First Quarter Report

March 31, 2011

Oncolytics Message to Shareholders

The progress we made in the first quarter of 2011 built upon the foundation of what we have achieved over the last decade at Oncolytics. In order to maximize the future commercial potential of REOLYSIN®, we continued to broaden our clinical program, both alone and in partnership with leading industry groups; generate positive clinical results in multiple indications; and strengthen our balance sheet to ensure we had sufficient capital to fund a full range of initiatives going forward.

Positive Clinical Results in an Expanding Group of Indications

During the quarter we announced preliminary results from a U.S. Phase 2 clinical trial (REO 017) using intravenous administration of REOLYSIN in combination with gemcitabine (Gemzar®) in patients with advanced pancreatic cancer. The study's primary objective is to determine the clinical benefit rate (complete response + partial response + stable disease) of REOLYSIN in combination with gemcitabine in patients with advanced or metastatic pancreatic adenocarcinoma with measurable disease who have not received any prior chemotherapy or biotherapy. The secondary objectives are to determine progression-free survival, and the safety and tolerability of REOLYSIN when administered in combination with gemcitabine. Seventeen evaluable patients with pancreatic cancer were expected to be treated in the first stage and if three or more patients received clinical benefit, the study would then proceed to the next stage. This endpoint was met after just six evaluable patients were enrolled. All patients treated reported symptomatic improvement. Three of six patients showed stable disease for 12 weeks or greater. In addition, one patient had stable disease at nine weeks of treatment, but was taken off of the study for alternative treatment, and one patient had a partial response of less than 12 weeks duration, and then died from a medical issue unrelated to treatment.

Subsequent to quarter-end, we announced interim data from a U.K. translational clinical trial (REO 013) investigating intravenous administration of REOLYSIN in patients with metastatic colorectal cancer prior to surgical resection of liver metastases. On initial histological analysis of the 10 treated patients to date, there was evidence of selective delivery of virus to tumour versus normal liver and viral replication in the majority (seven) of patients. In two patients, only necrotic tumour was found; in one of these cases virus was detected in immune cells in the tumour. In six of 10 patients there was no evidence of virus in the normal liver surrounding the tumour, with virus found only rarely in liver cells in the other four patients. These data suggest reovirus can be intravenously administered as a monotherapy and successfully delivered specifically and selectively to colorectal liver metastases without affecting surrounding normal liver tissue. We expect to fully report the results of this study later in 2011.

Broadening the Clinical Program

These positive results supported our decisions to conduct additional trials in these difficult to treat indications which in the first quarter included the start of enrollment in a randomized Phase 2 study being sponsored by the National Cancer Insititute examining REOLYSIN in combination with carboplatin/paclitaxel in patients with metastatic pancreatic cancer and a U.S. Phase I study of REOLYSIN in combination with FOLFIRI (Folinic Acid (leucovorin) + Fluorouracil (5-FU) + Irinotecan) in patients with oxaliplatin refractory/intolerant Kras mutant colorectal cancer (REO 022). We also intend to conduct a further complementary translational study co-administering reovirus with FOLFIRI to patients with colorectal cancer metastatic to the liver, which would further build our knowledge of how to maximize the efficacy of this novel therapy in cancer patients.

During the quarter we also announced completion of enrollment in a U.S. Phase 2 clinical trial using intravenous administration of REOLYSIN in combination with paclitaxel and carboplatin in patients with advanced head and neck cancers (REO 015). We expect to fully report the results of this study later in 2011.

Strengthening the Balance Sheet

While we have collaborated with a number of groups, such as the NCI, to cost effectively expand the scope of our clinical program, we continue to work to ensure we have the necessary funds to support an increasingly broad range of initiatives that we are conducting ourselves. During the quarter, and pursuant to the acceleration of the expiry date of those warrants issued on November 23, 2009, the Company received proceeds of approximately US$6.8 million resulting from the exercise of 1,943,000 warrants. The Company received a further approximately $8.1 million from the exercise of 1,322,750 warrants, issued in connection with the financing that closed on November 8, 2010. As at March 31, 2011, we had approximately $53.5 million from which to fund operations.

Looking to the Future

For the balance of the year one of our key areas of focus remains completing enrollment in the first stage of our Phase 3 study in head and neck cancers. We also hope to announce two new additional randomized studies and report results from multiple trials before the end of 2011. In parallel, we expect to continue to advance our manufacturing program through process validation and begin conformity runs which are necessary to support a product submission. We want to thank all our stakeholders for their continued support in what promises to be an exciting time ahead.

Brad Thompson
President and CEO

May 11, 2011

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

BASIS OF PRESENTATION AND TRANSITION TO IFRS

On January 1, 2011, we adopted International Financial Reporting Standards ("IFRS") for Canadian publicly accountable enterprises. Prior to the adoption of IFRS, we followed Canadian Generally Accepted Accounting Principles ("Canadian GAAP"). While IFRS has many similarities to Canadian GAAP, some of our accounting policies have changed as a result of our transition to IFRS. The most significant accounting policy changes that have had an impact on the results of our operations are discussed in more detail in the Accounting Changes section of this Management Discussion and Analysis of Financial Condition and Results of Operations ("MD&A").

This MD&A should be read in conjunction with our unaudited consolidated interim financial statements as at and for the period ending March 31, 2011 which have been prepared using IFRS and should also be read in conjunction with the audited consolidated financial statements, which were prepared using Canadian GAAP, and MD&A contained in our annual report for the year ended December 31, 2010.

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 2011 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 pharmaceuticals, 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.

OVERVIEW

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.

General Risk Factors

Prospects for biotechnology companies in the research and development stage should generally be regarded as speculative. It is not possible to predict, based upon 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 these reliances and 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 being made by Oncolytics.

REOLYSIN Development Update for the First Quarter of 2011

We continue to develop our lead product REOLYSIN as a potential cancer therapy. Our goal each year is to advance REOLYSIN through the various steps and stages of development required for pharmaceutical products. In order to achieve this goal, we actively manage the development of our clinical trial program, our pre-clinical and collaborative programs, our manufacturing process and supply, and our intellectual property.

Clinical Trial Program

We began 2011 with eleven clinical trials which included two randomized studies (our randomized Phase III head and neck trial and our randomized Phase II ovarian cancer trial). Five of these eleven trials are funded by us and the remainder are sponsored by the U.S. National Cancer Institute ("NCI"), the Cancer Therapy & Research Center at The University of Texas Health Center in San Antonio ("CTRC"), and the University of Leeds ("Leeds").

During the first quarter of 2011, we expanded our clinical trial program to include an additional randomized U.S. Phase II pancreatic cancer study and commenced related enrollment. We also commenced enrollment in our U.S. Phase I colorectal cancer study and completed enrollment in our U.K. translational metastatic colorectal cancer trial and our U.S. Phase II head and neck cancer trial. Finally, we met the primary endpoint for the first part of our non-randomized U.S. Phase II pancreatic cancer trial.

We exited the first quarter of 2011 with 12 clinical trials which includes three randomized studies (our randomized Phase III head and neck trial, our randomized Phase II ovarian cancer trial and our randomized Phase II pancreatic cancer trial). Five of the 12 trials are funded by us with the remainder sponsored by the NCI, CTRC, and Leeds. Our clinical trial program currently encompasses various cancer indications including head and neck, non-small cell lung, ovarian, pancreatic, colorectal, melanoma, and squamous cell carcinoma of the lung among others.

Clinical Trial – Randomized Phase III Head and Neck Pivotal Trial

Our randomized Phase III head and neck pivotal trial continues to enroll patients. During the first quarter of 2011, we expanded the number of enrolling clinical sites through the addition of other jurisdictions and identifying additional sites within these jurisdictions that we expect will add patients in this trial.

Clinical Trial – Program Expansion

Randomized Phase II Pancreatic Cancer Trial

During the first quarter of 2010, the Cancer Therapy Evaluation Program, Division of Cancer Treatment and Diagnosis, U.S. National Cancer Institute, which is part of the National Institutes of Health, agreed to sponsor a 2-Arm randomized Phase II study of carboplatin, paclitaxel plus REOLYSIN versus carboplatin and paclitaxel alone in the first line treatment of patients with recurrent or metastatic pancreatic cancer. The NCI is sponsoring the trial under our Clinical Trials Agreement with them. The Principal Investigator is Dr. Tanios Bekaii-Saab of The Ohio State University Comprehensive Cancer Center - Arthur G. James Cancer Hospital and Richard J. Solove Research Institute.

The study is an open-label, multi-institution, 2-arm Phase II randomized study of patients with metastatic pancreatic cancer. Patients will be randomized to receive either carboplatin, paclitaxel plus REOLYSIN (Arm A) or carboplatin and paclitaxel alone (Arm B). Patients in both arms will receive treatment every three weeks (21-day cycles). Patients in both arms will be receiving standard intravenous doses of paclitaxel and carboplatin on day one only. In Arm A, patients will also receive intravenous REOLYSIN at a dose of $3x10^{10}$ $TCID_{50}$ on days one through five. Tumor response assessment will be done by CT scan and conducted every eight weeks. Patients that progress on carboplatin and paclitaxel (Arm B) will have REOLYSIN added. If patients experience significant toxicity related to carboplatin and/or paclitaxel they may continue with single agent REOLYSIN.

The primary objective of the trial is to assess improvement in progression-free survival with REOLYSIN, carboplatin and paclitaxel relative to carboplatin and paclitaxel alone in patients with metastatic pancreatic cancer. The primary endpoint is progression free survival in both arms. Secondary endpoints include overall response rate and overall survival. The study is expected to enroll approximately 70 patients.

Clinical Trial – Results

U.S. Phase II Pancreatic Cancer Trial (non-randomized)

During the first quarter of 2011 we reported preliminary results from our non-randomized U.S. Phase II clinical trial using intravenous administration of REOLYSIN in combination with gemcitabine (Gemzar®) in patients with advanced pancreatic cancer. The trial is being conducted at the CTRC and the Principal Investigator is Dr. Monica Mita.

The trial is a single arm, open-label, Phase II study of REOLYSIN given intravenously with gemcitabine every three weeks. The study's primary objective is to determine the clinical benefit rate (complete response (CR) + partial response (PR) + stable disease (SD)) of REOLYSIN in combination with gemcitabine in patients with advanced or metastatic pancreatic adenocarcinoma with measurable disease who have not received any prior chemotherapy or biotherapy. The secondary objectives are to determine progression-free survival, and the safety and tolerability of REOLYSIN when administered in combination

with gemcitabine. Seventeen evaluable patients with pancreatic cancer were expected to be treated in the first stage and if three or more patients received clinical benefit, the study would then proceed to the next stage. This endpoint was met after six evaluable patients were enrolled. All patients treated reported symptomatic improvement. Three of six patients showed SD for 12 weeks or greater. In addition, one patient had stable disease at nine weeks of treatment, but was taken off of the study for alternative treatment, and one patient had a PR of less than 12 weeks duration, and then died from a medical issue unrelated to treatment.

Clinical Trial – Enrollment

U.S. Phase I Colorectal Cancer Trial

During the first quarter of 2011, patient enrollment commenced in our U.S. Phase I study of REOLYSIN in combination with FOLFIRI (Folinic Acid (leucovorin) + Fluorouracil (5-FU) + Irinotecan) in patients with oxaliplatin refractory/intolerant Kras mutant colorectal cancer. The principal investigator is Dr. Sanjay Goel of the Montefiore Medical Center at The Albert Einstein College of Medicine in New York.

This trial is a Phase I dose escalation study with three dose levels, comprising cohorts of three to six patients, to determine a maximum tolerated dose and dose-limiting toxicities with the combination of REOLYSIN and FOLFIRI. FOLFIRI will be administered on the first day of a two week (14-day) cycle, while REOLYSIN will be administered on days one through five of a four week (28-day) cycle.

Eligible patients include those with histologically confirmed cancer of the colon or rectum with Kras mutation and measurable disease. They must have progressed on or within 190 days after last dose of oxaliplatin regimen as front-line therapy in the metastatic setting or be intolerant to oxaliplatin. The study is expected to enroll 12 to 20 patients.

The rationale for conducting the study is based on signals of efficacy seen in a range of preclinical and clinical work with REOLYSIN. This includes a National Cancer Institute screen of seven colorectal cancer cell lines (four with ras mutations), all of which were susceptible to REOLYSIN; preclinical research into the efficacy of REOLYSIN in combination with various chemotherapeutic agents in colorectal cancer cell lines; observation of CEA responses and stable disease in colorectal patients in a phase I study of REOLYSIN as a monotherapy; and interim results from a translational study with REOLYSIN as a monotherapy, which showed evidence of viral replication and tumour cell death in four of six patients with metastatic colorectal cancer analyzed to date, two of which had confirmed Kras mutations in codon 12.

U.K. Colorectal Cancer Translation Clinical Trial

During the first quarter of 2011, we completed enrollment in our U.K. translational clinical trial investigating intravenous administration of REOLYSIN in patients with metastatic colorectal cancer prior to surgical resection of liver metastases. The principal investigator is Professor Alan Melcher of St. James's University Hospital and the trial is sponsored by the University of Leeds, UK.

The trial was an open-label, non-randomized, single centre study of REOLYSIN given intravenously to patients for five consecutive days in advance of their scheduled operations to remove colorectal cancer deposits metastatic to the liver. After surgery, the tumour and surrounding liver tissue were assessed for viral status and anti-tumour effects.

The primary objectives of the trial are to assess the presence, replication and anti-cancer effects of reovirus within liver metastases after intravenous administration of REOLYSIN by examination of the resected tumour. Secondary objectives include assessing the anti-tumour activity and safety profile of REOLYSIN, and monitoring the humoral and cellular immune response to REOLYSIN.

Eligible patients included those with histologically proven colorectal cancer, planned for potentially curative surgical resection of liver metastases. A total of 10 patients were treated in the study.

Manufacturing and Process Development

During the first quarter of 2011, we completed the fill and packaging of the 100-litre cGMP production runs from 2010. Our process development activity for the first quarter of 2011 continued to focus on process validation and formulation studies.

Intellectual Property

At the end of the first quarter of 2011, we had been issued over 250 patents including 41 U.S. and 11 Canadian patents as well as issuances in other jurisdictions. We also have approximately 200 patent applications filed in the U.S., Canada and 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

Warrants

In December 2010, and in conjunction with the terms of our warrant indenture, we accelerated the expiry date of our U.S.$3.50 warrants issued in November 2009 to January 24, 2011. By January 24, 2011, we had received U.S.$6.4 million from the exercise of 1,833,600 of our U.S.$3.50 warrants. As well, during the first quarter of 2011, we received proceeds of $8.1 million from the exercise of 1,322,750 warrants with an exercise price of $6.15. These warrants were issued in connection with the financing that closed on November 8, 2010.

Options

During the first quarter of 2011, we received cash proceeds of $0.2 million with respect to the exercise of 92,666 stock options.

Financial Impact

We estimated at the beginning of 2011 that our cash requirements to fund our operations would be approximately $29,000,000. Our cash usage for the first quarter of 2011 was $3,855,801 from operating activities and $15,276 for the purchases of property and equipment. Our net loss for the first quarter of 2011 was $3,971,116.

Cash Resources

We exited the first quarter of 2011 with cash and short-term investments totaling $53,522,119 (see *"Liquidity and Capital Resources")*.

Expected REOLYSIN Development for the Remainder of 2011

Our planned development activity for REOLYSIN in 2011 is made up of clinical, manufacturing, intellectual property and collaboration programs. Our 2011 clinical program continues to include the anticipated completion of stage 1 (approximately 80 patients) of our Phase III head and neck clinical trial and commencement of stage 2. As well, we still expect to complete enrollment in our non-small cell lung cancer trial and support those clinical trials that are sponsored by CTRC, Leeds and the NCI.

Our 2011 manufacturing program still includes several 100-litre cGMP production runs along with the related fill, labeling, packaging and shipping of REOLYSIN to the various clinical sites. As well, we plan on performing smaller process development studies examining formulation, stability and additional scale

up. Our intellectual property program includes filings for additional patents along with monitoring activities required to protect our patent portfolio. Finally, our 2011 collaboration program will finish the studies in place at the end of 2010 and contemplates the addition of future studies that may be required.

We still estimate that the cash requirements to fund our operations for 2011 will be approximately $29,000,000 (see *"Liquidity and Capital Resources"*).

ACCOUNTING CHANGES

Transition to IFRS

On January 1, 2011, we adopted IFRS for Canadian publicly accountable enterprises, as required by the Accounting Standards Board of Canada. Prior to the adoption of IFRS, we followed Canadian GAAP. The most significant change to our accounting policies relates to the treatment of our warrants with an exercise price denominated in U.S. dollars. The impact of this change has been fully disclosed in Note 3 of our unaudited interim consolidated financial statements. There was no change in how we account for our research and development or operating activities and there was no impact on our cash, cash equivalents or short-term investment balances.

Although we adopted IFRS on January 1, 2011, we were required to restate our comparative 2010 annual and interim financial positions and results of operations, effective from January, 1, 2010. The 2010 comparative amounts have not been audited by our external auditor. Note 4 of our unaudited interim consolidated financial statements as at and for the three months ended March 31, 2011 outlines our IFRS accounting policies and Note 3 provides a complete list of our IFRS 1 elections; detailed reconciliations between Canadian GAAP and IFRS of shareholders' equity as at January 1, March 31, and Dec. 31, 2010, respectively, and of net earnings and comprehensive income for the three and twelve months ending March 31, and December 31, 2010, respectively; and information regarding the impacts of IFRS transition on our cash flows. A summary of the changes are outlined below in the following tables and respective notes:

Total equity	**December 31, 2010** **$**	**March 31, 2010** **$**	**January 1, 2010** **$**
Total equity under CGAAP	41,931,760	27,226,276	31,366,458
Adjustment required to conform to IFRS:			
Revaluation of warrant liability	(5,536,800)	(1,564,000)	(1,023,051)
Total equity under IFRS	36,394,960	25,662,276	30,343,407

Comprehensive loss for the period	**For the three month period ending March 31, 2010** **$**	**For the year ending December 31, 2010** **$**
Comprehensive loss under CGAAP	4,141,211	19,973,772
Adjustments required to conform to IFRS:		
Revaluation of warrant liability	541,489	4,841,949
Comprehensive loss under IFRS	4,682,700	24,815,721
Basic and diluted loss per common share, CGAAP	0.07	0.32
Basic and diluted loss per common share, IFRS	0.07	0.39
Weighted average number of common shares	61,549,969	62,475,403

Consolidated Statement of Cash Flows

In transitioning to IFRS, there was no impact on our net change in cash for the three month period ending March 31, 2010 or for the year ending December 31, 2010.

IFRS Transitional Arrangements

When preparing our consolidated statement of financial position under IFRS at January 1, 2010, our date of transition, the following optional exemptions from full retrospective application of IFRS accounting policies have been adopted:

Cumulative translation differences – cumulative translation differences resulting from the translation of the financial statements of our U.S. subsidiary have been set to zero at January 1, 2010.

Effects of IFRS

Warrants
IFRS requires warrants with an exercise price denominated in a currency other than the entity's functional currency to be treated as a liability measured at fair value. Changes in fair value are to be recorded in the consolidated statement of loss and comprehensive loss.

Classification of expenses within the statement of loss and comprehensive loss
Under IFRS, we have chosen to present our expenses based on the function of each expense rather than the nature of each expense. As a result, stock based compensation, depreciation of capital assets, and foreign currency gains and losses are no longer separately presented on the statement of loss and comprehensive loss. There is no impact on our net loss or comprehensive loss as a result of these classifications.

Foreign currency translation
Under IFRS, we record the impact of fluctuations in foreign currency exchange rates relating to our net investment in our U.S. subsidiary and any foreign currency effects on the translation of our U.S. subsidiaries financial statements as a separate component of equity and other comprehensive income. Under CGAAP we treated our U.S. subsidiary as an integrated subsidiary with foreign currency translation differences recorded as part of our statement of loss. The result of the transition to IFRS is a reclassification of the related foreign currency gains and losses from net loss to other comprehensive income. There is no impact on our net comprehensive loss as a result of these re-classifications.

RESULTS OF OPERATIONS

Net loss for the three month period ending March 31, 2011 was $4,007,116 compared to $4,537,793 for the three month period ending March 31, 2010.

Research and Development Expenses ("R&D")

	2011 **$**	**2010** **$**
Clinical trial expenses	**1,040,507**	876,935
Manufacturing and related process development expenses	**608,744**	1,235,627
Intellectual property expenses	**213,803**	216,836
Research collaborations	**71,526**	(979)
Other R&D expenses	**858,533**	510,894
Foreign exchange loss	**175,625**	201,472
Stock based compensation	**2,873**	1,029
Research and development expenses	**2,971,611**	3,041,814

Clinical Trial Program

	2011 $	2010 $
Direct patient expenses	**697,827**	663,407
Phase III start up expenses	**342,680**	213,528
Clinical trial expenses	**1,040,507**	876,935

During the first quarter of 2011, our clinical trial expenses increased to $1,040,507 compared to $876,935 for the first quarter of 2010. In the first quarter of 2011, we incurred direct patient expenses related to the five clinical trials that we are sponsoring compared to four clinical trials in the first quarter of 2010. We also continue to incur start costs relating to our randomized Phase III head and neck cancer trial as we increase the number of jurisdictions and clinical sites initiated to enroll patients.

We expect our clinical trial expenses to increase in 2011 compared to 2010. We expect to complete enrollment in stage 1 of our Phase III pivotal trial and enter into stage 2. We also still expect to complete enrollment in our Phase II NSCLC study. Finally, we will continue to support our clinical research collaboration with CTRC, our Clinical Agreement with the NCI and our clinical trial with Leeds.

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

	2011 $	2010 $
Product manufacturing expenses	**156,099**	1,130,865
Process development expenses	**452,645**	104,762
Manufacturing and related process development expenses	**608,744**	1,235,627

In the first quarter of 2011, our M&P expenses were $608,744 compared to $1,235,627 for the first quarter of 2010. During the first quarter of 2011, we completed the fill and packaging of the 100-litre cGMP production runs from 2010. As well, we incurred shipping and storage activities as we supply our Phase III clinical trial with REOLYSIN. During the first quarter of 2010, our production activity included the completion of the bulk harvest of one 100-litre cGMP production run along with vial and labeling costs associated with the 100-litre production run completed at the end of 2009.

Our process development expenses for the first quarter of 2011 were $452,645 compared to $104,762 for the first quarter of 2010. Our process development activity for the first quarter of 2011 focused on optimization and validation studies anticipated to be required in support of product registration.

We still expect our M&P expenses for 2011 to increase compared to 2010. We expect to complete several 100-litre cGMP production runs including fill and finish activities in 2011. We also expect to continue to perform a number of small scale process development studies focusing on formulation, process validation, and stability.

Intellectual Property Expenses

	2011 $	2010 $
Intellectual property expenses	**213,803**	216,836

Our intellectual property expenses for the first quarter of 2011 were $213,803 compared to $216,836 for the first quarter of 2010. The change in intellectual property expenditures reflects the timing of filing costs associated with our patent base. At the end of the first quarter of 2011, we had been issued over 250 patents including 41 U.S. and 11 Canadian patents, as well as issuances in other jurisdictions. We also have approximately 200 patent applications filed in the U.S., Canada and other jurisdictions.

Research Collaborations

	2011 $	2010 $
Research collaborations	**71,526**	(979)

During the first quarter of 2011 our research collaboration expenses were $71,526. Our research collaboration activity continues to focus on the interaction of the immune system and the reovirus and the use of the reovirus as a co-therapy with existing chemotherapeutics and radiation. During the first quarter of 2010, we did not incur any new research collaboration costs.

We still expect that pre-clinical trial expenses and research collaborations in 2011 will remain consistent with 2010. We expect to complete our ongoing collaborative program carried over from 2010 and will continue to be selective in the types of new collaborations we enter into in 2011.

Other Research and Development Expenses

	2011 $	2010 $
R&D consulting fees	**136,912**	35,851
R&D salaries and benefits	**691,099**	463,590
Other R&D expenses	**30,522**	11,453
Other research and development expenses	**858,533**	510,894

During the first quarter of 2011, our Other Research and Development expenses were $858,533 compared to $510,894 for the first quarter of 2010. In the first quarter of 2011, we have increased our number of employees and consultants as we have expanded our randomized Phase III head and neck clinical trial into other jurisdictions and increased the number of enrolling clinical sites. This increase allows us to support this trial along with our expanding clinical trial program.

We now expect that our Other R&D expenses in 2011 will increase compared to 2010 reflecting the increase in employees and consultants.

Operating Expenses

	2011 $	2010 $
Public company related expenses	**815,848**	642,181
Office expenses	**293,888**	307,243
Depreciation of property and equipment	**17,275**	14,885
Operating expenses	**1,127,011**	964,309

During the first quarter of 2011, our public company related expenses were $815,848 compared to $642,181 for the first quarter of 2010. Our investor relations, transfer agent and listing fees increased during the first quarter of 2011 compared to the first quarter of 2010.

Commitments

As at March 31, 2011, we are committed to payments totaling $1,972,000 during the remainder of 2011 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

The following unaudited quarterly information is presented in thousands of dollars except for per share amounts:

	2011	2010					2009[6]		
(unaudited)	March	Dec.	Sept.	June	March		Dec.	Sept.	June
Revenue	—	—	—	—	—		—	—	—
Net loss [1], [3]	3,971	9,613	6,524	3,984	4,538		5,245	2,694	4,335
Basic and diluted loss per common share[3]	$0.06	$0.15	$0.11	$0.06	$0.07		$0.09	$0.05	$0.09
Total assets[4]	54,945	44,432	21,137	26,569	30,159		35,593	10,240	12,755
Total cash[2], [4]	53,521	42,906	19,708	24,885	28,823		34,129	9,655	11,983
Total long-term debt	—	—	—	—	—		—	—	—
Cash dividends declared[5]	Nil	Nil	Nil	Nil	Nil		Nil	Nil	Nil

(1) Included in net loss and net loss per share between March 2011 and April 2009 are warrant revaluation charges of $nil, $2,169,510, $2,522,490, ($391,540), $541,489, $nil, $nil, and $nil, respectively.
(2) Included in total cash are cash and cash equivalents plus short-term investments.
(3) Included in net loss and loss per common share between March 2011 and April 2009 are quarterly stock based compensation expenses of $2,873, $2,850,938, $397,675, $1,399, $1,029, $396,110, $7,982, $8,544, and $11,637, respectively.
(4) We issued 6,408,333 commons shares for net cash proceeds of $27,288,132 in 2010 (2009 – 17,524,211 common shares for net cash proceeds of $37,052,900).
(5) We have not declared or paid any dividends since incorporation.
(6) Represents Canadian GAAP figures.

LIQUIDITY AND CAPITAL RESOURCES

Liquidity

	March 31, 2011 $	December 31, 2010 $
Cash and cash equivalents	**49,912,873**	39,296,682
Short-term investments	**3,609,246**	3,609,246
Working capital	**51,645,341**	35,432,368

The increase in our cash and cash equivalent and short term investment positions reflects the cash usage from our operating activities of $3,855,801 along with the cash provided by financing activities of $14,715,297 for the three month ending March 31, 2011.

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 mainly funded our operations through the issue of additional capital via public and private offerings.

As a result of the exercise of existing warrants we raised over $14.7 million to be used to support our clinical trial, manufacturing, intellectual property and collaboration programs in the first quarter of 2011. We still anticipate that the expected cash requirements to fund our operations in 2011 will be $29 million.

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 to fund our presently planned operations into 2012. Factors that will affect our anticipated cash usage for the remainder of 2011 and into 2012, and for which additional funding might be required include, but are not limited to, expansion in 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.

In 2011 we were able to raise funds through the exercise of previously issued warrants. During 2010, we were able to raise funds through a bought deal public offering along with the exercise of existing warrants and options. We have no assurances that we will be able to raise funds through the sale of our common shares, consequently, we will continue to evaluate all types of financing arrangements.

We also want to be in a position to evaluate potential financings and be able to accept appropriate financings when available. As a result, we renewed our base shelf prospectus in 2010 which qualified for distribution up to $150,000,000 of common shares, subscription receipts, warrants, and/or units. Establishing our base shelf provides us with additional flexibility when seeking capital as, under certain circumstances, it shortens the time period to close a financing and is expected to increase the number of potential investors that may be prepared to invest in our company. We have been able to take advantage of our base shelf with the bought deal financing in 2010 along with the exercise of previously issued warrants raising approximately $41.7 million. Our current base shelf expires in July 2012 and our present intention would be to renew it prior to its expiry.

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. As at March 31, 2011, we have $3,609,246 (December 31, 2010 - $3,609,246) invested under this policy and we are currently earning interest at an effective rate of 0.30% (December 31, 2010 – 0.30%)

OTHER MD&A REQUIREMENTS

We have 71,209,318 common shares outstanding at May 11, 2011. If all of our warrants (2,170,110) and options (4,604,094) were exercised we would have 77,938,522 common shares outstanding.

Additional information relating to Oncolytics Biotech Inc. is available on SEDAR at www.sedar.com.

Controls and Procedures

There were no changes in our internal controls over financial reporting during the quarter ended March 31, 2011 that materially affected or are reasonably likely to materially affect, internal controls over financial reporting.

Interim Consolidated Financial Statements

Oncolytics Biotech® Inc.
(unaudited)

March 31, 2011

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

As at,	Notes	March 31, 2011 $	December 31, 2010 $ *(note 3)*	January 1, 2010 $ *(note 3)*
Assets				
Current assets				
Cash and cash equivalents	6	**49,912,873**	39,296,682	32,448,939
Short-term investments	6	**3,609,246**	3,609,246	1,679,937
Accounts receivable		**72,653**	284,988	64,787
Prepaid expenses		**389,839**	278,934	507,408
Total current assets		**53,984,611**	43,469,850	34,701,071
Non-current assets				
Property and equipment		**224,912**	226,911	208,320
Long term investments	**7**	**–**	–	684,000
Total non-current assets		**224,912**	226,911	892,320
Asset held for sale	7	**735,681**	735,681	–
Total assets		**54,945,204**	44,432,442	35,593,391
Liabilities And Shareholders' Equity				
Current Liabilities				
Accounts payable and accrued liabilities		**2,339,270**	2,500,682	4,226,933
Warrant liability	8	**–**	5,536,800	1,023,051
Total current liabilities		**2,339,270**	8,037,482	5,249,984
Commitments and contingencies	*11, 12, 18 and 19*			
Shareholders' equity				
Share capital Authorized: unlimited Issued: March 31, 2011 – 71,207,318 December 31, 2010 – 67,958,302 January 1, 2010 – 61,549,969	8	**177,147,062**	155,439,610	131,908,274
Warrants	8	**2,653,627**	4,108,652	2,437,460
Contributed surplus	9	**19,366,032**	19,399,489	13,734,743
Accumulated other comprehensive loss		**(193,540)**	(156,660)	–
Deficit		**(146,367,247)**	(142,396,131)	(117,737,070)
Total shareholders' equity		**52,605,934**	36,394,960	30,343,407
Total Liabilities And Equity		**54,945,204**	44,432,442	35,593,391

See accompanying notes

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

For the three month period ending March 31,	**Notes**	**2011 $**	**2010 $** *(note 3)*
Expenses			
Research and development	16	**2,971,611**	3,041,814
Operating	16	**1,127,011**	964,309
		4,098,622	4,006,123
Loss before the following		**(4,098,622)**	(4,006,123)
Change in fair value of warrant liability		**36,000**	(541,489)
Interest		**91,506**	9,819
Loss before income taxes		**(3,971,116)**	(4,537,793)
Income taxes		**—**	—
Net loss		**(3,971,116)**	(4,537,793)
Other comprehensive loss – translation adjustment		**(36,880)**	(144,907)
Net comprehensive loss		**(4,007,996)**	(4,682,700)
Basic and diluted loss per share	10	**(0.06)**	(0.07)
Weighted average number of shares (basic and diluted)		**69,956,058**	61,549,969

See accompanying notes

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

	For the three month period ending, March 31, 2010 *(note 3)*					
	Share capital	**Contributed Surplus**	**Warrants**	**Accumulated Other Comprehensive Income**	**Deficit**	**Total Equity**
	$	$	$	$	$	$
As at January 1, 2010	131,908,274	13,734,743	2,437,460	—	(117,737,070)	30,343,407
Net loss and comprehensive loss for the period	—	—	—	(144,907)	(4,537,793)	(4,682,700)
Expired warrants	—	2,438,000	(2,438,000)	—	—	—
Stock based compensation	—	1,029	—	—	—	1,029
Other	—	—	540	—	—	540
As at March 31, 2010	131,908,274	16,173,772	—	(144,907)	(122,274,863)	25,662,276

	For the three month period ending, March 31, 2011					
	Share capital	**Contributed Surplus**	**Warrants**	**Accumulated Other Comprehensive Income**	**Deficit**	**Total Equity**
	$	$	$	$	$	$
As at December 31, 2010	155,439,610	19,399,489	4,108,652	(156,660)	(142,396,131)	36,394,960
Net loss and comprehensive loss	—	—	—	(36,880)	(3,971,116)	(4,007,996)
Exercise of warrants	21,487,080	—	(1,455,025)	—	—	20,032,055
Exercise of stock options	220,372	(36,330)	—	—	—	184,042
Stock based compensation	—	2,873	—	—	—	2,873
As at March 31, 2011	**177,147,062**	**19,366,032**	**2,653,627**	**(193,540)**	**(146,367,247)**	**52,605,934**

See accompanying notes

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

For the three month period ending March 31,	Notes	2011 $	2010 $
Cash Flows			
Operating Activities			
Net loss for the period		**(3,971,116)**	(4,537,793)
Amortization - property and equipment		**17,275**	14,885
Stock based compensation		**2,873**	1,029
Change in fair value of warrant liability		**(36,000)**	541,489
Unrealized foreign exchange loss		**191,149**	218,988
Net change in non-cash working capital	15	**(59,982)**	(1,176,681)
Cash used in operating activities		**(3,855,801)**	(4,938,083)
Investing Activities			
Acquisition of property and equipment		**(15,276)**	(3,647)
Cash used in investing activities		**(15,276)**	(3,647)
Financing Activities			
Proceeds from exercise of stock options and warrants		**14,715,297**	—
Cash provided by financing activities		**14,715,297**	—
Increase (decrease) in cash		**10,844,220**	(4,941,730)
Cash and cash equivalents, beginning of period		**39,296,682**	32,448,939
Impact of foreign exchange on cash and cash equivalents		**(228,029)**	(363,895)
Cash and cash equivalents, end of period		**49,912,873**	27,143,314

See accompanying notes

ONCOLYTICS BIOTECH INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

March 31, 2011

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 consolidated financial statements for the period ended March 31, 2011, were authorized for issue in accordance with a resolution of the directors on May 11, 2011. 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 consolidated financial statements include our financial statements and the financial statements of our subsidiaries as at March 31, 2011 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"). For Oncolytics Biotech Inc., there are no differences between IFRS as adopted by Canada and full IFRS as published by the 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 consolidated financial statements have been prepared in compliance with International Accounting Standard 34 *Interim Financial Reporting* and IFRS 1 *First-time Adoption of International Financial Reporting Standards.*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.

Basis of consolidation

Our accounts include the accounts of Oncolytics Biotech Inc. and our subsidiaries. Subsidiaries are entities over which we have control, being the power to govern the financial and operating policies of the investee entity so as to obtain benefits from its activities. Accounting policies of subsidiaries are consistent with our accounting policies and all intra-group transactions, balances, income and expenses are eliminated on consolidation.

A change in ownership interest of a subsidiary, without a change in control, is accounted for as an equity transaction.

Note 3: Adoption of IFRS

These are our first consolidated financial statements prepared in accordance with IFRS.

Our accounting policies outlined in Note 4 have been applied in preparing our consolidated financial statements as at and for the period ended March 31, 2011, the comparative information presented as at and for the period ended March 31, 2010 and in the preparation of our opening IFRS balance sheet at January 1, 2010 (our date of transition).

In preparing our opening balance sheet, we have adjusted amounts reported previously in our consolidated financial statements prepared in accordance with Canadian Generally Accepted Accounting Principles ("CGAAP"). An explanation of how the transition from CGAAP to IFRS has affected our financial position, financial performance and cash flows is set out in the tables below and the respective notes.

Total equity	**December 31, 2010** **$**	**March 31, 2010** **$**	**January 1, 2010** **$**
Total equity under CGAAP	41,931,760	27,226,276	31,366,458
Adjustment required to conform to IFRS:			
Revaluation of warrant liability	(5,536,800)	(1,564,000)	(1,023,051)
Total equity under IFRS	36,394,960	25,662,276	30,343,407

Comprehensive loss for the period	**For the three month period ending March 31, 2010** **$**	**For the year ending December 31, 2010** **$**
Comprehensive loss under CGAAP	4,141,211	19,973,772
Adjustments required to conform to IFRS:		
Revaluation of warrant liability	541,489	4,841,949
Comprehensive loss under IFRS	4,682,700	24,815,721
Basic and diluted loss per common share, CGAAP	0.07	0.32
Basic and diluted loss per common share, IFRS	0.07	0.39
Weighted average number of common shares	61,549,969	62,475,403

Consolidated Statement of Cash Flows

In transitioning to IFRS, there was no impact on our net change in cash for the three month period ending March 31, 2010 or for the year ending December 31, 2010.

IFRS Transitional Arrangements

When preparing our consolidated statement of financial position under IFRS at January 1, 2010, our date of transition, the following optional exemptions from full retrospective application of IFRS accounting policies have been adopted:

Cumulative translation differences – cumulative translation differences resulting from the translation of our net investment in our U.S. subsidiary and the the financial statements of our U.S. subsidiary have been set to zero at January 1, 2010.

Effects of IFRS

Warrants
IFRS requires warrants with an exercise price denominated in a currency other than the entity's functional currency to be treated as a liability measured at fair value. Changes in fair value are to be recorded in the consolidated statement of loss and comprehensive loss.

Classification of expenses within the statement of loss and comprehensive loss
Under IFRS, we have chosen to present our expenses based on the function of each expense rather than the nature of each expense. As a result, stock based compensation, depreciation of capital assets, and foreign currency gains and losses are no longer separately presented on the statement of loss and comprehensive loss. There is no impact on our net loss or comprehensive loss as a result of these classifications.

Foreign currency translation
Under IFRS, we record the impact of fluctuations in foreign currency exchange rates relating to our net investment in our U.S. subsidiary and any foreign currency effects on the translation of our U.S. subsidiaries financial statements as a separate component of equity and other comprehensive income. Under CGAAP we treated our U.S. subsidiary as an integrated subsidiary with foreign currency translation differences recorded as part of our statement of loss. The result of the transition to IFRS is a reclassification of the related foreign currency gains and losses from net loss to other comprehensive income. There is no impact on our net comprehensive loss as a result of these re-classifications.

Note 4: Summary of Significant Accounting Policies

The consolidated financial statements have, in management's opinion, been properly prepared within reasonable limits of materiality and within the framework of the significant accounting policies summarized below.

Property and equipment

Property and equipment are recorded at cost. Depreciation is provided on bases and at rates designed to amortize the cost of the assets over their estimated useful lives. Depreciation is recorded using the declining balance method at the following annual rates:

Office equipment and furniture	20%
Medical equipment	20%
Computer equipment	30%
Leasehold improvements	Straight-line over the term of the lease

Intellectual property

Intellectual property acquired through our investment in BCBC is included in Asset Held for Sale on the balance sheet at cost.

Foreign currency translation

The financial statements for each of our subsidiaries are prepared using their functional currency. The functional currency is the currency of the primary economic environment in which an entity operates. Our presentation currency is the Canadian dollar which is also Oncolytics Biotech Inc.'s functional currency. Foreign currency transactions are translated into the functional currency using exchange rates prevailing at the dates of the transactions. Exchange differences resulting from the settlement of such transactions and from the translation at exchange rates ruling at the statement of financial position date of monetary assets and liabilities denominated in currencies other than the functional currency are recognized directly in the consolidated statement of loss.

Exceptions to this are where the monetary items form part of the net investment in a foreign operation. These exchange differences are initially recognized in equity. The statement of financial position of foreign operations is translated into Canadian dollars using the exchange rate at the statement of financial position date and the income statements are translated into Canadian dollars using the average exchange rate for the period. Where this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, the exchange rate on the transaction date is used. Exchange differences on translation into Canadian dollars are recognized as a separate component of equity. On disposal of a foreign operation, any cumulative exchange differences held in equity are transferred to the consolidated statement of loss.

Research and development costs

Research costs are expensed as incurred. Development costs that meet specific criteria related to technical, market and financial feasibility will be capitalized. To date, all development costs have been expensed.

Investment tax credits

Investment tax credits relating to qualifying scientific research and experimental development expenditures that are recoverable in the current period are accounted for as a reduction in research and development expenditures. Investment tax credits not recoverable in the current period are accrued provided there is reasonable assurance that the credits will be realized.

Loss per common share

Basic loss per common share is determined using the weighted average number of common shares outstanding during the period.

We use the treasury stock method to calculate diluted loss per common share. Under this method, diluted loss per common share is computed in a manner consistent with basic loss per common share except that the weighted average common shares outstanding are increased to include additional common shares from the assumed exercise of options and warrants, if dilutive. The number of additional common shares is calculated by assuming that any outstanding "in the money" options and warrants were exercised at the later of the beginning of the period or the date of issue and that the proceeds from such exercises were used to acquire shares of common stock at the average market price during the reporting period.

Stock based compensation

Stock option plan

We have one stock option plan (the "Plan") available to officers, directors, employees, consultants and suppliers with grants under the Plan approved from time to time by our Board of Directors (the "Board"). Under the Plan, the exercise price of each option equals the trading price of our stock on the date of grant in accordance with Toronto

Stock Exchange guidelines. Vesting is provided for at the discretion of the Board and the expiration of options is to be no greater than 10 years from the date of grant.

Officers, directors and employees

We use the fair value based method of accounting for employee awards granted under the Plan. We calculate the fair value of each stock option grant using the Black Scholes Option Pricing Model and the fair value is recorded over the option's vesting period.

Non-employees

Stock based compensation to non-employees is recorded at the fair value of the goods received or the services rendered. The fair value is measured at the date we obtain the goods or the date the counterparty renders the service. If the fair value of the goods or services cannot be reliably valued the fair value of the options granted will be used.

Financial instruments

Financial assets

Financial assets are comprised of cash and cash equivalents, accounts receivable, short-term investments and long term investment. Financial assets are initially recorded at fair market value and are classified as follows:

Cash and cash equivalents
Cash and cash equivalents consist of cash on hand and interest bearing deposits with our bank and have been designated as held for trading.

Accounts receivable
Accounts receivable have been classified as loans and receivables.

Short-term investments
We determine the appropriate classification of our short-term investments at the time of purchase and re-evaluate such classification as of each balance sheet date. We classify our short-term investments as held-to-maturity as we have the positive intent and ability to hold the securities to maturity. Held-to-maturity securities are stated at original cost, adjusted for amortization of premiums and accretion of discounts to maturity computed under the effective interest rate method. Such amortization and interest on securities classified as held-to-maturity are included in interest income.

Long term investment
We classified our long term investment as available-for-sale.

Impairment of financial assets

We assess at each reporting date whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset (an incurred 'loss event') and that loss event has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated.

Financial liabilities

Trade accounts payable
Trade accounts payable are non interest-bearing and recorded at fair market value. They are classified as Other Financial Liabilities and are subsequently measured at amortized cost using the effective interest rate method.

Warrant liability
Warrants with an exercise price denominated in a foreign currency are recorded as a Warrant Liability and classified as fair value through profit and loss. The Warrant Liability is initially measured at estimated fair value with subsequent changes in fair value recorded as a gain or loss in the consolidated statement of loss and comprehensive loss. These warrants have not been listed on an exchange and therefore do not trade on an active market.

Fair Value Measurement

The accounting guidance for fair value measurements prioritizes the inputs used in measuring fair value into the following hierarchy:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 – Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable;

Level 3 - Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

The fair value of our Warrant Liability is based on level 2 (significant observable inputs).

Transaction Costs

Transaction costs are expensed as incurred for financial instruments designated as held for trading. Transaction costs for other financial instruments are recognized as part of the financial instrument's carrying value.

Asset held for sale

Assets are classified as held for sale if their carrying amount will be recovered primarily through a sale as opposed to continued use. Assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Depreciation ceases when an asset is classified as held for sale.

Deferred income taxes

We follow the liability method of accounting for income taxes. Under the liability method, deferred income taxes are recognized for the difference between financial statement carrying values and the respective income tax basis of assets and liabilities (temporary differences). Deferred income tax assets and liabilities are measured using substantively enacted income tax rates and laws expected to apply in the years in which temporary differences are expected to be recovered or settled. The effect on deferred income tax assets and liabilities of a change in tax rates is charged or credited to income, except when it related to items charged or credited to either other comprehensive income or directly to equity.

Accounting Standards and Interpretations Issued but Not Yet Effective

In November 2009, the International Accounting Standard Board ("IASB") issued IFRS 9 *Financial Instruments* which replaced the classification and measurement requirements in IAS 39 *Financial Instruments: Recognition and Measurement* for financial assets. In October 2010, the IASB issued additions to IFRS 9 regarding financial liabilities. The new standard is effective for annual periods beginning on our after January 1, 2013 with earlier adoption permitted. We do not anticipate that there will be a material impact on our financial position or results of operations.

Note 5: Significant Judgments, Estimates and Assumptions

Judgments

The preparation of our consolidated financial statements requires us to make judgments, estimates and assumptions that affect the reported amount of expenses, assets, liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

Estimates and assumptions

Because a precise determination of many assets and liabilities is dependent upon future events, the preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting periods. Actual results could differ from those estimates and such differences could be significant. Significant estimates made by management affecting our consolidated financial statements include:

Stock based compensation
We measure our stock based compensation expense by reference to the fair value of the stock options at the date at which they are granted. Estimating fair value for granted stock options requires determining the most appropriate valuation model which is dependent on the terms and conditions of the grant. This estimate also requires determining the most appropriate inputs to the valuation model including the expected life of the option, volatility and dividend yield and making assumptions about them. The assumptions and model used for estimating fair value for stock based compensation transactions are disclosed in note 8 of our audited 2010 consolidated financial statements.

Warrant liability
We measured our initial warrant liability and subsequent revaluations of our warrant liability by reference to the fair value of the warrants at the date at which they were granted and subsequently revalued at each reporting date. Estimating fair value for these warrants required determining the most appropriate valuation model which is dependent on the terms and conditions of the grant. This estimate also requires determining the most appropriate inputs to the valuation model including the expected life of the warrants, volatility and dividend yield and making assumptions about them.

Asset held for sale
We continue to carry our asset held for sale at cost. We have used management judgment pertaining to the timing and potential results of the ongoing sales process. As well, assumptions have been made and estimates used in assessing the fair value of the associated intellectual property.

Taxes
Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. Currently, we are accumulating tax loss carry forward balances in various tax jurisdictions creating a deferred tax asset. Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

To date we have determined that none of our deferred tax assets should be recognized. Our deferred tax assets mainly comprise of our net operating losses from prior years, prior year research and development expenses, and investment tax credits. These tax pools relate to entities that have a history of losses, have varying expiry dates, and

may not be used to offset taxable income within our other subsidiaries. As well, there are no taxable temporary differences or any tax planning opportunities available that could partly support the recognition of these losses as deferred tax assets.

Note 6: Cash Equivalents and Short Term Investments

Cash Equivalents

Cash equivalents consist of interest bearing deposits with our bank totaling $40,593,513 (December 31, 2010 – $34,337,595; January 1, 2010 - $15,518,939). The current annual interest rate earned on these deposits is 0.90% (December 31, 2010 – 1.06%; January 1, 2010 – 0.30%).

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** %
March 31, 2011						
Short-term investments	**3,609,246**	**3,609,246**	**Nil**	**3,609,246**	**3,609,246**	**0.30%**
December 31, 2010						
Short-term investments	3,609,246	3,609,246	Nil	3,609,246	3,609,246	0.30%

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

Note 7: Asset Held for Sale

In 2009, we acquired all of the convertible preferred shares of British Canadian Biosciences Corp. ("BCBC"), a privately held biotechnology company specializing in the development of peptides for the treatment of a variety of conditions, including cancer. In February 2010, we completed the conversion of our preferred share holding in BCBC into common shares. As a result of this conversion we owned 10% of the issued common shares of BCBC. The common shares of BCBC do not have a quoted market price in an active market. BCBC's only asset is intellectual property.

In the fourth quarter of 2010, BCBC concluded that it was unable to obtain additional financing to support its business and subsequently suspended operations. In November 2010, we purchased an additional 60% of the common shares of BCBC for $51,681 which included cash and the settlement of certain trade accounts payable. As the operations of BCBC had been suspended, its only remaining asset was intellectual property. In conjunction with this purchase, we assessed the cost of our investment against the estimated fair value of BCBC using a cash flow analysis and determined that the estimated fair value of our investment was in excess of our cost. At the end of 2010, we began the process to sell BCBC and as a result we are reflecting our investment in BCBC's intellectual property as an asset held for sale.

Note 8: Share Capital

Authorized:
Unlimited number of no par value common shares

Issued:	**Shares**		**Warrants**		
	Number	**Amount** $	**Number**	**Equity Amount** $	**Liability Amount** **$**
Balance, January 1, 2010	61,549,969	131,908,274	4,255,000	2,437,460	1,023,051
Issued for cash pursuant to November 8, 2010 bought deal financing [(a)]	6,256,000	22,639,720	3,503,360	4,120,202	—
Exercise of warrants	119,900	787,507	(119,900)	(11,010)	(328,200)
Expired warrants	—	—	(2,300,000)	(2,438,000)	—
Exercise of stock options	32,433	104,109	—	—	—
Revaluation of warrant liability	—	—	—	—	4,841,949
Balance, December 31, 2010	67,958,302	155,439,610	5,338,460	4,108,652	5,536,800
Exercise of US$3.50 warrants	1,833,600	11,897,142	(1,833,600)	—	(5,500,800)
Exercise of warrants	1,322,750	9,589,938	(1,322,750)	(1,455,025)	—
Exercise of stock options	92,666	220,372	—	—	—
Expired warrants	—	—	(12,000)	—	(36,000)
Balance, March 31, 2011	**71,207,318**	**177,147,062**	**2,170,110**	**2,653,627**	—

(a) Pursuant to a bought deal financing, 6,256,000 units were issued at an issue price of $4.60 per unit for gross proceeds of $28,777,600. Each unit included one common share (ascribed value of $4.05) and 0.50 of one common share purchase warrant (ascribed value of $0.55). The ascribed value was determined using the relative fair value method. Each common share purchase warrant entitles the holder to acquire one common share in the capital of the Company upon payment of $6.15 per share until November 8, 2012. Share issue costs for this offering were $2,697,081. In addition, we issued 375,360 common share purchase warrants with an exercise price of $4.60 that expires on November 8, 2012 to the brokerage firm assisting with the transaction. The ascribed value of these broker warrants was $679,402 ($1.81 per broker warrant) and has been included in the share issue costs above. The ascribed values of the warrants were determined using Black Scholes.

Warrants – liability

Under IFRS, the prescribed accounting treatment for warrants with an exercise price denominated in a foreign currency is to treat these warrants as a liability measured at fair value with subsequent changes in fair value accounted for through the consolidated statement of loss. The fair value of these warrants is determined using the Black Scholes Option Pricing Model. Our warrants with an exercise price of U.S.$3.50 meet this requirement and we have presented the value of these warrants as a deemed current liability on the consolidated statement of financial position. As these warrants are exercised, the value of the recorded warrant liability is included in our share capital along with the proceeds from the exercise. If these warrants expire, the related warrant liability is reversed through the statement of loss. There is no cash flow impact as a result of this accounting treatment.

As at March 31, 2011, our warrant liability is $nil (December 31, 2010 - $5,536,800; January 1, 2010 - $1,023,051) as these warrants were either exercised or expired on January 24, 2011.

Warrants – equity

The following table summarizes the weighted average assumptions used in the Black Scholes Option Pricing Model with respect to the valuation of warrants and broker warrants issued:

	2010
Risk-free interest rate	**1.40%**
Expected hold period to exercise	**2.00**
Volatility in the price of the Company's shares	**61.9%**
Dividend yield	**Zero**

The following table summarizes our outstanding warrants as at March 31, 2011:

Exercise Price	**Outstanding, Beginning of the Period**	**Granted During the Period**	**Exercised During the Period**	**Expired During the Period**	**Outstanding, End of Period**	**Weighted Average Remaining Contractual Life (years)**
US$3.50	1,845,600	—	(1,833,600)	(12,000)	—	—
$4.60	375,360	—	—	—	375,360	1.58
$6.15	3,117,500	—	(1,322,750)	—	1,794,750	1.58
	5,338,460	—	(3,156,350)	(12,000)	2,170,110	1.58

March 31, 2011

Note 9: Stock Based Compensation

Stock Option Plan

We have issued stock options to acquire common stock through our stock option plan of which the following are outstanding at March 31:

	2011		2010	
	Stock Options	**Weighted Average Share Price** $	**Stock Options**	**Weighted Average Share Price** $
Outstanding, beginning of the period	**4,703,760**	**4.53**	3,936,543	4.72
Granted during the period	—	—	—	—
Cancelled during the period	**(3,000)**	**12.49**	—	—
Exercised during the period	**(92,666)**	**1.99**	—	—
Outstanding, end of the period	**4,608,094**	**4.57**	3,936,543	4.72
Options exercisable, end of the period	**4,559,261**	**4.59**	3,875,026	4.75

The following table summarizes information about the stock options outstanding and exercisable at March 31, 2011:

Range of Exercise Prices	**Number Outstanding**	**Weighted Average Remaining Contractual Life (years)**	**Weighted Average Exercise Price** $	**Number Exercisable**	**Weighted Average Exercise Price** $
$1.45 - $2.37	699,094	5.1	2.10	677,761	2.11
$2.70 - $3.60	1,404,750	5.9	3.13	1,389,750	3.14
$4.00 - $5.00	1,224,750	3.7	4.86	1,212,250	4.86
$6.72 - $9.76	1,279,500	7.1	7.22	1,279,500	7.22
	4,608,094	5.5	4.57	4,559,261	4.59

The outstanding options vest annually or after the completion of certain milestones. We have reserved 6,154,997 common shares for issuance relating to outstanding stock options.

Compensation expense related to options granted to employees and directors was $2,873 (2010 – $1,029).

Note 10: Loss Per Common Share

Loss per common share is calculated using the weighted average number of common shares outstanding for the period ending March 31, 2011 of 69,956,058 (2010 – 61,549,969). The effect of any potential exercise of our stock options and warrants outstanding during the year has been excluded from the calculation of diluted loss per common share, as it would be anti-dilutive.

Note 11: Commitments

We are committed to payments totaling $1,972,000 for activities related to our clinical trial program and collaborations.

We are committed to rental payments (excluding our portion of operating costs and rental taxes) under the terms of a lease for office premises which expires on May 31, 2016. Annual payments under the terms of this lease are as follows:

	Amount $
2011	43,315
2012	88,792
2013	91,332
2014	94,888
2015	97,428
2016	40,595
	456,350

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 12: Contingencies

Assumption Agreement

During 1999, the Company entered into an agreement that assumed certain obligations (the "Assumption Agreement") in connection with a Share Purchase Agreement (the "Agreement") between SYNSORB and the former shareholders of the Company to make milestone payments and royalty payments.

As of March 31, 2011, a milestone payment was still outstanding for $1.0 million, due within 90 days of the first receipt from an Appropriate Regulatory Authority, for marketing approval to sell REOLYSIN to the public or the approval of a new drug application for REOLYSIN.

This milestone payment, when payable, will be accounted for as research and development expense and will not be deductible for income tax purposes.

In addition to the milestone payment, payments may become due and payable in accordance with the Agreement upon realization of sales of REOLYSIN. If we receive royalty payments or other payments as a result of entering into partnerships or other arrangements for the development of the reovirus technology, we are obligated to pay to the founding shareholders 11.75% of the royalty payments and other payments received. Alternatively, if we develop the reovirus treatment to the point where it may be marketed at a commercial level, the payments referred to in the foregoing sentence will be amended to a royalty payment of 2.35% of Net Sales received by the Company for such products.

BRI "Work in Kind" Contribution

We entered into an engineering and process development agreement with the Biotechnology Research Institute of the National Research Council of Canada ("BRI"). The terms of this Agreement include a "work in kind" contribution from BRI. In exchange for this "work in kind" contribution, we agreed to provide a royalty, contingent upon receiving Sales Revenue, at the lesser of 0.5% of Sales Revenue or $20,000 per year. The total royalty under this Agreement is equal to two times the "work in kind" contribution. As of March 31, 2011, we estimate that the accumulated work in kind totals approximately $433,000.

Note 13: 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, any warrant liability, cash and cash equivalents and short-term investments in the definition of capital.

	March 31, 2011	**December 31, 2010**	**January 1, 2010**
	$	**$**	**$**
Cash and cash equivalents	**49,912,693**	39,296,682	32,448,939
Short-term investments	**3,609,246**	3,609,246	1,679,937
Warrant liability	—	5,536,800	1,023,051
Shareholders' equity	**52,605,934**	36,394,960	30,343,407

At March 31, 2011, 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 by our Board of Directors (the "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 10, 2010, we renewed our existing short form base shelf prospectus (the "Base Shelf") that qualifies for distribution up to $150,000,000 of common shares, subscription receipts, warrants, or units (the "Securities"). 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. The Base Shelf expires on July 10, 2012 and we have registered 9,759,360 units under this shelf.

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

Note 14: Financial Instruments

Our financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, accounts payable, and warrant liability. As at March 31, 2011, there are no significant differences between the carrying values of these amounts and their estimated market values due to their short-term maturities.

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. We are exposed to currency risk from the purchase of goods and services primarily in the U.S. and the U.K. and to the extent cash is held in foreign currencies. The impact of a $0.01 increase in the value of the U.S. dollar against the Canadian dollar would have increased our net loss in 2011 by approximately $64,113. The impact of a $0.10 increase in the value of the British pound against the Canadian dollar would have increased our net loss in 2011 by approximately $29,891.

We mitigate our foreign exchange risk through the purchase of foreign currencies in sufficient amounts to settle our foreign accounts payable.

Balances in foreign currencies at March 31, 2011 are as follows:

	U.S. dollars	British pounds
	$	£
Cash and cash equivalents	8,815,560	68,708
Accounts payable	(401,373)	(146,788)
	8,414,187	(78,080)

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

Note 15: Additional Cash Flow Disclosures

Net Change In Non-Cash Working Capital

	2011	2010
	$	$
Change in:		
Accounts receivable	**212,335**	31,774
Prepaid expenses	**(110,905)**	85,856
Accounts payable and accrued liabilities	**(161,412)**	(1,294,311)
Change in non-cash working capital	**(59,982)**	(1,176,681)
Net change associated with investing activities	—	—
Net change associated with operating activities	**(59,982)**	(1,176,681)

Note 16: Other Expenses and Adjustments

	2011	2010
	$	**$**
Included in research and development expenses:		
Foreign exchange loss	**175,627**	201,472
Stock based compensation	**2,873**	1,029
Included in operating expenses		
Amortization of capital assets	**17,275**	14,885

Shareholder Information

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

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