liabilities. We have commitments and contingent obligations relating to the completion of our research and development of pelareorep.

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

	Nine Months Ended September 30,		
	2022	2021	Change
Cash used in operating activities	**$ (17,416,436)**	$ (16,098,335)	$ (1,318,101)
Cash used in investing activities	**(55,740)**	(211,236)	155,496
Cash provided by financing activities	**6,334,841**	33,067,387	(26,732,546)
Impact of foreign exchange on cash and cash equivalents	**2,237,354**	109,979	2,127,375
(Decrease) increase in cash and cash equivalents	**$ (8,899,981)**	$ 16,867,795	$ (25,767,776)

Cash used in operating activities

Cash used in operating activities was $17,416,436 for the nine months ended September 30, 2022 compared to $16,098,335 for the nine months ended September 30, 2021. The change reflected higher net operating activities and non-cash working capital changes during the periods.

Cash used in investing activities

Cash used in investing activities was $55,740 for the nine months ended September 30, 2022 compared to $211,236 for the nine months ended September 30, 2021. The change was primarily related to leasehold improvements and furnishing our Calgary headquarters in 2021.

Cash provided by financing activities

Cash provided by financing activities was $6,334,841 for the nine months ended September 30, 2022 compared to $33,067,387 for the nine months ended September 30, 2021. The change was primarily due to our U.S. ATM activities. During the nine months ended September 30, 2022, we sold 3,613,760 common shares for gross proceeds of US$5,643,235 at an average price of US$1.56. During the nine months ended September 30, 2021, we sold 8,401,029 common shares for gross proceeds of US$27,158,080 at an average price of US$3.23.

We desire to maintain adequate cash reserves to support our planned activities which include our clinical trial program, product manufacturing, administrative costs, and our intellectual property expansion and 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 costs associated with these activities. 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 with the objective of ensuring 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 2022.

Contractual Obligations and Commitments

As at September 30, 2022, we were committed to payments totaling approximately $16.8 million for activities mainly related to our clinical trial, manufacturing, and translational science programs, which are expected to occur over the next three years. We are able to cancel most of these agreements with notice.

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.

Our total undiscounted lease liability as at September 30, 2022 was as follows:

	September 30, 2022
Less than one year	$ 340,272
One to five years	211,244
More than five years	—
Total undiscounted lease liability	$ 551,516

Off-Balance Sheet Arrangements

As at September 30, 2022, we had not entered into any off-balance sheet arrangements.

Transactions with Related Parties

During the three and nine months ended September 30, 2022, we did not enter into any related party transactions other than compensation paid to Key Management Personnel disclosed in Note 13 of our condensed interim consolidated financial statements.

Critical Accounting Policies and Estimates

In preparing our condensed interim consolidated financial statements, we use IFRS as issued by the International Accounting Standards Board. IFRS requires that we make certain estimates, judgments and assumptions that we believe are reasonable based on the information available in applying our accounting policies. Actual results could differ from those estimates.

Our critical accounting policies and estimates are described in our audited consolidated financial statements for the year ended December 31, 2021 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.shtml.

There were no material changes to our critical accounting policies in the three and nine months ended September 30, 2022.

Financial Instruments and Other Instruments

Our financial instruments consist of cash and cash equivalents, other receivables, accounts payable and accrued liabilities, and warrant derivative. As at September 30, 2022, the carrying amount of our cash and cash equivalents, other receivables, and accounts payable and accrued liabilities approximated their fair value. 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 September 30, 2022, the fair value of our warrant derivative was $50,030 (December 31, 2021 - $56,017). We use the Black-Scholes valuation model to estimate fair value. The expected volatility is based on the Company's common share historical volatility less an estimated market participant risk adjustment. The risk-free interest rate is based on U.S. Department of Treasury benchmark treasury yield rates with an approximate equivalent remaining term in effect at the time of valuation and the expected life represents the estimated length of time the warrants are expected to remain outstanding.

Credit risk

Credit risk is the risk of 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 and other receivables from Pfizer in connection with the BRACELET-1 study (see Note 8 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 and other receivables.

We mitigate our exposure to credit risk 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 and these accounts are used solely for the purpose of settling accounts payable or payroll.

Interest rate risk

Interest rate risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in market interest rates. We are exposed to interest rate risk through our cash and cash equivalents. We mitigate this risk through our investment policy that only allows investment of excess cash resources in investment-grade vehicles while matching maturities with our operational requirements.

Fluctuations in market rates of interest do not have a significant impact on our results of operations due to the short term to 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 2022 by approximately $188,000.

We mitigate our foreign exchange risk by maintaining sufficient foreign currencies, through the purchase of foreign currencies or receiving foreign currencies from financing activities, to settle our foreign accounts payable.

Significant balances in foreign currencies at September 30, 2022 are as follows:

	U.S. dollars	Euro
Cash and cash equivalents	$ 21,377,467	€ —
Accounts payable and accrued liabilities	(1,345,402)	(705,472)
	$ 20,032,065	€ (705,472)

Liquidity risk

Liquidity risk is the risk that we will encounter difficulty in meeting obligations associated with financial liabilities. We manage liquidity risk through the management of our capital structure as outlined in Note 9 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 59,028,688 common shares outstanding at November 3, 2022. If all of our options, restricted share units and performance share units (5,295,785), and common share purchase warrants with a US$0.90 exercise price (64,035), were exercised or were to vest, we would have 64,388,508 common shares outstanding.

Our 2021 annual report on Form 20-F is available on www.sedar.com and www.sec.gov/edgar.shtml.

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 and nine months ended September 30, 2022 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 and nine months ended September 30, 2022 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 upon 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 that we 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 Form 20-F and our other public filings available on www.sedar.com and www.sec.gov/edgar.shtml.

Condensed Interim Consolidated Financial Statements
(unaudited)

Oncolytics Biotech® Inc.
September 30, 2022 and 2021

ONCOLYTICS BIOTECH INC.
CONDENSED INTERIM CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
(unaudited)
(in Canadian dollars, except share amounts)

As at	September 30, 2022	December 31, 2021
Assets		
Current assets		
Cash and cash equivalents (note 4)	**$ 32,362,063**	$ 41,262,044
Other receivables (note 8)	**496,855**	866,055
Prepaid expenses	**5,346,353**	2,775,800
Total current assets	**38,205,271**	44,903,899
Property and equipment	**379,700**	392,041
Right-of-use assets	**374,006**	584,251
Total assets	**$ 38,958,977**	$ 45,880,191
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities	**$ 3,321,251**	$ 1,987,870
Other liabilities (note 8)	**—**	352,279
Lease liabilities (note 8)	**294,864**	293,672
Warrant derivative (notes 5(b), 10)	**50,030**	56,017
Total current liabilities	**3,666,145**	2,689,838
Contract liability	**6,730,287**	6,730,287
Lease liabilities (note 8)	**165,918**	361,081
Total liabilities	**10,562,350**	9,781,206
Commitments and contingencies (note 8)		
Shareholders' equity		
Share capital (note 5) Authorized: unlimited Issued: September 30, 2022 – 58,706,442 December 31, 2021 – 55,043,789	**398,068,304**	391,348,183
Warrants (note 5)	**—**	3,617,570
Contributed surplus (notes 5, 6)	**39,301,814**	34,161,103
Accumulated other comprehensive income	**722,631**	387,738
Accumulated deficit	**(409,696,122)**	(393,415,609)
Total shareholders' equity	**28,396,627**	36,098,985
Total liabilities and shareholders' equity	**$ 38,958,977**	$ 45,880,191

See accompanying notes

ONCOLYTICS BIOTECH INC.
CONDENSED INTERIM CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS
(unaudited)
(in Canadian dollars, except share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	**2021**	**2022**	**2021**
Expenses				
Research and development (notes 6, 12, 13)	**$ 3,678,496**	$ 3,278,705	**$ 10,590,464**	$ 9,240,900
General and administrative (notes 6, 12, 13)	**2,381,413**	2,876,312	**7,825,659**	9,539,188
Loss before the following	**(6,059,909)**	(6,155,017)	**(18,416,123)**	(18,780,088)
Change in fair value of warrant derivative (note 10)	**(16,677)**	52,216	**9,309**	(32,405)
Foreign exchange gain	**1,525,514**	1,212,070	**1,939,468**	190,164
Interest income, net	**146,487**	25,740	**214,254**	76,457
Loss before income taxes	**(4,404,585)**	(4,864,991)	**(16,253,092)**	(18,545,872)
Income tax expense	**(2,598)**	(7,151)	**(27,421)**	(7,151)
Net loss	**(4,407,183)**	(4,872,142)	**(16,280,513)**	(18,553,023)
Other comprehensive income items that may be reclassified to net loss				
Translation adjustment	**269,390**	94,907	**334,893**	6,225
Net comprehensive loss	**$ (4,137,793)**	$ (4,777,235)	**$ (15,945,620)**	$ (18,546,798)
Basic and diluted loss per common share (note 7)	**$ (0.08)**	$ (0.09)	**$ (0.28)**	$ (0.35)
Weighted average number of shares (basic and diluted) (note 7)	**58,325,075**	54,960,650	**57,529,973**	53,003,541

See accompanying notes

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

	Share Capital	Warrants	Contributed Surplus	Accumulated Other Comprehensive Income	Accumulated Deficit	Total
As at December 31, 2020	$ 356,824,172	$ 3,617,570	$ 31,022,356	$ 400,225	$ (367,111,330)	$ 24,752,993
Net loss and other comprehensive loss	—	—	—	6,225	(18,553,023)	(18,546,798)
Issued pursuant to stock option plan (notes 5, 6)	321,697	—	(120,747)	—	—	200,950
Issued pursuant to incentive share award plan (notes 5, 6)	413,282	—	(413,282)	—	—	—
Issued pursuant to "At the Market" Agreement (note 5)	34,168,071	—	—	—	—	34,168,071
Issued pursuant to warrant derivative exercised (note 5)	686,616	—	—	—	—	686,616
Share-based compensation (note 6)	—	—	2,697,238	—	—	2,697,238
Share issue costs (note 5)	(1,247,078)	—	—	—	—	(1,247,078)
As at September 30, 2021	$ 391,166,760	$ 3,617,570	$ 33,185,565	$ 406,450	$ (385,664,353)	$ 42,711,992
As at December 31, 2021	$ 391,348,183	$ 3,617,570	$ 34,161,103	$ 387,738	$ (393,415,609)	$ 36,098,985
Net loss and other comprehensive income	—	—	—	334,893	(16,280,513)	(15,945,620)
Issued pursuant to stock option plan (notes 5, 6)	19,570	—	(7,487)	—	—	12,083
Issued pursuant to incentive share award plan (notes 5, 6)	98,388	—	(98,388)	—	—	—
Expiry of equity warrant agreement (note 5)	—	(3,617,570)	3,617,570	—	—	—
Issued pursuant to "At the Market" Agreement (note 5)	7,159,552	—	—	—	—	7,159,552
Share-based compensation (note 6)	—	—	1,629,016	—	—	1,629,016
Share issue costs (note 5)	(557,389)	—	—	—	—	(557,389)
As at September 30, 2022	**$ 398,068,304**	**$ —**	**$ 39,301,814**	**$ 722,631**	**$ (409,696,122)**	**$ 28,396,627**

See accompanying notes

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

	Nine Months Ended September 30,	
	2022	**2021**
Operating Activities		
Net loss for the period	**$ (16,280,513)**	$ (18,553,023)
Depreciation - property and equipment (note 12)	**70,588**	106,979
Depreciation - right-of-use-assets (note 12)	**222,401**	248,111
Share-based compensation (notes 6, 12, 13)	**1,629,016**	2,697,238
Interest expense on lease liabilities	**63,959**	65,848
Unrealized foreign exchange (gain) loss	**(1,663,988)**	79,925
Change in fair value of warrant derivative (note 10)	**(9,309)**	32,405
Net change in non-cash working capital (note 11)	**(1,448,590)**	(775,818)
Cash used in operating activities	**(17,416,436)**	(16,098,335)
Investing Activities		
Acquisition of property and equipment	**(55,740)**	(211,236)
Cash used in investing activities	**(55,740)**	(211,236)
Financing Activities		
Proceeds from exercise of stock options (note 6)	**12,083**	200,950
Proceeds from exercise of warrant derivative (note 5)	**—**	230,946
Proceeds from "At the Market" equity distribution agreement (note 5)	**6,602,163**	32,920,993
Payment of lease liabilities	**(279,405)**	(285,502)
Cash provided by financing activities	**6,334,841**	33,067,387
(Decrease) increase in cash and cash equivalents	**(11,137,335)**	16,757,816
Cash and cash equivalents, beginning of period	**41,262,044**	31,219,574
Impact of foreign exchange on cash and cash equivalents	**2,237,354**	109,979
Cash and cash equivalents, end of period	**$ 32,362,063**	$ 48,087,369

See accompanying notes

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 SW, 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 program in hormone receptor-positive / human epidermal growth factor 2-negative (HR+/HER2-) metastatic breast cancer to a phase 3 licensure-enabling study. In addition, we are exploring gastrointestinal registration program opportunities 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. As at September 30, 2022, we had an accumulated deficit of $409,696,122. We do not expect to generate significant revenues until, and unless, pelareorep becomes commercially viable. To date, we have funded our operations mainly through the issuance of additional capital via public offerings, equity distribution arrangements, and through 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 September 30, 2022, we had cash and cash equivalents of $32,362,063, and 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 and the global political conflict in Ukraine, 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, and rising interest rates, 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 nine months ended September 30, 2022, our future assessment of the magnitude and duration of COVID-19 and conflict in Ukraine, 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 and nine months ended September 30, 2022, were authorized for issue in accordance with a resolution of the Board of Directors on November 3, 2022.

Basis of presentation

These condensed interim consolidated financial statements have been prepared on the historical cost basis, except for certain assets and liabilities which are 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

should be read in conjunction with our most recent annual audited consolidated financial statements for the year ended December 31, 2021.

Our condensed interim consolidated financial statements include our financial statements and the financial statements of our subsidiaries as at September 30, 2022 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: Significant 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, 2021.

Accounting Standards and Interpretations Issued but Not Yet Effective

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 apply to annual reporting periods beginning on or after January 1, 2023, with earlier application permitted. The adoption of this standard is not expected to have a material impact on our 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 apply to annual reporting periods beginning on or after January 1, 2023, with earlier application permitted. The adoption of this standard is not expected to have a material impact on our 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 apply to annual reporting periods beginning on or after January 1, 2023, with earlier application permitted. The amendments apply prospectively to transactions that occur on or after the beginning of the earliest comparative period presented. We are assessing the impact of adopting this standard on our consolidated financial statements.

Note 4: Cash Equivalents

Cash equivalents consist of interest-bearing deposits with our bank totaling $29,949,747 (December 31, 2021 – $39,901,509). The current annual interest rate earned on these deposits is 2.80% (December 31, 2021 – 0.45%).

(in Canadian dollars, except share amounts)

Note 5: Share Capital

Authorized:
Unlimited number of no par value common shares

	Shares	
	Number	Amount
As at December 31, 2020	46,166,980	$ 356,824,172
Issued pursuant to stock option plan	123,159	381,771
Issued pursuant to incentive share award plan	150,899	543,833
Issued pursuant to "At the Market" (ATM) equity distribution agreement[(a)(c)]	8,401,029	34,168,071
Issued pursuant to warrant derivative exercised[(b)]	201,722	686,616
Share issue costs	—	(1,256,280)
As at December 31, 2021	55,043,789	$ 391,348,183
Issued pursuant to stock option plan	8,333	19,570
Issued pursuant to incentive share award plan	40,560	98,388
Issued pursuant to "At the Market" (ATM) equity distribution agreement[(c)(d)]	3,613,760	7,159,552
Share issue costs	—	(557,389)
As at September 30, 2022	**58,706,442**	**$ 398,068,304**

(a) On June 15, 2020, 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$40,000,000 over a 25-month period through the facilities of the Nasdaq Capital Market in the United States. This sales agreement was terminated on March 4, 2021. During the nine months ended September 30, 2021, we sold 5,685,097 common shares for gross proceeds of US$18,503,188 at an average price of US$3.25. We received, net of commissions of US$555,096, proceeds of US$17,948,092. In total, we incurred share issue costs (including commissions) of $707,421.

(b) On August 16, 2019, pursuant to an underwritten public offering, 4,619,773 units were sold at a purchase price of US$0.81 per unit. Each unit included one common share with a fair value of US$0.54 and one common share purchase warrant with a fair value of US$0.27. These warrants were classified as a financial liability. Each common share purchase warrant entitled the holder to purchase one common share at an exercise price of US$0.90 until August 16, 2024. No warrants were exercised during the nine months ended September 30, 2022. As at September 30, 2022, there were 64,035 warrants remaining (December 31, 2021 - 64,035). During the nine months ended September 30, 2021, our share capital included fair value of $455,670 in addition to gross proceeds of US$181,550 for the 201,722 warrants that were exercised.

(c) 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$80,000,000 over a 16-month period through the facilities of the Nasdaq Capital Market in the United States. During the nine months ended September 30, 2022, we sold 2,719,770 (September 30, 2021 - 2,715,932) common shares for gross proceeds of US$4,560,307 (September 30, 2021 - US$8,654,892) at an average price of US$1.68 (September 30, 2021 - US$3.19). We received, net of commissions of US$136,809 (September 30, 2021 - US$259,647), proceeds of US$4,423,498 (September 30, 2021 - US$8,395,245). In total, we incurred share issue costs (including commissions) of $209,278 (September 30, 2021 - $539,657). This sales agreement was terminated on June 16, 2022.

(d) 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$65,000,000 over a 25-month period through the facilities of the Nasdaq Capital Market in the United States. During the nine months ended September 30, 2022, we sold 893,990 common shares for gross proceeds of US$1,082,928 at an average price of US$1.21. We received, net of commissions of US$32,488, proceeds of US$1,050,440. In total, we incurred share issue costs (including commissions) of $348,111.

(in Canadian dollars, except share amounts)

Equity Warrants

On June 1, 2017, pursuant to an underwritten public offering, 16,445,000 units were sold for gross proceeds of $11,511,500. Each unit included one common share and one common share purchase warrant, which were classified as equity. These warrants expired on June 1, 2022, and were transferred to contributed surplus on the interim consolidated statement of financial position upon expiry. There was no cash flow impact as a result of the warrant expiry.

The following table summarizes our outstanding equity warrants:

	Number	Amount
As at December 31, 2021	16,443,500	$ 3,617,570
Expired	(16,443,500)	(3,617,570)
As at September 30, 2022	**—**	**$ —**

Note 6: Share-Based Compensation

Stock Option Plan

Our stock option activity for the nine months ended September 30, 2022 and 2021 was as follows:

	2022		2021	
	Stock Options	Weighted Average Exercise Price $	Stock Options	Weighted Average Exercise Price $
Outstanding, beginning of the period	**5,334,420**	**3.53**	3,764,055	4.08
Granted	**292,500**	**1.39**	1,267,500	3.40
Forfeited	**(62,962)**	**3.83**	(88,945)	7.04
Expired	**(255,894)**	**7.36**	(4,156)	41.53
Exercised	**(8,333)**	**1.45**	(96,493)	2.08
Outstanding, end of the period	**5,299,731**	**3.23**	4,841,961	3.85
Exercisable, end of the period	**3,529,741**	**3.44**	2,236,960	4.73

The following table summarizes information about the stock options outstanding and exercisable at September 30, 2022:

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	2.02	1.39	799,998	1.40
$1.90 - $3.05	1,011,942	3.12	2.36	577,792	2.49
$3.06 - $3.29	1,532,500	2.20	3.17	1,016,659	3.17
$3.30 - $3.40	1,057,500	3.44	3.40	457,501	3.40
$3.41 - $40.00	695,291	2.13	7.01	677,791	7.10
	5,299,731	2.58	3.23	3,529,741	3.44

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

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Government of Canada benchmark bond yield rates in effect at the time of grant and 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 nine months ended September 30, 2022 and 2021 were determined using the following weighted average assumptions:

	2022	2021
Risk-free interest rate	**2.93%**	0.50%
Expected hold period to exercise	**3.0 years**	3.0 years
Expected share price volatility	**108.54%**	111.37%
Expected dividend yield	**Nil**	Nil
Weighted average fair value of options	**$0.92**	$2.27

Incentive Share Award Plan

Restricted Share Units ("RSUs")

We have granted RSUs to non-employee directors through our incentive share award plan. Grants of RSUs to non-employee directors vest either immediately, on the third anniversary date from the grant date or when the director ceases to be a member of the board. We have also granted RSUs to certain officers and employees of the Company. Grants of RSUs to certain officers and employees of the Company vest over a three-year period. Our RSU activity for the nine months ended September 30, 2022 and 2021 was as follows:

	2022	2021
Outstanding, beginning of the period	**40,560**	134,618
Released	**(40,560)**	(53,388)
Outstanding, end of the period	**—**	81,230

We have reserved 5,870,644 common shares for issuance relating to our outstanding equity compensation plans. Our share-based compensation expense was $499,924 and $1,629,016 for the three and nine months ended September 30, 2022, respectively (September 30, 2021 - $1,006,920 and $2,697,238, respectively).

Note 7: Loss Per Common Share

Loss per common share is calculated using net loss for the period and the weighted average number of common shares outstanding for the three and nine months ended September 30, 2022 of 58,325,075 and 57,529,973, respectively (September 30, 2021 - 54,960,650 and 53,003,541, respectively). 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 8: Commitments

We are committed to payments totaling approximately $16,800,000 for activities mainly related to our clinical trial, manufacturing, and translational science programs, which are expected to occur over the next three years. We are able to cancel most of these agreements with notice.

Our commitments include the committed payments related to our co-development agreement with Merck KGaA, Darmstadt, Germany, and Pfizer Inc ("Pfizer"), known as BRACELET-1, as this phase 2 clinical trial is jointly funded by Oncolytics and Pfizer. As at September 30, 2022, we recorded US$278,268 ($381,421) (December 31, 2021 - US$616,855 ($782,049)) in other receivables related to BRACELET-1 cost from Pfizer per the terms of the collaboration agreement and nil (December 31, 2021 - US$277,866 ($352,279)) in other liabilities representing future trial costs to be incurred.

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Under a clinical trial agreement entered into with the Alberta Cancer Board ("ACB"), we have agreed to repay the amount funded under the agreement together with a royalty, to a combined maximum amount of $400,000 plus an overhead repayment of $100,000, upon sales of a specified product. We agreed to repay the ACB in annual installments in an amount equal to the lesser of: (a) 5% of gross sales of a specified product; or (b) $100,000 per annum once sales of a specified product commence.

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.

Our total undiscounted lease liability as at September 30, 2022 was as follows:

	September 30, 2022
Less than one year	$ 340,272
One to five years	211,244
More than five years	—
Total undiscounted lease liability	$ 551,516

Note 9: 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 which include the clinical trial program, product manufacturing, administrative costs, and intellectual property protection. We include shareholders' equity and cash and cash equivalents in the definition of capital.

	September 30, 2022	December 31, 2021
Cash and cash equivalents	**$ 32,362,063**	$ 41,262,044
Shareholders' equity	**$ 28,396,627**	$ 36,098,985

We do not have any debt other than accounts payable and accrued liabilities and lease liabilities. We have commitments and contingent obligations relating to the completion of 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 costs associated with these activities. 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 upon exercise are converted to common shares. 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 16, 2022, we renewed our short form base shelf prospectus (the "Base Shelf") that qualifies for distribution of up to $150,000,000 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, and also may 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 us with additional flexibility when managing our cash resources as, under certain circumstances, it shortens the time period 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 as a result of 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 into our US$65,000,000 ATM equity distribution agreement in June 2022 (see Note 5). We use this equity arrangement to assist us in achieving our capital objective. This arrangement provides 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 2022.

Note 10: Financial Instruments

Fair value of financial instruments

Our financial instruments consist of cash and cash equivalents, other receivables, accounts payable and accrued liabilities, and warrant derivative. As at September 30, 2022, the carrying amount of our cash and cash equivalents, other receivables, and accounts payable and accrued liabilities approximated their fair value. 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 September 30, 2022, the fair value of our warrant derivative was $50,030 (December 31, 2021 - $56,017). We use the Black-Scholes valuation model to estimate fair value. The expected volatility is based on the Company's common share historical volatility less an estimated market participant risk adjustment. The risk-free interest rate is based on U.S. Department of Treasury benchmark treasury yield rates with an approximate equivalent remaining term in effect at the time of valuation and the expected life represents the estimated length of time the warrants are expected to remain outstanding.

Financial risk management

Credit risk
Credit risk is the risk of 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 and other receivables from Pfizer in connection with the BRACELET-1 study (see Note 8) 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 and other receivables.

We mitigate our exposure to credit risk 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 and these accounts are used solely for the purpose of settling accounts payable or payroll.

Interest rate risk
Interest rate risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in market interest rates. We are exposed to interest rate risk through our cash and cash equivalents. We mitigate this risk through our investment policy that only allows investment of excess cash resources in investment-grade vehicles while matching maturities with our operational requirements.

Fluctuations in market rates of interest do not have a significant impact on our results of operations due to the short term to 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 2022 by approximately $188,000.

(in Canadian dollars, except share amounts)

We mitigate our foreign exchange risk by maintaining sufficient foreign currencies, through the purchase of foreign currencies or receiving foreign currencies from financing activities, to settle our foreign accounts payable.

Significant balances in foreign currencies at September 30, 2022 are as follows:

	U.S. dollars	Euro
Cash and cash equivalents	$ 21,377,467	€ —
Accounts payable and accrued liabilities	(1,345,402)	(705,472)
	$ 20,032,065	€ (705,472)

Liquidity risk
Liquidity risk is the risk that we will encounter difficulty in meeting obligations associated with financial liabilities. We manage liquidity risk through the management of our capital structure as outlined in Note 9. Accounts payable and accrued liabilities are all due within the current operating period.

Note 11: Additional Cash Flow Disclosures

Net Change In Non-Cash Working Capital

	Nine Months Ended September 30,	
	2022	**2021**
Change in:		
Other receivables	**$ 369,200**	$ (161,658)
Prepaid expenses	**(2,570,553)**	(827,368)
Accounts payable and accrued liabilities	**1,333,381**	529,236
Other liabilities	**(352,279)**	(123,985)
Non-cash impact of foreign exchange	**(228,339)**	(192,043)
Change in non-cash working capital related to operating activities	**$ (1,448,590)**	$ (775,818)

Other Cash Flow Disclosures

	Nine Months Ended September 30,	
	2022	**2021**
Cash interest received	**$ 278,213**	$ 142,305
Cash taxes paid	**$ 45,510**	$ 29,795

(in Canadian dollars, except share amounts)

Note 12: Components of Expenses

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	**2021**	**2022**	**2021**
Research and development expenses				
Clinical trial expenses	**$ 1,363,948**	$ 798,570	**$ 3,674,955**	$ 2,576,886
Manufacturing and related process development expenses	**650,584**	464,994	**1,670,765**	1,277,050
Intellectual property expenses	**59,681**	153,324	**415,834**	524,763
Translational science expenses	**109,941**	307,831	**250,204**	450,515
Personnel-related expenses	**1,187,751**	1,020,860	**3,592,412**	2,906,119
Share-based compensation	**273,700**	511,621	**910,973**	1,470,569
Other expenses	**32,891**	21,505	**75,321**	34,998
	$ 3,678,496	$ 3,278,705	**$ 10,590,464**	$ 9,240,900
General and administrative expenses				
Public company related expenses	**$ 1,370,501**	$ 1,700,773	**$ 4,787,000**	$ 6,066,646
Office expenses	**686,870**	595,717	**2,027,627**	1,890,783
Share-based compensation	**226,224**	495,299	**718,043**	1,226,669
Depreciation - property and equipment	**22,989**	11,089	**70,588**	106,979
Depreciation - right-of-use assets	**74,829**	73,434	**222,401**	248,111
	$ 2,381,413	$ 2,876,312	**$ 7,825,659**	$ 9,539,188

Our research and development personnel-related expenses included employee compensation and benefits of $1,187,751 and $3,552,456 for the three and nine months ended September 30, 2022, respectively (September 30, 2021 - $946,890 and $2,832,149, respectively).

Our general and administrative office expenses included employee compensation and benefits of $572,325 and $1,720,664 for the three and nine months ended September 30, 2022, respectively (September 30, 2021 - $512,412 and $1,560,362, respectively).

Note 13: 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 consists of key executives of the Company and members of the Board of Directors.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	**2021**	**2022**	**2021**
Compensation and short-term benefits	**$ 812,281**	$ 763,951	**$ 2,405,350**	$ 2,320,516
Share-based compensation	**359,024**	702,019	**1,128,096**	1,869,090
	$ 1,171,305	$ 1,465,970	**$ 3,533,446**	$ 4,189,606

Shareholder Information

For public company filings please go to www.sedar.com or contact us at:

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