Second Quarter Report

June 30, 2016

Oncolytics Biotech Inc.
TSX: ONC
OTCQX: ONCYF

Oncolytics Biotech Inc.

2016 Second Quarter Report

Message to Shareholders

The second quarter of 2016 was notable for Oncolytics as we announced encouraging preliminary data from two randomized Phase II studies in highly prevalent indications – non-small cell lung cancer and metastatic colorectal cancer. Early in the quarter we also announced updated survival data from a randomized Phase 2 study in pancreatic cancer.

Expanding our Library of Randomized Clinical Data

In May we announced preliminary data from a sponsored randomized, Phase II clinical study of REOLYSIN® in non-small cell lung cancer (IND 211). Patients with non-squamous cell histology were treated with REOLYSIN® given in combination with pemetrexed (Arm A) versus pemetrexed alone (Arm B). Patients with squamous cell histology were treated with REOLYSIN® given in combination with docetaxel (Arm C) versus docetaxel alone (Arm D). In reporting the results, the investigators combined the test arms from each treatment group and the control arms from each treatment group. The investigators noted that that female patients in the REOLYSIN®-containing arms did better than in the standard treatment arms. A subgroup analysis demonstrated that EGFR mutation and p53 mutation status was associated with a trend to improved overall survival and progression free survival. This marked the first time that we had generated randomized data correlating genetic status to patient outcomes in lung cancer.

At the same time we also announced preliminary data from a randomized Phase II clinical trial of REOLYSIN® in combination with FOLFOX-6 and bevacizumab (Avastin®) in patients with advanced or metastatic colorectal cancer (IND 210). The abstract submitted to the ASCO annual meeting for presentation, reported that the overall test arm had an objective response rate of 52.9% (n=51) versus 34.6% (n=52) in the control arm (p=0.06). The Company conducted a pre-planned analysis of patient responses by gender, as specified in the study protocol. The male patients in the test arm had an objective response rate of 46.9% (n=32) versus 41.9% (n=31) in the control arm (p=0.6747). The female patients in the test arm had an objective response rate of 63.2% (n=19) versus 23.8% (n=21) in the control arm (p=0.0054). An additional analysis of all those patients (both male and female) with liver metastases, with or without metastases to other sites was conducted. For patients who had metastases to the liver, those treated with REOLYSIN® had objective tumour response rates of 55% (n=40), versus 28.6% (n=42) for those who did not receive REOLYSIN® (p=0.0077). For the patients who did not have liver metastases (21 of the 103 patients), there was no statistically significant difference in response rate (five of 11 in the test arm, versus 6 of 10 in the control arm). As a result of these data, we promptly made a submission to the U.S. Food and Drug Administration of an Investigational New Drug Application containing the protocol titled "Phase 2 study of REOLYSIN® (pelareorep) in combination with FOLFOX6, bevacizumab and pembrolizumab in female patients with KRAS-mutant colorectal cancer metastatic to the liver", which is now active.

In April, we announced updated results from a U.S. NCI sponsored, randomized Phase 2 clinical trial of REOLYSIN® in combination with carboplatin and paclitaxel in patients with pancreatic cancer (NCI-8601). We performed an intent-to-treat analysis of overall survival on patients with confirmed treatment regimes, as assessed by the percentage of patients surviving for two years. The analysis showed a statistically significantly higher percentage of patients surviving two years

in the test arm (17.7%, n=36) versus the control arm (0%, n=20) (p = 0.001), the crossover arm (12.5%, n=16)) versus the control arm (p = 0.03) and the test plus crossover arms (16.0%, n=52) versus the control arm (p = 0.0004). These results build on the overall survival benefit data we collected in our REO 017 study, and validate our decision to conduct a Phase 1b study of pembrolizumab (KEYTRUDA®) in combination with REOLYSIN® and chemotherapy in patients with advanced pancreatic adenocarcinoma (REO 024), which enrolled its first patient early in 2016 and is our first trial incorporating a checkpoint inhibitor.

Leveraging our Expertise

In April, we also announced the formation of a Science and Technology Committee made up of directors Dr. William Rice and Dr. Bernd Seizinger. In addition to many years of senior leadership in oncology drug development, Dr. Rice and Dr. Seizinger bring strong scientific and medical credentials along with a wealth of industry and academic contacts to the table. The committee is charged with supporting REOLYSIN®'s further development in the context of the broader oncology space with an ultimate focus on reaching a commercial endpoint.

Building out the Clinical Program

Our randomized Phase 2 program continues to expand our understanding of how REOLYSIN® works and provide important information that will shape our later-stage clinical initiatives with respect to indications, target patient populations and expected outcomes. We continue to push forward an array of clinical initiatives with a focus on a range of paths, both nearer- and longer-term, to registration.

I look forward to updating you on our progress in the second half of the year in our next report.

Yours Sincerely,

Dr. Brad Thompson, Ph.D.
President and CEO

MANAGEMENT DISCUSSION & ANALYSIS

June 30, 2016

August 3, 2016

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

This discussion and analysis should be read in conjunction with the unaudited consolidated interim financial statements of Oncolytics Biotech Inc.® as at and for the three and six months ended June 30, 2016 and 2015, 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, 2015. The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") and interpretations issued by the International Accounting Standards Board.

FORWARD-LOOKING STATEMENTS

The following discussion contains forward-looking statements, within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended and under applicable Canadian provincial securities legislation. Forward-looking statements, including our belief as to the potential of REOLYSIN®, a therapeutic reovirus, as a cancer therapeutic and our expectations as to the success of our research and development and manufacturing programs in 2016 and beyond, future financial position, business strategy and plans for future operations, and statements that are not historical facts, involve known and unknown risks and uncertainties, which could cause our actual results to differ materially from those in the forward-looking statements.

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 REOLYSIN® as a cancer treatment, the success and timely completion of clinical studies and trials, our ability to successfully commercialize REOLYSIN®, uncertainties related to the research, development and manufacturing of REOLYSIN®, 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 obtain financing to fund our development program, our ability to receive regulatory approval to commence enrollment in our clinical trial program, the final results of our co-therapy clinical trials, our ability to maintain our supply of REOLYSIN® 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 to update these forward-looking statements except as required by applicable law.

REOLYSIN® Development Update For 2016

Oncolytics Biotech Inc. is a Development Stage Company

Since our inception in April of 1998, Oncolytics Biotech® Inc. has been a development stage company and we have focused our research and development efforts on the development of REOLYSIN®, our potential cancer therapeutic. 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, if and when, our cancer product becomes commercially viable.

Our goal is to advance REOLYSIN® through the various stages of development required for successful pharmaceutical products. In order to achieve this goal, we believe that we have to actively manage the development of our clinical trial program, our pre-clinical and collaborative programs, our manufacturing process and REOLYSIN® supply, and our intellectual property.

Clinical Trial Program

Our overall clinical program is made up of a registration program that currently includes muscle-invasive bladder cancer and glioma cancer (our "Registration Program"), six randomized Phase II clinical trials (our "Randomized Program"), two checkpoint inhibitor studies (our "Checkpoint Inhibitor Program") and five other investigative clinical trials for a total of 13 clinical trials. During the second quarter of 2016, we expanded our clinical program to include a second check point inhibitor trial investigating pembrolizumab (KEYTRUDA®) in combination with REOLYSIN® and chemotherapy in female patients with colorectal cancer metastatic to the liver, announced clinical results from two of our third party sponsored clinical studies and provided updated survival data from our pancreatic clinical study with the US National Cancer Institute.

Randomized Program

We continue to progress through our Randomized Program that includes six randomized Phase II clinical trials investigating lung, ovarian, colorectal, pancreatic, prostate, and breast cancers and is currently in varying stages of enrollment. The objective of our Randomized Program is to examine the potential efficacy of REOLYSIN® over multiple indications in a randomized setting to determine which indication may be most susceptible to REOLYSIN® therapy, which predictive biomarkers can possibly be used, and the registration path for product approval. The randomized clinical trials included in our Randomized Program do not pre-screen patient tumors for certain biomarkers, but are considered "all comer" trials with respect to the histology of the patients' tumors. The primary objective for each of the randomized clinical trials within our Randomized Program is an analysis of progression free survival along with an analysis of overall survival as a secondary endpoint comparing the control and test arms within each trial. As well, each randomized clinical trial includes other multiple secondary endpoints dependent on the particular cancer indication, but in all cases includes an analysis of molecular factors that may be predictive of response (biomarker analysis). The National Cancer Institute of Canada ("NCIC") Clinical Trials Group sponsors our randomized Phase II colorectal, lung, prostate, and breast cancer trials. The US National Cancer Institute ("NCI") sponsors our randomized Phase II ovarian and pancreatic cancer trials.

We believe that as we progress through our Randomized Program we will develop a scientific understanding of REOLYSIN® that will include which cancer indications should be pursued in a Phase III setting, if progression fee survival is a reasonable proxy for overall survival and which predictive biomarkers should be used for screening patients.

Randomized Program - Clinical Trial Results

Randomized Colorectal Cancer Study

During the second quarter of 2016, we announced preliminary data from our NCIC randomized Phase II clinical trial of REOLYSIN® in combination with FOLFOX-6 and bevacizumab (Avastin®) in patients with advanced or metastatic colorectal cancer. This preliminary analysis was presented at the June 2016 American Society of Clinical Oncology ("ASCO") Annual Meeting held in Chicago, IL.

	Objective Response Rate (%)		**Progression Free Survival (months)**		**Median Overall Survival (months)[1]**	
	Test	**Control**	**Test**	**Control**	**Test**	**Control**
Female Patients	63.2 (n=19)	23.8 (n=21)	7.43 (n=19)	8.08 (n=21)	19.3 (n=19)	14.5 (n=21)
Male Patients	46.9 (n=32)	41.9 (n=31)	7.33 (n=32)	9.26 (n=31)	15.4 (n=32)	15.7 (n=31)
Overall	52.9 (n=51)	34.6 (n=52)	7.33 (n=51)	9.13 (n=52)	15.57 (n=51)	15.21(n=52)

Note:

1. This was an interim analysis, as 62 (60.2%) patients out of a total of 103 patients were alive at the time of data cut-off. All of the median survivals noted could change at final analysis.

The abstract reported that the overall test arm had an objective response rate of 52.9% (n=51) versus 34.6% (n=52) in the control arm (p=0.06) and reported on a pre-planned analysis, as specified in the protocol, of patient responses by gender. The female patients in the test arm had an objective response rate of 63.2% (n=19) versus 23.8% (n=21) in the control arm (p=0.0054). The male patients in the test arm had an objective response rate of 46.9% (n=32) versus 41.9% (n=31) in the control arm (p=0.6747). The abstract also noted that, of grade 3 or higher adverse events, there was less abdominal pain (3.5% versus 17.3%, p=0.02), more hypertension (26.3% versus 3.8%, p=0.001) and more proteinuria (22.8% versus 1.9%, p=0.001) in the test arm than the control arm.

We also conducted an additional analysis of all patients (both male and female) with liver metastases, with or without metastases to other sites. For patients who had metastases to the liver, those treated with REOLYSIN® had objective tumour response rates of 55% (n=40), versus 28.6% (n=42) for those who did not receive REOLYSIN® (p=0.0077). For the patients who did not have liver metastases (21 of the 103 patients), there was no statistically significant difference in response rate (five of 11 in the test arm, versus 6 of 10 in the control arm).

Randomized Lung Cancer Study

During the second quarter of 2016, we announced preliminary data from our randomized NCIC Phase II lung cancer study of REOLYSIN®. Patients with non-squamous cell histology were treated with REOLYSIN® given in combination with pemetrexed (Arm A) versus pemetrexed alone (Arm B). Patients with squamous cell histology were treated with REOLYSIN® given in combination with docetaxel (Arm C) versus docetaxel alone (Arm D). This preliminary analysis was presented at the June 2016 Annual ASCO meeting held in Chicago, IL.

	Median Progression Free Survival (months)			**Median Overall Survival (months)[1]**		
	Test Arms (Arm A+C) (95% CI)	**Control Arms (Arm B+D) (95% CI)**	**Hazard Ratio (95% CI)**	**Test Arms (Arm A+C) (95% CI)**	**Control Arms (Arm B+D) (95% CI)**	**Hazard Ratio (95% CI)**
EGFR[2]	5.16 (0.76-8.71) (n=8)	4.63 (1.51-7.03) (n=5)	0.54 (0.13-2.22)	18.66 (1.38-26.84) (n=8)	7.49 (4.63-16.79) (n=5)	0.37 (0.08-1.71)
TP53[2]	4.07 (2.63-6.21) (n=24)	2.40 (1.28-2.99) (n=21)	0.58 (0.31-1.08)	8.74 (6.83-13.93) (n=23)	6.14 (3.02-8.18) (n=21)	0.55 (0.28-1.07)
Female Patients	3.98 (2.66-5.39) (n=41)	2.84 (1.51-4.34) (n=34)	0.59 (0.36-0.98)	8.38 (5.36-10.38) (n=41)	7.59 (5.59-10.45) (n=34)	0.85 (0.49-1.46)
Male Patients	2.56 (1.45-3.94) (n=36)	2.69 (2.46-4.24) (n=41)	1.34 (0.83-2.14)	7.66 (4.37-10.94) (n=36)	7.26 (4.86-10.78) (n=41)	1.0 (0.60-1.68)
Overall	2.96 (2.56-4.17) (n=77)	2.83 (2.50-3.98) (n=75)	0.93 (0.66-1.31)	8.12 (5.85-9.40) (n=77)	7.39 (5.72-9.43) (n=75)	0.94 (0.64-1.37)

Notes:

1. This was an interim analysis, as 38 (25.0%) patients out of a total of 152 patients were alive at the time of data cut-off. Survival outcomes noted could change at final analysis.
2. Mutated.

The investigators concluded that REOLYSIN® was reasonably well tolerated at the dose and schedule administered with pemetrexed or docetaxel and that no new safety signals were seen. They also noted it was of interest that female patients in the REOLYSIN®-containing arms did better than in the standard treatment arms and that in a subgroup analysis that EGFR mutation and p53 mutation status was associated with a trend to improved progression free survival.

Checkpoint Inhibitor Program

During the second quarter of 2016, we announced that, following submission to the U.S. Food and Drug Administration ("FDA") for review, the Investigational New Drug Application containing the protocol titled "Phase 2 study of REOLYSIN® (pelareorep) in combination with FOLFOX6, bevacizumab and pembrolizumab in female patients with KRAS-mutant colorectal cancer metastatic to the liver" was active.

The objective of this study is to confirm the objective overall and liver metastases response rates in female patients that we saw in our NCIC sponsored randomized Phase II colorectal study *(see "Randomized Program - Clinical Trial Results")*. This is a multicenter, single arm safety and efficacy study of REOLYSIN® in combination with chemotherapy (FOLFOX6), bevacizumab (Avastin®) and pembrolizumab (KEYTRUDA®) in female patients with KRAS-mutant metastatic colorectal cancer (CRC) in the liver.

The primary objective is to evaluate the overall response rate (ORR) according to Immune-related Response Evaluation Criteria in Solid Tumors ("irRECIST"). Secondary objectives include evaluating disease response in liver metastases and overall survival. The Company also intends to examine the effect of study treatment on immune-related cells and biomarkers associated with immune response and genetic biomarkers associated with positive response to study treatment. Study enrollment will be approximately 30 patients.

Manufacturing and Process Development

During the second quarter of 2016, we continued to supply our clinical trial program with previously filled and labeled product from our existing supply of REOLYSIN®. As well, we continued our validation activities designed to demonstrate that our manufacturing process for the commercial production of REOLYSIN® is robust and reproducible as part of a process validation master plan. Process validation is required to ensure that the resulting product meets required specifications and quality standards and will form part of the Company's submission to regulators, including the FDA, for product approval.

Collaborative Program

Abstracts/Posters Presented during the Second Quarter of 2016

Conference/Meeting	Abstract/Poster Title	Description/Conclusion
American Society of Gene and Cell Therapy in Washington, DC	***The Potency of a Histone Deacetylase Inhibitor and REOLYSIN® in Head and Neck Squamous Cell Carcinoma***	The authors used the first FDA approved histone deacetylase inhibitor ("HDACi"), vorinostat (suberoylanilide hydroxamic acid) ("SAHA"), in combination with REOLYSIN® in vitro and in vivo. They had previously found a synergistic combination of SAHA and REOLYSIN® in a nude mouse model. Preclinical models using oncolytics are often conducted in immunocompromised mice, negating the significant impact of the immune system. The data demonstrates that combination of reovirus plus SAHA therapy has significant activity in the treatment of SCCHN, even in an immunocompetent model and that immune system rebound likely plays a significant role in the long-term anti-tumor response.
2016 Annual Meeting of the American Association of Cancer Research in New Orleans, LA	***Successful oncolytic virotherapy in a bortezomib resistant syngeneic mouse model of multiple myeloma: implications for translation significance***	Using the VK*MYC bortezomib resistant transplantable multiple myeloma mouse model, the authors demonstrated that mice harboring bortezomib insensitive multiple myeloma tumors significantly responded to reovirus treatment. These data are supportive of previous and ongoing preclinical and clinical work in this indication and the Company is currently enrolling patients in a Phase 1b study of REOLYSIN® in combination with bortezomib in patients with relapsed or refractory multiple myeloma.
2016 Annual Meeting of the American Association of Cancer Research in New Orleans, LA	***Toll like receptor 3 as an immunotherapeutic target for Kras mutated colorectal cancer***	The authors hypothesized that effective expression of toll like receptors 3 ("TLR3") would dampen the infection potential of reovirus through the mounting of an innate immune response. Using a xenograft model with HCT116 colorectal cancer cells, those with TLR3 downregulated cells showed improved control of tumor growth with reovirus treatment compared to those expressing TLR3 (p=0.04). Down regulation of the host immune response improved virus mediated cell cytotoxicity and the findings could result in improved and beneficial killing of cancer cells by reovirus.

Intellectual Property

At the end of the second quarter of 2016, we had been issued over 415 patents including 60 U.S. and 20 Canadian patents as well as issuances in other jurisdictions. We have an extensive patent portfolio covering the oncolytic reovirus that we use in our clinical trial program including a composition of matter patent that expires in 2028. Our patent portfolio also includes methods for treating proliferative disorders using modified adenovirus, HSV, parapoxvirus and vaccinia virus.

Financing Activity

On February 26, 2016, we entered into an "at-the-market" equity distribution agreement with Canaccord Genuity Inc. acting as sole agent in Canada (our "Canadian ATM"). Under the terms of the distribution agreement, we may, from time to time, sell shares of our common stock having an aggregate offering value of up to $4.6 million through Canaccord Genuity Inc. Sales of common shares, if any, pursuant to the Canadian ATM, will be made in transactions that are deemed to be "at-the-market distributions", through the facilities of the Toronto Stock Exchange or other "marketplace" (as defined in National Instrument 21-101 Marketplace Operation) in Canada. We will determine, at our sole discretion, the timing and number of shares to be sold under this ATM facility. During the six month period ending June 30, 2016, we sold 1,981,500 commons shares for gross proceeds of $1,078,193. We incurred share issue costs which included costs to establish our Canadian ATM facility of $468,363.

Financial Impact

We estimated at the beginning of 2016 that our cash requirements to fund our operations for the year would be approximately $19.0 million. We now expect our cash requirements for 2016 will be between $14 - $15 million and will depend on our ultimate clinical program. (see *"Liquidity and Capital Resources"*). Our cash usage for the first half of 2016 was $5,645,983 from operating activities and $5,702 for the acquisition of property and equipment. Our net loss for the six month period ending June 30, 2016 was $6,597,483.

Cash Resources

We exited the second quarter of 2016 with cash and short-term investments totaling $20,409,781 (see *"Liquidity and Capital Resources")*.

REOLYSIN® Development For 2016

Our planned development activity for REOLYSIN® in 2016 is made up of clinical, manufacturing, and intellectual property programs. Our 2016 clinical program includes the continuation of patient enrollment in our Registration, Checkpoint Inhibitor and Randomization Programs and the anticipated release of clinical data. We also expect to use our clinical data to assist in the implementation of our overall Clinical Program.

Our 2016 manufacturing program includes continued production of 100-litre cGMP production runs along with the related fill, labeling, packaging and shipping of REOLYSIN® to our various clinical sites. We also plan to continue progressing through our process validation master plan and related conformity testing in 2016. Finally, our intellectual property program includes filings for additional patents along with monitoring activities required to protect our patent portfolio.

At the beginning of 2016, we estimated our cash requirements to fund our operations for 2016 would be be approximately $19 million. We now expect our cash requirements for 2016 will be between $14 - $15 million and will depend on our ultimate clinical program. (see *"Liquidity and Capital Resources"*).

Second Quarter Results of Operations

(for the three months ended June 30, 2016 and 2015)

Net loss for the three month period ending June 30, 2016 was $2,580,708 compared to $3,850,258 for the three month period ending June 30, 2015.

Research and Development Expenses ("R&D")

	2016 $	**2015 $**
Clinical trial expenses	**559,609**	122,727
Manufacturing and related process development expenses	**104,483**	827,184
Intellectual property expenditures	**127,774**	202,067
Research collaboration expenses	**84,407**	208,907
Other R&D expenses	**659,557**	962,394
Foreign exchange loss (gain)	**(105,591)**	141,189
Share based payments	**60,717**	7,086
Research and development expenses	**1,490,956**	2,471,554

Clinical Trial Program

	2016 $	2015 $
Direct patient expenses	559,609	122,727
Clinical trial expenses	559,609	122,727

Our clinical trial expenses were $559,609 for the second quarter of 2016 compared to $122,727 for the second quarter of 2015. During the second quarter of 2016, our clinical activities continued to relate primarily to the patient enrollment in our checkpoint inhibitor pancreatic cancer study investigating pembrolizumab (KEYTRUDA®) in combination with REOLYSIN®. As well, we incurred costs associated with the completion of enrollment in our Randomized Program while implementing our Registration Program. During the second quarter of 2015, our clinical trial program activities related to completing the enrollment in our Randomized Program and closing out fully enrolled clinical trials.

Manufacturing & Related Process Development ("M&P")

	2016 $	2015 $
Product manufacturing expenses	10,156	568,664
Process development expenses	94,327	258,520
Manufacturing and related process development expenses	104,483	827,184

Our M&P expenses for the second quarter of 2016 were $104,483 compared to $827,184 for the second quarter of 2015. During the second quarter of 2016, our product manufacturing costs mainly related to shipping and storage costs which were offset by recoveries from a development collaboration. During the second quarter of 2015, our product manufacturing costs mainly related to the fill, labeling and lot release testing of product to be used in our clinical trial program along with costs associated with shipping and storage of our bulk and vialed product.

Our process development expenses for the second quarter of 2016 were $94,327 compared to $258,520 for the second quarter of 2015. During the second quarters of 2016 and 2015, our process development activities continued to be focused on our validation master plan. In the second quarter of 2016, these activities related to scaled up and process optimization studies compared to assay development, optimization, validation and stability studies in the second quarter of 2015.

Intellectual Property Expenses

	2016 $	2015 $
Intellectual property expenses	127,774	202,067

Our intellectual property expenses for the second quarter of 2016 were $127,774 compared to $202,067 for the second quarter of 2015. The change in intellectual property expenditures reflects the timing of filing costs associated with our expanded patent base. At the end of the second quarter of 2016, we had been issued over 415 patents including 60 U.S. and 20 Canadian patents, as well as issuances in other jurisdictions.

Research Collaborations

	2016 $	2015 $
Research collaborations	84,407	208,907

Our research collaboration expenses for the second quarter of 2016 were $84,407 compared to $208,907 for the second quarter of 2015. During the second quarter of 2016, our research collaborations were primarily focused on biomarker studies. During the second quarter of 2015, our research collaborations included biomarker studies along with studies investigating the interaction of the immune system and the reovirus and the use of the reovirus as a co-therapy with existing chemotherapeutics and radiation.

Other Research and Development Expenses

	2016 $	2015 $
R&D consulting fees	67,110	51,550
R&D salaries and benefits	533,294	772,917
Other R&D expenses	59,153	137,927
Other research and development expenses	659,557	962,394

Our Other Research and Development expenses for the second quarter of 2016 were $659,557 compared to $962,394 for the second quarter of 2015. During the second quarter of 2016, our R&D salaries and benefits expenses continued to decline compared to the second quarter of 2015 as a result of a drop in head count that occurred during the second half of 2015. As well, with the completion of enrollment in our NCIC trials in 2015 and the close out of completed Company sponsored studies, our Other R&D expenses continue to decline.

Share Based Payments

	2016 $	2015 $
Share based payments	60,717	7,086

Share based payments are a result of activity related to our stock option plan. During the second quarter of 2016, our non-cash share based payment expenses were $60,717 compared to $7,086 for the second quarter of 2015. In the second quarters of 2016 and 2015, we incurred stock based compensation associated with the vesting of previously granted stock options.

Operating Expenses

	2016 $	2015 $
Public company related expenses	754,876	874,598
Office expenses	266,998	454,017
Amortization of property and equipment	44,675	44,852
Share based payments	58,909	48,588
Operating expenses	1,125,458	1,422,055

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 US and Canadian stock listings. Our public company related expenses were $754,876 for the second quarter of 2016 compared to $874,598 for the second quarter of 2015. During the second quarter of 2016, our public company expenses decreased compared to the second quarter of 2015 mainly due to decrease in professional fees partially offset by an increase in financial advisory services and investor relations activities.

Office expenses include compensation costs (excluding share based payments), office rent and other office related costs. Our office expenses were $266,998 for the second quarter of 2016 compared to $454,017 for the second quarter of 2015. During the second quarter of 2016, our office rent associated with our head office decreased compared to the second quarter of 2015. As well, recoveries from a development agreement increased during the second quarter of 2016 compared to the second quarter of 2015.

During the second quarter of 2016, our non-cash share based payment expenses were $58,909 compared to $48,588 for the second quarter of 2015. We incurred stock based compensation associated with the granting of restricted share units to independent board members and the vesting of previously granted stock options.

Results of Operations

(for the six month period ending June 30, 2016 and 2015)

Net loss for the six month period ending June 30, 2016 was $6,597,483 compared to $7,402,096 for the six month period ending June 30, 2015.

Research and Development Expenses ("R&D")

	2016 $	2015 $
Clinical trial expenses	**1,054,871**	661,894
Manufacturing and related process development expenses	**638,002**	1,415,775
Intellectual property expenditures	**524,138**	572,918
Research collaboration expenses	**138,526**	401,822
Other R&D expenses	**1,465,502**	1,919,661
Foreign exchange loss (gain)	**275,726**	(158,033)
Share based payments	**120,320**	83,056
Research and development expenses	**4,217,085**	4,897,093

Clinical Trial Program

	2016 $	2015 $
Direct patient expenses	1,054,871	661,894
Clinical trial expenses	1,054,871	661,894

Our clinical trial expenses were $1,054,871 for the six month period ending June 30, 2016 compared to $661,894 for the six month period ending June 30, 2015. During the six month period ending June 30, 2016, our clinical activities mainly related to the patient enrollment in our checkpoint inhibitor pancreatic cancer study investigating pembrolizumab (KEYTRUDA®) in combination with REOLYSIN® along with costs associated with the completion of enrollment in our Randomized Program while implementing our Registration Program. During the six month period ending June 30, 2015, our clinical trial program activities mainly related to the completion of enrollment in our Randomized Program and close out fully enrolled clinical trials.

We still expect our clinical trial expenses to increase in 2016 compared to 2015. In 2016, we expect to commence enrollment in our Registration Program which will include a mix of Company and Third Party sponsored clinical trials. As well, we expect to expand our Checkpoint Inhibitor Program and we believe, in order to ensure timely completion of this program, we will need to directly sponsor certain clinical trials including our pancreatic cancer trial in combination with pembrolizumab (KEYTRUDA®). We also expect to incur regulatory consulting activities and associated costs in order to support our decisions pertaining to our Clinical Programs.

Manufacturing & Related Process Development ("M&P")

	2016 $	2015 $
Product manufacturing expenses	365,191	965,744
Process development expenses	272,811	450,031
Manufacturing and related process development expenses	638,002	1,415,775

Our M&P expenses for the six month period ending June 30, 2016 were $638,002 compared to $1,415,775 for the six month period ending June 30, 2015. During the six month period ending June 30, 2016, our product manufacturing activities have mainly related to supplying our clinical program with sufficient product including related shipping and storage activities. These costs have been partially offset by recoveries from a development collaboration. During the six month period ending June 30, 2015, our production manufacturing activities related to the fill, labeling and lot release testing of product to be used in our clinical trial program along with related shipping and storage activities.

Our process development expenses for the six month period ending June 30, 2016 were $272,811 compared to $450,031 for the six month period ending June 30, 2015. During the six month periods ending June 30, 2016 and 2015, our process development activities focused on our validation master plan. In 2016, these activities included stability, scale up and process optimization studies. In 2015, our process development activities also included assay development and validation studies.

We still expect our M&P expenses for 2016 to increase compared to 2015. In 2016, we expect to fill, label and store sufficient product in preparation for a registration study. We also expect to continue to perform conformity testing related to our process validation master plan.

Intellectual Property Expenses

	2016 $	2015 $
Intellectual property expenses	524,138	572,918

Our intellectual property expenses for the six month period ending June 30, 2016 were $524,138 compared to $572,918 for the six month period ending June 30, 2015. The change in intellectual property expenditures reflects the timing of filing costs associated with our expanded patent base. At the end of the first half of 2016, we had been issued over 415 patents including 60 U.S. and 20 Canadian patents, as well as issuances in other jurisdictions. We expect that our intellectual property expenses will remain consistent in 2016 compared to 2015.

Research Collaborations

	2016 $	2015 $
Research collaborations	138,526	401,822

Our research collaboration expenses for the six month period ending June 30, 2016 were $138,526 compared to $401,822 for the six month period ending June 30, 2015. During the six month periods ending June 30, 2016, our research collaborations included biomarker studies along with studies investigating the interaction of the immune system and the reovirus. During the six month month period ending June 30, 2015, our research collaborations also included the use of the reovirus as a co-therapy with existing chemotherapeutics and radiation.

We still expect that our research collaborations in 2016 will remain consistent with 2015. We expect to complete our ongoing collaborative program carried over from 2015 and will continue to be selective in the types of new collaborations we enter into in 2016.

Other Research and Development Expenses

	2016 $	2015 $
R&D consulting fees	129,072	103,665
R&D salaries and benefits	1,232,383	1,548,157
Other R&D expenses	104,047	267,839
Other research and development expenses	1,465,502	1,919,661

Our Other Research and Development expenses for the first half of 2016 were $1,465,502 compared to $1,919,661 for the first half of 2015. During the first half of 2016, our R&D salaries and benefits expenses continued to decline compared to the second quarter of 2015 as a result of a drop in head count that occurred during the second half of 2015. As well, with the completion of enrollment in our NCIC trials in 2015 and the close out of completed Company sponsored studies, our Other R&D expenses continue to decline.

We still expect that our Other Research and Development expenses in 2016 will remain consistent compared to 2015.

Share Based Payments

	2016 $	2015 $
Share based payments	120,320	83,056

Share based payments are a result of activity related to our stock option plan. During the first half of 2016 and 2015, these amounts related to the vesting of previously granted stock options.

Operating Expenses

	2016 $	2015 $
Public company related expenses	1,582,383	1,529,135
Office expenses	731,924	898,084
Amortization of property and equipment	90,617	89,982
Share based payments	80,946	87,588
Operating expenses	2,485,870	2,604,789

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 U.S. and Canadian stock listings. During the six month periods ending June 30, 2016 and 2015, our public company related expenses have remained relatively consistent.

Office expenses include compensation costs (excluding share based payments), office rent, and other office related costs. During the first half of 2016, we incurred office expenses of $731,924 compared to $898,084 during the first half of 2015. During the first six months of 2016, rent associated with our head office declined compared to the first six months of 2015. As well, recoveries from a development agreement increased in the first half of 2016 compared to 2015.

During the six month period ending June 30, 2016, our non-cash share based payment expenses were $80,946 compared to $87,588 for the six month period ending June 30, 2015. We incurred stock based compensation associated with the granting of restricted share units to independent board members and the vesting of previously granted stock options.

We still expect our operating expenses in 2016 to remain consistent with 2015.

Commitments

As at June 30, 2016, we are committed to payments totaling $2,382,000 during the remainder of 2016 for activities related to clinical trial activity, manufacturing and collaborations. All of these committed payments are considered to be part of our normal course of business.

Summary of Quarterly Results

(unaudited)	2016		2015				2014	
(amounts in thousands, except per share data)	June	March	Dec.	Sept	June	March	Dec.	Sept
Revenue	—	—	—	—	—	—	—	—
Net loss[2]	2,581	4,017	3,497	2,824	3,850	3,552	3,779	4,637
Basic and diluted loss per common share[2]	$0.02	$0.03	$0.03	$0.02	$0.03	$0.04	$0.04	$0.05
Total assets[3]	21,368	23,203	27,384	31,001	33,190	31,445	17,193	18,079
Total cash[1], [3]	20,410	22,322	26,077	30,023	32,079	30,639	16,185	17,045
Total long-term debt	—	—	—	—	—	—	—	—
Cash dividends declared[5]	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

(1) Included in total cash are cash and cash equivalents plus short-term investments.
(2) Included in net loss and loss per common share between June 2016 and July 2014 are quarterly stock based compensation expenses (recovery) of $119,626, $81,640, $248,101, $10,791, $55,675, $114,970, $109,902, and $199,821, respectively.
(3) We issued 1,981,500 common shares for net cash proceeds of $0.6 million (2015 - 24,197,878 common shares for net cash proceeds of $23.4 million; 2014 - 8,708,676 common shares for net cash proceeds of $9.0 million).
(4) We have not declared or paid any dividends since incorporation.

Liquidity and Capital Resources

2016 Financing Activities

During the period between February 26 and June 30, 2016, we sold 1,981,500 common shares for gross proceeds of $1,078,193. We incurred share issue costs which included costs to establish our Canadian ATM facility of $468,363.

2015 Financing Activities

US Share Purchase Agreement
During the first six months of 2015, we issued 5,778,674 common shares under our share purchase agreement with Lincoln Park Capital, LLC for net cash proceeds of US$3,490,496.

"At the Market" Equity Distribution Agreement
During the first six months of 2015, we issued 18,419,204 common shares under our "At the Market" equity distribution agreement with Canaccord Genuity Inc. for net cash proceeds of US$15,192,315.

Liquidity

As at June 30, 2016, we had cash and cash equivalents, short-term investments and working capital positions as follows:

	June 30, 2016 $	December 31, 2015 $
Cash and cash equivalents	18,320,981	24,016,275
Short-term investments	2,088,800	2,060,977
Working capital position	18,214,179	24,214,488

We do not have any debt other than trade accounts payable and we have potential contingent obligations relating to the completion of our research and development of REOLYSIN®.

We desire to maintain adequate cash and short-term investment reserves to support our planned activities which include our clinical trial program, product manufacturing, administrative costs, and our intellectual property expansion and protection. To date, we have funded our operations mainly through the issue of additional capital via public and private offerings and through the exercise of warrants and stock options. In February 2016, we were able to raise funds through our Canadian ATM (our "Financing Arrangement").

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. In an effort to be able to evaluate all types of financing arrangements, we maintain a current 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"). We renewed our Base Shelf on February 16, 2016 which allows us to 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 effected from time to time in one or more transactions at a fixed price or prices, which may be changed, 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. Our Base Shelf expires on March 16, 2018.

Maintaining 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 our company. By utilizing our Base Shelf, we were able to enter into our Financing Arrangement.

Our Financing Arrangement provides us with access to, subject to the respective terms and conditions, $4.6 million of which we have raised gross proceeds of approximately $1.1 million. We expect to continue to access our Financing Arrangement to help support our current clinical trial, manufacturing, intellectual property and collaboration programs. We now anticipate that the expected cash usage from our operations in 2016 will be between approximately $14 - $15 million. Despite the anticipated change in our cash requirements compared to 2015, we continue to manage our research and development plan with the objective of ensuring optimal use of our existing resources. Additional activities continue to be subject to adequate resources and we believe we will have sufficient cash resources and access to additional cash resources through our Financing Arrangement to fund our presently planned operations into 2017. Factors that will affect our anticipated cash usage in 2016 and 2017, and 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 2016.

Investing Activities

Under our Investment Policy, we are permitted to invest in short-term instruments with a rating no less than R-1 (DBRS) with terms less than two years. Our portfolio consists of guaranteed investment certificates. As of June 30, 2016, we had $2.1 million invested under this policy, currently earning interest at an effective rate of 1.41%.

Financial Instruments and Other Instruments

Our financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable and accounts payable. As at June 30, 2016, there are no significant differences between the carrying values of these amounts and their estimated market values. These financial instruments expose us to the following risks:

Credit risk

Credit risk is the risk of financial loss if a counter-party to a financial instrument fails to meet its contractual obligations. We are exposed to credit risk on our cash and cash equivalents and short-term investments 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 short-term investments.

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.

We also mitigate our exposure to credit risk by restricting our portfolio to investment grade securities with short-term maturities and by monitoring the credit risk and credit standing of counterparties. Currently, 100% of our short-term investments are in guaranteed investment certificates.

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 and our portfolio of short-term investments. 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.

Currency risk

Currency risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. In the normal course of our operations, we are exposed to currency risk from the purchase of goods and services primarily in the U.S., the U.K. and the European Union. In addition, we are exposed to currency risk to the extent cash is held in foreign currencies from either the purchase of foreign currencies or when we receive foreign currency proceeds from financing activities. For the six month ending June 30, 2016, the impact of a $0.01 increase in the value of the U.S. dollar against the Canadian dollar would have decreased our net loss by approximately $49,607. The impact of a $0.10 increase in the value of the British pound against the Canadian dollar would have increased our net loss for the six month period ending June 30, 2016 by approximately $5,703. The impact of a $0.10 increase in the value of the Euro against the Canadian dollar would have decreased our net loss for the six month period ending June 30, 2016 by approximately $3,428.

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.

Balances in foreign currencies at June 30, 2016 are as follows:

	U.S. Dollars $	British Pounds £	Euro €
Cash and cash equivalents	7,162,981	22,670	34,652
Accounts payable	(234,787)	(2,656)	—
	6,928,194	20,014	34,652

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 the notes to our audited financial statements. Accounts payable are all due within the current operating period.

Other MD&A Requirements

We have 120,491,622 common shares outstanding at August 3, 2016. If all of our options (7,754,727) were exercised and our restricted share units were to vest (306,643) we would have 128,552,992 common shares outstanding.

Our 2016 Annual Information Form on Form 20-F is available on www.sedar.com.

Disclosure Controls and Procedures

There were no changes in our internal controls over financial reporting during the quarter ended June 30, 2016 that materially affected or are reasonably likely to materially affect, internal controls over financial reporting.

Interim Consolidated Financial Statements
(unaudited)

Oncolytics Biotech® Inc.
June 30, 2016 and 2015

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

	Notes	June 30, 2016 $	December 31, 2015 $
Assets			
Current assets			
Cash and cash equivalents	*3*	**18,320,981**	24,016,275
Short-term investments	*3*	**2,088,800**	2,060,977
Accounts receivable		**54,633**	340,059
Prepaid expenses		**530,470**	506,669
Total current assets		**20,994,884**	26,923,980
Non-current assets			
Property and equipment		**372,854**	459,818
Total non-current assets		**372,854**	459,818
Total assets		**21,367,738**	27,383,798
Liabilities And Shareholders' Equity			
Current Liabilities			
Accounts payable and accrued liabilities		**2,780,705**	2,709,492
Total current liabilities		**2,780,705**	2,709,492
Commitments	*7*		
Shareholders' equity			
Share capital Authorized: unlimited Issued:			
June 30, 2016 – 118,900,812			
December 31, 2015 - 118,151,622	*4*	**261,975,522**	261,324,692
Contributed surplus	*4, 5*	**26,438,232**	26,277,966
Accumulated other comprehensive loss		**460,092**	760,978
Accumulated deficit		**(270,286,813)**	(263,689,330)
Total shareholders' equity		**18,587,033**	24,674,306
Total liabilities and equity		**21,367,738**	27,383,798

See accompanying notes

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

	Notes	Three Month Period Ending June 30, 2016 $	Three Month Period Ending June 30, 2015 $	Six Month Period Ending June 30, 2016 $	Six Month Period Ending June 30, 2015 $
Expenses					
Research and development	*5, 11, 12*	**1,490,956**	2,471,554	**4,217,085**	4,897,093
Operating	*5, 11, 12*	**1,125,458**	1,422,055	**2,485,870**	2,604,789
Operating (loss)		**(2,616,414)**	(3,893,609)	**(6,702,955)**	(7,501,882)
Interest income		**35,537**	44,122	**105,158**	100,557
Loss before income taxes		**(2,580,877)**	(3,849,487)	**(6,597,797)**	(7,401,325)
Income tax		**169**	(771)	**314**	(771)
Net (loss)		**(2,580,708)**	(3,850,258)	**(6,597,483)**	(7,402,096)
Other comprehensive income items that may be reclassified to net loss					
Translation adjustment		**(130,827)**	(41,117)	**(300,886)**	184,474
Net comprehensive (loss)		**(2,711,535)**	(3,891,375)	**(6,898,369)**	(7,217,622)
Basic and diluted (loss) per common share	*6*	**(0.02)**	(0.03)	**(0.06)**	(0.07)
Weighted average number of shares (basic and diluted)		**119,601,638**	114,549,532	**118,900,812**	107,095,007

See accompanying notes

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

	Share Capital $	Contributed Surplus $	Accumulated Other Comprehensive Loss $	Accumulated Deficit $	Total $
As at December 31, 2014	237,657,056	25,848,429	280,043	(249,966,335)	13,819,193
Net loss and comprehensive loss	—	—	184,474	(7,402,096)	(7,217,622)
Issued, pursuant to Share Purchase Agreement	4,305,396	—	—	—	4,305,396
Issued, pursuant to "At the Market" Agreement	19,053,525	—	—	—	19,053,525
Share based compensation	—	170,645	—	—	170,645
As at June 30, 2015	261,015,977	26,019,074	464,517	(257,368,431)	30,131,137

	Share Capital $	Contributed Surplus $	Accumulated Other Comprehensive Loss $	Accumulated Deficit $	Total $
As at December 31, 2015	261,324,692	26,277,966	760,978	(263,689,330)	24,674,306
Net loss and comprehensive loss	—	—	(300,886)	(6,597,483)	(6,898,369)
Issued, pursuant to "At the Market" Agreement	609,830	—	—	—	609,830
Issued, pursuant to incentive share award plan	41,000	(41,000)	—	—	—
Share based compensation	—	201,266	—	—	201,266
As at June 30, 2016	**261,975,522**	**26,438,232**	**460,092**	**(270,286,813)**	**18,587,033**

See accompanying notes

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

	Notes	Three Month Period Ending June 30, 2016 $	Three Month Period Ending June 30, 2015 $	Six Month Period Ending June 30, 2016 $	Six Month Period Ending June 30, 2015 $
Operating Activities					
Net loss for the period		**(2,580,708)**	(3,850,258)	**(6,597,483)**	(7,402,096)
Amortization - property and equipment		**44,675**	44,852	**90,617**	89,982
Share based compensation	*5, 11*	**119,626**	55,675	**201,266**	170,645
Unrealized foreign exchange loss (gain)		**(243,914)**	1,634	**(102,619)**	(303,522)
Net change in non-cash working capital	*10*	**37,581**	(1,370,187)	**762,236**	(420,482)
Cash used in operating activities		**(2,622,740)**	(5,118,284)	**(5,645,983)**	(7,865,473)
Investing Activities					
Acquisition of property and equipment		**(5,702)**	(17,657)	**(5,702)**	(29,597)
Purchase of short-term investments		**—**	—	**(27,823)**	(29,292)
Cash used in investing activities		**(5,702)**	(17,657)	**(33,525)**	(58,889)
Financing Activities					
Proceeds from Share Purchase Agreement	*4*	**—**	2,379,800	**—**	4,305,396
Proceeds from "At the Market" equity distribution agreement	*4*	**710,374**	4,416,607	**609,830**	19,053,525
Cash provided by financing activities		**710,374**	6,796,407	**609,830**	23,358,921
Increase (decrease) in cash		**(1,918,068)**	1,660,466	**(5,069,678)**	15,434,559
Cash and cash equivalents, beginning of period		**20,233,408**	28,578,023	**24,016,275**	14,152,825
Impact of foreign exchange on cash and cash equivalents		**5,641**	(220,272)	**(625,616)**	430,833
Cash and cash equivalents, end of period		**18,320,981**	30,018,217	**18,320,981**	30,018,217

See accompanying notes

Note 1: Incorporation and 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.

Our interim consolidated financial statements for the period ended June 30, 2016, were authorized for issue in accordance with a resolution of the Board of Directors (the "Board") on August 3, 2016. We are a limited company incorporated and domiciled in Canada. Our shares are publicly traded and our registered office is located at 210, 1167 Kensington Crescent NW, Calgary, Alberta, Canada.

We are a development stage biopharmaceutical company that focuses on the discovery and development of pharmaceutical products for the treatment of cancers that have not been successfully treated with conventional therapeutics. Our product being developed may represent a novel treatment for Ras mediated cancers which can be used as an alternative to existing cytotoxic or cytostatic therapies, as an adjuvant therapy to conventional chemotherapy, radiation therapy, or surgical resections, or to treat certain cellular proliferative disorders for which no current therapy exists.

Note 2: Basis of Financial Statement Presentation

Our interim consolidated financial statements include our financial statements and the financial statements of our subsidiaries as at June 30, 2016 and are presented in Canadian dollars, our functional currency.

Our accounts are prepared in accordance with International Financial Reporting Standards (“IFRS”) and interpretations issued by the International Accounting Standards Board (“IASB”). The accounts are 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.

These interim consolidated financial statements have been prepared in compliance with International Accounting Standard 34 *Interim Financial Reporting.* The notes presented in these 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 interim consolidated financial statements should be read in conjunction with our most recent annual audited consolidated financial statements, for the year ended December 31, 2015. We have consistently applied the same accounting policies for all periods presented in these interim consolidated financial statements as those used in our audited consolidated financial statements for the year ended December 31, 2015.

Note 3: Cash Equivalents and Short Term Investments

Cash Equivalents
Cash equivalents consist of interest bearing deposits with our bank totaling $16,277,405 (December 31, 2015 - $21,742,300). The current annual interest rate earned on these deposits is 0.86% (December 31, 2015 – 0.76%).

Short-Term Investments
Short-term investments which consist of guaranteed investment certificates are liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value. The objectives for holding short-term investments are to invest our excess cash resources in investment vehicles that provide a better rate of return compared to our interest bearing bank account with limited risk to the principal invested. We intend to match the maturities of these short-term investments with the cash requirements of the Company’s activities and treat these as held-to-maturity short-term investments.

	Face Value $	Original Cost $	Accrued Interest $	Carrying Value $	Fair Value $	Effective Interest Rate %
June 30, 2016						
Short-term investments	**2,088,800**	**2,088,800**	**—**	**2,088,800**	**2,088,800**	**1.41%**
December 31, 2015						
Short-term investments	2,060,977	2,060,977	—	2,060,977	2,060,977	1.35%

Fair value is determined by using published market prices provided by our investment advisor.

Note 4: Share Capital

Authorized:
Unlimited number of no par value common shares

Issued:	Shares	
	Number	**Amount $**
Balance, December 31, 2014	93,512,494	237,657,056
Issued pursuant to "At the Market" sales agreement[(a)]	18,860,454	20,049,693
Issued pursuant to Share Purchase Agreement[(b)]	5,778,674	4,371,687
Share issue costs	—	(753,744)
Balance, December 31, 2015	118,151,622	261,324,692
Issued, pursuant to incentive share award plan	100,000	41,000
Issued pursuant to "At the Market" equity distribution agreement[(c)]	1,981,500	1,078,193
Share issue costs	—	(468,363)
Balance, June 30, 2016	**120,233,122**	**261,975,522**

(a) In 2015, under the terms of our "at-the-market" equity distribution agreement with Canaccord Genuity Inc. acting as sole agent (our "US ATM"), we issued 18,860,454 common shares for net proceeds of approximately US$15.5 million. On November 5, 2015, we were delisted from the NASDAQ Capital Market and as a result we are no longer able to sell common shares under our US ATM.

(b) In 2015, under the terms of the share purchase agreement with Lincoln Park Capital Fund, LLC ("Share Purchase Agreement"), we issued 5,778,674 common shares for net proceeds of approximately US$3.5 million. As part of the shares issued, we issued 78,674 commitment shares. The commitment shares were valued at a fair value of US$50,024 and were recorded as additional share issue costs. On November 5, 2015, we were delisted from the NASDAQ Capital Market and as a result we are no longer able to sell common shares under the Share Purchase Agreement.

(c) On February 25, 2016, we entered into a new "at-the-market" equity distribution agreement with Canaccord Genuity Inc. acting as our sole agent with an aggregate offering value of $4.6 million and allows us to sell our common shares through the facilities of the Toronto Stock Exchange or other "marketplace" (as defined in National Instrument 21-101 Marketplace Operation) in Canada (our "Canadian ATM"). Subject to the terms of our Canadian ATM, we are able to determine, at our sole discretion, the timing and number of shares to be sold under this ATM facility. During the period ending June 30, 2016, we sold 1,981,500 commons shares for gross proceeds of $1,078,193. We incurred share issue costs which included costs to establish our Canadian ATM facility of $468,363.

Note 5: Share Based Payments

Stock Option Plan

We have issued stock options to acquire common stock through our stock option plan of which the following are outstanding at June 30:

	2016		2015	
	Stock Options	Weighted Average Exercise Price $	Stock Options	Weighted Average Exercise Price $
Outstanding, beginning of the period	**8,561,394**	**2.17**	5,446,394	3.19
Granted during the period	**—**	**—**	100,000	0.80
Expired during the period	**(706,667)**	**3.64**	(15,000)	1.59
Forfeited during the period	**(100,000)**	**1.69**	—	—
Exercised during the period	**—**	**—**	—	—
Outstanding, end of the period	**7,754,727**	**2.04**	5,531,394	3.16
Options exercisable, end of the period	**5,669,727**	**2.63**	5,381,394	3.19

The following table summarizes information about the stock options outstanding and exercisable at June 30, 2016:

Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price $	Number Exercisable	Weighted Average Exercise Price $
$0.41 - $0.41	400,000	9.4	0.41	400,000	0.41
$0.42 - $0.57	2,780,000	9.4	0.42	695,000	0.42
$0.58 - $1.87	1,640,667	7.6	1.55	1,640,667	1.55
$1.88 - $3.95	1,614,060	4.6	3.03	1,614,060	3.03
$3.96 - $6.72	1,320,000	5.5	5.33	1,320,000	5.33
	7,754,727	7.4	2.04	5,669,727	2.63

Non-exercisable options vest annually over periods ranging from one to three years or upon satisfaction of certain performance conditions.

There were no options granted during the six month period ending June 30, 2016. During the six month period ending June 30, 2015, the estimated fair value of stock options granted was determined using the Black Scholes Option Pricing Model using the following weighted average assumptions and fair value of options:

	2015
Risk-free interest rate	0.64%
Expected hold period to exercise	2.0 years
Volatility in the price of the Company's shares	103%
Rate of forfeiture	2.5%
Dividend yield	Nil
Weighted average fair value of options	$0.43

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 marketable bond rate 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.

Incentive Share Award Plan

We have issued restricted share units to non-employee directors through our incentive share award plan. Grants of restricted share units to non-employee directors vest either on the third anniversary date from the grant date or when the director ceases to be a member of the board. The following restricted share units are outstanding at June 30:

	2016	2015
Outstanding, beginning of the period	**368,831**	—
Granted during the period[(1), (2)]	**37,812**	—
Vested, during the period	**(100,000)**	—
Outstanding, end of the period	**306,643**	—

(1) The weighted average fair value of the restricted share units granted was $0.41 in 2016.

We have reserved 11,312,394 common shares for issuance relating to outstanding stock options. Compensation expense related to stock options granted to employees, directors and consultants and restricted share units granted to independent directors was $119,626 and $201,266 for the three and six month periods ending June 30, 2016, respectively (2015 - $55,675 and $170,645, respectively).

Note 6: Loss Per Common Share

Loss per common share is calculated using the net loss for the three and six month periods and the weighted average number of common shares outstanding for the three and six month periods ending June 30, 2016 of 119,601,638 and 118,900,812, respectively (June 30, 2015 of 114,549,532 and 107,095,007, 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 7: Commitments

We are committed to payments totaling $2,382,000 for activities related to our clinical trial, manufacturing and collaboration programs.

We are committed to rental payments (excluding our portion of operating costs and rental taxes) under the terms of our office leases. Annual payments under the terms of these leases are as follows:

	Amount $
Remainder of 2016	62,630
2017	148,891
2018	103,512
2019	103,512
2020	103,512
2021	43,130
	565,187

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.

Note 8: Capital Disclosures

Our objective when managing capital is to maintain adequate cash resources to support planned activities which include the clinical trial program, product manufacturing, administrative costs and intellectual property expansion and protection. We include shareholders' equity, cash and cash equivalents and short-term investments in the definition of capital.

	June 30, 2016 $	December 31, 2015 $
Cash and cash equivalents	**18,320,981**	24,016,275
Short-term investments	**2,088,800**	2,060,977
Shareholders' equity	**18,587,033**	24,674,306

We do not have any debt other than trade accounts payable and we have potential contingent obligations relating to the completion of our research and development of REOLYSIN®.

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 February 16, 2016, 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 Canada. Under our 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 effected from time to time in one or more transactions at a fixed price or prices, which may be changed, 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 our company. Funds received from a Prospectus Supplement will be used in line with our Board approved budget and multi-year plan. Our renewed Base Shelf expires on March 16, 2018 and allowed us to enter into our Canadian ATM equity distribution agreement (see Note 4). We use this equity arrangement to assist us in achieving our capital objective.

We are not subject to externally imposed capital requirements and there have been no changes in how we define or manage our capital in 2016.

Note 9: Financial Instruments

Our financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, and accounts payable. As at June 30, 2016, there are no significant differences between the carrying values of these amounts and their estimated market values.

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 short-term investments 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 short-term investments.

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.

We also mitigate our exposure to credit risk by restricting our portfolio to investment grade securities with short-term maturities and by monitoring the credit risk and credit standing of counterparties. Currently, 100% of our short-term investments are in guaranteed investment certificates.

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 and our portfolio of short-term investments. 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.

Currency risk

Currency risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. In the normal course of our operations, we are exposed to currency risk from the purchase of goods and services primarily in the U.S., the U.K. and the European Union. In addition, we are exposed to currency risk to the extent cash is held in foreign currencies from either the purchase of foreign currencies or when we receive foreign currency proceeds from financing activities. The impact of a $0.01 increase in the value of the U.S. dollar against the Canadian dollar would have decreased our net loss for the six month period ending June 30, 2016 by approximately $49,607. The impact of a $0.10 increase in the value of the British pound against the Canadian dollar would have increased our net loss for the six month period ending June 30, 2016 by approximately $5,703. The impact of a $0.10 increase in the value of the Euro against the Canadian dollar would have decreased our net loss for the six month period ending June 30, 2016 by approximately $3,428.

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.

Balances in foreign currencies at June 30, 2016 are as follows:

	U.S. Dollars $	British Pounds £	Euro €
Cash and cash equivalents	7,162,981	22,670	34,652
Accounts payable	(234,787)	(2,656)	—
	6,928,194	20,014	34,652

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 8. Accounts payable are all due within the current operating period.

Note 10: Additional Cash Flow Disclosures

Net Change In Non-Cash Working Capital

	Three Month Period Ending June 30, 2016 $	Three Month Period Ending June 30, 2015 $	Six Month Period Ending June 30, 2016 $	Six Month Period Ending June 30, 2015 $
Change in:				
Accounts receivable	**5,015**	(15,555)	**285,426**	130,490
Prepaid expenses	**(301,182)**	(316,760)	**(23,801)**	(289,915)
Accounts payable and accrued liabilities	**226,367**	(1,216,039)	**71,213**	(315,521)
Non-cash impact of foreign exchange	**107,381**	178,167	**429,398**	54,464
Change in non-cash working capital related to operating activities	**37,581**	(1,370,187)	**762,236**	(420,482)

Other Cash Flow Disclosures

	Three Month Period Ending June 30, 2016 $	Three Month Period Ending June 30, 2015 $	Six Month Period Ending June 30, 2016 $	Six Month Period Ending June 30, 2015 $
Cash interest received	**35,537**	44,122	**105,158**	100,557
Cash taxes paid	**(169)**	771	**(314)**	771

Note 11: Other Expenses and Adjustments

We present our expenses based on the function of each expense and therefore include realized foreign exchange gains and losses, unrealized non-cash foreign exchange gains and losses, and non-cash stock based compensation associated with research and development activity as a component of research and development expenses and amortization of property and equipment and stock based compensation associated with operating activities as a component of operating expenses.

	Three Month Period Ending June 30, 2016 $	Three Month Period Ending June 30, 2015 $	Six Month Period Ending June 30, 2016 $	Six Month Period Ending June 30, 2015 $
Included in research and development expenses:				
Realized foreign exchange loss (gain)	**7,567**	99,081	**77,459**	327,261
Unrealized non-cash foreign exchange loss (gain)	**(243,914)**	(180,141)	**(102,619)**	(485,297)
Non-cash share based payments	**60,717**	7,086	**120,320**	83,056
Included in operating expenses:				
Amortization of property and equipment	**44,675**	44,852	**90,617**	89,982
Non-cash share based payments	**58,909**	48,589	**80,946**	87,589
Office minimum lease payments	**37,481**	45,352	**85,969**	91,706

Note 12: 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 the members of the Board of Directors along with certain officers of the Company.

	Three Month Period Ending June 30, 2016 $	Three Month Period Ending June 30, 2015 $	Six Month Period Ending June 30, 2016 $	Six Month Period Ending June 30, 2015 $
Short-term employee benefits	**690,992**	665,564	**1,358,446**	1,320,100
Share-based payments	**119,626**	48,588	**201,266**	153,425
	810,618	714,152	**1,559,712**	1,473,525

Shareholder Information

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

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Matt Coffey, PhD
Chief Operating Officer
Kirk Look, CA
Chief Financial Officer
George M. Gill, MD
Senior Vice President, Regulatory Affairs and
Chief Safety Officer
Alan Tuchman, MD, MBA (FAAN)
Senior Vice President, Medical and Clinical Affairs
Chief Medical Officer

Directors

Matt Coffey, PhD
Chief Operating Officer, Oncolytics Biotech Inc.
Angela Holtham, FCPA, FCMA, ICD.D
Corporate Director
J. Mark Lievonen, FCA
President, Sanofi Pasteur Limited
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