

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For fiscal year ended December 31, 2013

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ____ to ____

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report:

Commission file number: 000-31062



ONCOLYTICS BIOTECH INC.

(Exact name of Registrant as specified in its charter)

Province of Alberta, Canada

(Jurisdiction of incorporation or organization)

Suite 210, 1167 Kensington Crescent, N.W. Calgary, Alberta, T2N 1X7

(Address of principal executive offices)

Kirk Look

Suite 210, 1167 Kensington Crescent, N.W. Calgary, Alberta, T2N 1X7

Tel: (403) 670-7377

E-mail: info@oncolytics.ca

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class
Common Shares, no par value

Name of each exchange on which registered
NASDAQ Capital Market

Securities registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the Registrant's classes of capital or common stock as of the close of the period covered by the annual report: 84,803,818 **common shares as at December 31, 2013**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

If this report is an annual or transition report, indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes
No

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one)

Large accelerated filer

Accelerated filer

Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP	International Financial Reporting Standards as issued by the International Accounting Standards Board	Other
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17

Item 18

If this is an annual report, indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes
No

ONCOLYTICS BIOTECH INC.

FORM 20-F

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

All references in this annual report on Form 20-F to the terms “we”, “our”, “us”, “the Company” and “Oncolytics” refer to Oncolytics Biotech Inc.

Certain statements in this annual report on Form 20-F and the documents attached as exhibits to this annual report, constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Oncolytics Biotech Inc., or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Forward-looking statements are statements that are not historical facts, and include, but are not limited to, estimates and their underlying assumptions; statements regarding plans, objectives and expectations with respect to the efficacy of our technologies; the timing and results of clinical studies related to our technologies; future operations, products and services; the impact of regulatory initiatives on our operations; the size of and opportunities related to the markets for our technologies; general industry and macroeconomic growth rates; expectations related to possible joint and/or strategic ventures and statements regarding future performance. Forward-looking statements generally, but not always, are identified by the words “expects,” “anticipates,” “believes,” “intends,” “estimates,” “projects”, “potential”, “possible” and similar expressions, or that events or conditions “will,” “may,” “could” or “should” occur.

The forward-looking statements in this annual report are subject to various risks and uncertainties, most of which are difficult to predict and generally beyond our control, including without limitation:

- risks related to all of our products, including REOLYSIN®, being in the research and development stage and requiring further development and testing before they can be marketed commercially;
- risks inherent in pharmaceutical research and development;
- risks related to timing and possible delays in our clinical trials;
- risks related to some of our clinical trials being conducted in, and subject to the laws of foreign countries;
- risks related to our pharmaceutical products being subject to intense regulatory approval processes in the United States and other foreign jurisdictions;
- risks related to being subject to government manufacturing and testing regulations;
- risks related to the extremely competitive biotechnology industry and our competition with larger companies with greater resources;
- risks related to our reliance on patents and proprietary rights to protect our technology;
- risks related to potential products liability claims;
- risks related to our limited manufacturing experience and reliance on third parties to commercially manufacture our products, if and when developed;
- risks related to our new products not being accepted by the medical community or consumers;
- risks related to our technologies becoming obsolete;
- risks related to our dependence on third party relationships for research and clinical trials;
- risks related to our lack of operating revenues and history of losses;
- uncertainty regarding our ability to obtain third-party reimbursement for the costs of our product;
- risks related to other third-party arrangements;
- risks related to our ability to obtain additional financing to fund future research and development of our products and to meet ongoing capital requirements;

- risks related to potential increases in the cost of director and officer liability insurance;
- risks related to our dependence on key employees and collaborators;
- risks related to Barbados law;
- risks related to the effect of changes in the law on our corporate structure;
- risks related to expenses in foreign currencies and our exposure to foreign currency exchange rate fluctuations;
- risks related to our compliance with the Sarbanes-Oxley Act of 2002, as amended;
- risks related to our status as a foreign private issuer;
- risk related to possible “passive foreign investment company” status;
- risks related to fluctuations in interest rates;
and
- risks related to our common shares.

This list is not exhaustive of the factors that may affect any of the Company’s forward-looking statements. Some of the important risks and uncertainties that could affect forward-looking statements are described further under the section heading “Item 3. Key Information – D. Risk Factors” below. If one or more of these risks or uncertainties materializes, or if underlying assumptions prove incorrect, our actual results may vary materially from those expected, estimated or projected. Forward-looking statements in this document are not a prediction of future events or circumstances, and those future events or circumstances may not occur. Given these uncertainties, users of the information included herein, including investors and prospective investors are cautioned not to place undue reliance on such forward-looking statements. 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 forward-looking statements. We do not assume responsibility for the accuracy and completeness of these statements.

Forward-looking statements are based on our beliefs, opinions and expectations at the time they are made, and we do not assume any obligation to update our forward-looking statements if those beliefs, opinions, or expectations, or other circumstances, should change, except as required by applicable law.

CURRENCY AND EXCHANGE RATES

Canadian Dollars Per U.S. Dollar

The following table sets out the exchange rates for one United States dollar ("US\$") expressed in terms of one Canadian dollar ("Cdn\$") including the average exchange rates (based on the average of the exchange rates on the last day of each month in such periods) and the range of high and low exchange rates for such periods.

Canadian Dollars Per One U.S. Dollar					
	2013	2012	2011	2010	2009
Average for the period	1.0299	0.9996	0.9893	1.0299	1.1420

For the Month of						
	February 2014	January 2014	December 2013	November 2013	October 2013	September 2013
High for the period	1.0940	1.0589	1.0573	0.9815	1.0271	1.0201
Low for the period	1.1112	1.1225	1.0737	1.0629	1.0496	1.0549

Exchange rates are based on the Bank of Canada nominal noon exchange rates. The nominal noon exchange rate on March 18, 2014 as reported by the Bank of Canada for the conversion of United States dollars into Canadian dollars was US\$1.00 = Cdn\$1.1086. Unless otherwise indicated, in this annual report on Form 20-F, all references herein are to Canadian Dollars.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not Applicable

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not Applicable

ITEM 3. KEY INFORMATION

A. Selected Financial Data

The selected financial data presented below for the four years ended December 31, 2013 is presented in Canadian dollars and is derived from our consolidated financial statements in Canadian dollars and in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). The information set forth below should be read in conjunction with our consolidated financial statements (including notes thereto) included under Item 18 and "Operating and Financial Review and Prospects" included under Item 5. For exchange rate data please see the section heading "Currency and Exchange Rates" above.

	2013	2012	2011	2010
	\$	\$	\$	\$
Revenues	—	—	—	—
Net loss ^{(1), (3), (4)}	(23,532,647)	(36,373,521)	(29,044,701)	(24,659,061)
Net comprehensive loss	(23,395,834)	(36,313,135)	(29,005,542)	(24,815,721)
Basic and diluted loss per share ⁽²⁾	(0.28)	(0.48)	(0.41)	(0.39)
Total assets ⁽²⁾	28,222,027	22,078,090	36,024,617	44,432,442
Shareholders' equity ⁽²⁾	22,213,366	14,786,780	29,520,379	36,394,960
Cash dividends declared per share ⁽⁵⁾	Nil	Nil	Nil	Nil
Weighted average number of common shares outstanding	83,530,981	76,102,062	70,911,526	62,475,403

Notes:

- 1) Included in net loss and net loss per share for the year ended December 31, 2013 is stock based compensation expense of \$424,384 (2012 - \$730,751; 2011 - \$1,805,503; 2010 - \$3,251,041).
- 2) We issued 8,093,533 common shares for net cash proceeds of \$30,398,036 in 2013 (2012 - 5,458,950 common shares for net cash proceeds of \$20,848,785; 2011 - 3,293,033 common shares for net cash proceeds of \$14,824,658; 2010 - 6,408,333 common shares for net cash proceeds of \$27,288,132).
- 3) Included in the net loss and net loss per share for the year ended December 31, 2013 is change in fair value of warrant liability of \$nil (2012 change in fair value of warrant liability gain of \$nil; 2011 - change in fair value of warrant liability loss of \$36,000; 2010 change in fair value of warrant liability loss of \$4,841,949).
- 4) Included in net loss and net loss per share for the year ended December 31, 2013 is a write down of asset available for sale of \$nil (2012 - \$nil; 2011 - \$735,681; 2010 - \$nil).
- 5) We have not declared or paid any dividends since incorporation.

B. Capitalization and Indebtedness

Not Applicable

C. Reasons for the Offer and Use of Proceeds

Not Applicable

D. Risk Factors

Investment in our common shares ("Common Shares") involves a degree of risk. These risks should be carefully considered before any investment decision is made. The following are some of the key risk factors generally associated with our business. However, the risks described below are not the only ones that we face. Additional risks not currently known to us, or that we currently deem immaterial, may also impair our business operations.

All of our potential products, including REOLYSIN[®], are in the research and development stage and will require further development and testing before they can be marketed commercially.

Prospects for companies in the biotechnology industry generally may be regarded as uncertain given the nature of the industry and, accordingly, investments in biotechnology companies should be regarded as speculative. We are currently in the research and development stage on one product, REOLYSIN[®], for human application, the riskiest stage for a company in the biotechnology industry. It is not possible to predict, based upon studies in animals and early stage human clinical trials, whether REOLYSIN[®] will prove to be safe and effective in humans. REOLYSIN[®] will require additional research and development, including extensive additional clinical testing, before we will be able to obtain the approvals of the relevant regulatory authorities in applicable countries to market REOLYSIN[®] commercially. There can be no assurance that the research and development programs we conduct will result in REOLYSIN[®] or any other products becoming commercially viable products, and in the event that any product or products result from the research and development program, it is unlikely they will be commercially available for a number of years.

To achieve profitable operations we, alone or with others, must successfully develop, introduce and market our products. To obtain regulatory approvals for products being developed for human use, and to achieve commercial success, human clinical trials must demonstrate that the product is safe for human use and that the product shows efficacy. Unsatisfactory results obtained from a particular study relating to a program may cause us to abandon our commitment to that program or the product being tested. No

assurances can be provided that any current or future animal or human test, if undertaken, will yield favourable results. If we are unable to establish that REOLYSIN® is a safe, effective treatment for cancer, we may be required to abandon further development of the product and develop a new business strategy.

There are inherent risks in pharmaceutical research and development.

Pharmaceutical research and development is highly speculative and involves a high and significant degree of risk. The marketability of any product we develop will be affected by numerous factors beyond our control, including but not limited to:

- the discovery of unexpected toxicities or lack of sufficient efficacy of products which make them unattractive or unsuitable for human use;
- preliminary results as seen in animal and/or limited human testing may not be substantiated in larger, controlled clinical trials;
- manufacturing costs or other production factors may make manufacturing of products ineffective, impractical and non-competitive;
- proprietary rights of third parties or competing products or technologies may preclude commercialization;
- requisite regulatory approvals for the commercial distribution of products may not be obtained;
- and
- other factors may become apparent during the course of research, up-scaling or manufacturing which may result in the discontinuation of research and other critical projects.

Our products under development have never been manufactured on a commercial scale, and there can be no assurance that such products can be manufactured at a cost or in a quantity to render such products commercially viable. Production and utilization of our products may require the development of new manufacturing technologies and expertise. The impact on our business in the event that new manufacturing technologies and expertise are required to be developed is uncertain. There can be no assurance that we will successfully meet any of these technological challenges or others that may arise in the course of development.

Any failure or delay in clinical trials for our products, including REOLYSIN®, may cause us to incur additional costs or delay or prevent the commercialization of our products and could severely harm our business.

We must conduct extensive clinical trials to demonstrate the safety and efficacy of our products in humans. Clinical testing, in particular, is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more of our clinical trials can occur at any stage of testing. We may experience numerous unforeseen events during, or as a result of, the clinical trial process, which could delay or prevent us from receiving marketing approval or commercializing our product candidates, including the following:

- Our clinical trials may produce negative or inconclusive results, and we may decide, or regulatory authorities may require us, to conduct additional clinical trials or we may abandon projects that we expect to be promising;
- The number of subjects required for our clinical trials may be larger than we anticipate, enrollment in our clinical trials may be slower than we anticipate, or participants may drop out of our clinical trials at a higher rate than we anticipate;
- We might have to suspend or terminate our clinical trials if the participants are being exposed to unacceptable health risks;
- Regulators or institutional review boards may require that we hold, suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or our clinical protocols;
- Regulators may refuse to accept or consider data from clinical trials for various reasons, including noncompliance with regulatory requirements or our clinical protocols;
- The cost of our clinical trials may be greater than we anticipate;
- and
- The supply or quality of our products or other materials necessary to conduct our clinical trials may be insufficient or inadequate.

Additionally, subject enrollment, which is a significant factor in the timing of clinical trials, is affected by a variety of factors, including the following:

- The size and nature of the subject population;
- The proximity of subjects to clinical sites;
- The eligibility criteria for the trial;
- The design of the clinical trial;
- Competing clinical trials;
- and
- Clinicians' and subjects' perceptions as to the potential advantages of the medication being studied in relation to other available therapies, including any new medications that may be approved for the indications we are investigating.

Furthermore, we plan to rely on clinical trial sites to ensure the proper and timely conduct of our clinical trials, and while we have agreements governing their committed activities, we have limited influence over their actual performance. Any delays or unanticipated problems during clinical testing, such as enrollment in our clinical trials being slower than we anticipate or participants dropping out of our clinical trials at a higher rate than we anticipate, could increase our costs, slow down our product development and approval process and jeopardize our ability to commence product sales and generate revenues.

Pharmaceutical products are subject to intense regulatory approval processes.

The regulatory process for pharmaceuticals, which includes preclinical studies and clinical trials of each compound to establish its safety and efficacy, takes many years and requires the expenditure of substantial resources. Moreover, if regulatory approval of a drug is granted, such approval may entail limitations on the indicated uses for which it may be marketed. Failure to comply with applicable regulatory requirements can, among other things, result in suspension of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution. Further, government policy may change, and additional government regulations may be established that could prevent or delay regulatory approvals for our products. In addition, a marketed drug and its manufacturer are subject to continual review. Later discovery of previously unknown problems with the product or manufacturer may result in restrictions on such product or manufacturer, including withdrawal of the product from the market.

The United States Food and Drug Administration (“FDA”) and similar regulatory authorities in other countries may deny approval of a new drug application if required regulatory criteria are not satisfied, or may require additional testing. Product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur after the product reaches the market. The FDA and similar regulatory authorities in other countries may require further testing and surveillance programs to monitor the pharmaceutical product that has been commercialized. Non-compliance with applicable requirements can result in fines and other judicially imposed sanctions, including product withdrawals, product seizures, injunction actions and criminal prosecutions.

In addition to our own pharmaceuticals, we may supply active pharmaceutical ingredients and advanced pharmaceutical intermediates for use in our customers’ drug products. The final drug products in which the pharmaceutical ingredients and advanced pharmaceutical intermediates are used, however, are subject to regulation for safety and efficacy by the FDA and possibly other regulatory authorities in other jurisdictions. Such products must be approved by such agencies before they can be commercially marketed. The process of obtaining regulatory clearance for marketing is uncertain, costly and time consuming. We cannot predict how long the necessary regulatory approvals will take or whether our customers will ever obtain such approval for their products. To the extent that our customers do not obtain the necessary regulatory approvals for marketing new products, our product sales could be adversely affected.

The FDA and other governmental regulators have increased requirements for drug purity and have increased environmental burdens upon the pharmaceutical industry. Because pharmaceutical drug manufacturing is a highly regulated industry, requiring significant documentation and validation of manufacturing processes and quality control assurance prior to approval of the facility to manufacture a specific drug, there can be considerable transition time between the initiation of a contract to manufacture a product and the actual initiation of manufacture of that product. Any lag time in the initiation of a contract to manufacture product and the actual initiation of manufacture could cause us to lose profits or incur liabilities.

The pharmaceutical regulatory regime in Europe and other countries is generally similar to that of the United States. We could face similar risks in these other jurisdictions as the risks described above.

Our operations and products may be subject to other government manufacturing and testing regulations.

Securing regulatory approval for the marketing of therapeutics by the FDA in the United States and similar regulatory agencies in other countries is a long and expensive process, which can delay or prevent product development and marketing. Approval to market products may be for limited applications or may not be received at all.

The products we anticipate manufacturing will have to comply with the FDA’s current Good Manufacturing Practices (“cGMP”) and other FDA and local government guidelines and regulations, including other international regulatory requirements and guidelines. Additionally, certain of our customers may require the manufacturing facilities contracted by us to adhere to additional manufacturing standards, even if not required by the FDA. Compliance with cGMP regulations requires manufacturers to expend time, money and effort in production and to maintain precise records and quality control to ensure that the product meets applicable specifications and other requirements. The FDA and other regulatory bodies periodically inspect drug-manufacturing facilities to ensure compliance with applicable cGMP requirements. If the manufacturing facilities contracted by us fail to comply with the cGMP requirements, the facilities may become subject to possible FDA or other regulatory action and manufacturing at the facility

could consequently be suspended. We may not be able to contract suitable alternative or back-up manufacturing facilities on terms acceptable to us or at all.

The FDA or other regulatory agencies may also require the submission of any lot of a particular product for inspection. If the lot product fails to meet the FDA requirements, then the FDA could take any of the following actions: (i) restrict the release of the product; (ii) suspend manufacturing of the specific lot of the product; (iii) order a recall of the lot of the product; or (iv) order a seizure of the lot of the product.

We are subject to regulation by governments in many jurisdictions. If we do not comply with healthcare, drug, manufacturing and environmental regulations, among others, in such jurisdiction, our existing and future operations may be curtailed, and we could be subject to liability.

In addition to the regulatory approval process, we may be subject to regulations under local, provincial, state, federal and foreign law, including, but not limited to, requirements regarding occupational health, safety, laboratory practices, environmental protection and hazardous substance control, and may be subject to other present and future local, provincial, state, federal and foreign regulations.

The biotechnology industry is extremely competitive and we must successfully compete with larger companies with substantially greater resources.

Technological competition in the pharmaceutical industry is intense and we expect competition to increase. Other companies are conducting research on therapeutics involving the Ras pathway as well as other novel treatments or therapeutics for the treatment of cancer which may compete with our product. Many of these competitors are more established, benefit from greater name recognition and have substantially greater financial, technical and marketing resources than us. In addition, many of these competitors have significantly greater experience in undertaking research, preclinical studies and human clinical trials of new pharmaceutical products, obtaining regulatory approvals and manufacturing and marketing such products. In addition, there are several other companies and products with which we may compete from time to time, and which may have significantly better and larger resources than we do. Accordingly, our competitors may succeed in manufacturing and/or commercializing products more rapidly or effectively, which could have a material adverse effect on our business, financial condition or results of operations.

We anticipate that we will face increased competition in the future as new products enter the market and advanced technologies become available. There can be no assurance that existing products or new products developed by our competitors will not be more effective, or be more effectively manufactured, marketed and sold, than any that may be developed or sold by us. Competitive products may render our products obsolete and uncompetitive prior to recovering research, development or commercialization expenses incurred with respect to any such products.

We rely on patents and proprietary rights to protect our technology.

Our success will depend, in part, on our ability to obtain patents, maintain trade secret protection and operate without infringing the rights of third parties. We have received Granted Patents in countries throughout the world, including the United States, Canada, Europe, and Japan. We file our Applications for Patent in the United States and under the PCT, allowing us to subsequently file in other jurisdictions. See “Narrative Description—Patent and Patent Application Summary”. Our success will depend, in part, on our ability to obtain, enforce and maintain patent protection for our technology in Canada, the United States and other countries. We cannot be assured that patents will issue from any pending applications or that claims now or in the future, if any, allowed under issued patents will be sufficiently broad to protect our technology. In addition, no assurance can be given that any patents issued to, or licensed by us, will not be challenged, invalidated, infringed or circumvented, or that the rights granted there under will provide continuing competitive advantages to us.

The patent positions of pharmaceutical and biotechnology firms, including us, are generally uncertain and involve complex legal and factual questions. In addition, it is not known whether any of our current research endeavours will result in the issuance of patents in Canada, the United States, or elsewhere, or if any patents already issued will provide significant proprietary protection or will be circumvented or invalidated. Since patent applications in the United States and Canada may be maintained in secrecy until at least 18 months after filing of the original priority application, and since publication of discoveries in the scientific or patent literature tends to lag behind actual discoveries by several months, we cannot be certain that we or any licensor were the first to create inventions claimed by pending patent applications or that we or the licensor were the first to file patent applications for such inventions. Loss of patent protection could lead to generic competition for these products, and others in the future, which would materially and adversely affect our financial prospects for these products.

Similarly, since patent applications filed before November 29, 2000 in the United States may be maintained in secrecy until the patents issue or foreign counterparts, if any, publish, we cannot be certain that we or any licensor were the first creator of inventions covered by pending patent applications or that we or such licensor were the first to file patent applications for such inventions. There is no assurance that our patents, if issued, would be held valid or enforceable by a court or that a competitor's technology or product would be found to infringe such patents.

Accordingly, we may not be able to obtain and enforce effective patents to protect our proprietary rights from use by competitors. If other such parties obtain patents for certain information relied on by us in conducting our business, then we may be required to stop using, or pay to use, certain intellectual property, and as such, our competitive position and profitability could suffer as a result.

In addition, we may be required to obtain licenses under patents or other proprietary rights of third parties. No assurance can be given that any licenses required under such patents or proprietary rights will be available on terms acceptable to us. If we do not obtain such licenses, we could encounter delays in introducing one or more of our products to the market while we attempt to design around such patents, or we could find that the development, manufacture or sale of products requiring such licenses could be foreclosed. In addition, we could incur substantial costs in defending ourselves in suits brought against us on such patents or in suits in which our attempts to enforce our own patents against other parties.

Our products may fail or cause harm, subjecting us to product liability claims.

Use of our product during current clinical trials may entail risk of product liability. We maintain clinical trial liability insurance; however, it is possible this coverage may not provide full protection against all risks. Given the scope and complexity of the clinical development process, the uncertainty of product liability litigation, and the shrinking capacity of insurance underwriters, it is not possible at this time to assess the adequacy of current clinical trial coverage, nor the ability to secure continuing coverage at the same level and at reasonable cost in the foreseeable future. While we carry, and intend to continue carrying amounts believed to be appropriate under the circumstances, it is not possible at this time to determine the adequacy of such coverage.

In addition, the sale and commercial use of our product entails risk of product liability. We currently do not carry any product liability insurance for this purpose. There can be no assurance that we will be able to obtain appropriate levels of product liability insurance prior to any sale of our pharmaceutical products. An inability to obtain insurance on economically feasible terms or to otherwise protect against potential product liability claims could inhibit or prevent the commercialization of products developed by us. The obligation to pay any product liability claim or a recall of a product could have a material adverse effect on our business, financial condition and future prospects.

We have limited manufacturing experience and intend to rely on third parties to commercially manufacture our products, if and when developed.

To date, we have relied upon a contract manufacturer to manufacture small quantities of REOLYSIN®. The manufacturer may encounter difficulties in scaling up production, including production yields, quality control and quality assurance. Only a limited number of manufacturers can supply therapeutic viruses and failure by the manufacturer to deliver the required quantities of REOLYSIN® on a timely basis at a commercially reasonable price may have a material adverse effect on us. We have completed a program for the development of a commercial process for manufacturing REOLYSIN® and have filed a number of patent applications related to the process. There can be no assurance that we will successfully obtain sufficient patent protection related to our manufacturing process.

New products may not be accepted by the medical community or consumers.

Our primary activity to date has been research and development and we have no experience in marketing or commercializing products. We will likely rely on third parties to market our products, assuming that they receive regulatory approvals. If we rely on third parties to market our products, the commercial success of such product will be subject to a number of risks that may be outside of our control, including:

- competition in relation to alternative treatments, including efficacy advantages and cost advantages;
- perceived ease of use;
- the availability of coverage or reimbursement by third-party payors;
- uncertainties regarding marketing and distribution support; and
- distribution or use restrictions imposed by regulatory authorities.

Moreover, there can be no assurance that physicians, patients or the medical community will accept our product, even if it proves to be safe and effective and is approved for marketing by Health Canada, the FDA and other regulatory authorities. A failure to successfully market our product would have a material adverse effect on our revenue.

Our technologies may become obsolete.

The pharmaceutical industry is characterized by rapidly changing markets, technology, emerging industry standards and frequent introduction of new products. The introduction of new products embodying new technologies, including new manufacturing processes and the emergence of new industry standards may render our products obsolete, less competitive or less marketable. The process of developing our products is extremely complex and requires significant continuing development efforts and third party commitments. Our failure to develop new technologies and products and the obsolescence of existing technologies could adversely affect our business.

We may be unable to anticipate changes in our potential customer requirements that could make our existing technology obsolete. Our success will depend, in part, on our ability to continue to enhance our existing technologies, develop new technology that addresses the increasing sophistication and varied needs of the market, and respond to technological advances and emerging industry standards and practices on a timely and cost-effective basis. The development of our proprietary technology entails significant technical and business risks. We may not be successful in using our new technologies or exploiting our niche markets effectively or adapting our businesses to evolving customer or medical requirements or preferences or emerging industry standards.

We are highly dependent on third-party relationships for research and clinical trials.

We rely upon third party relationships for assistance in the conduct of research efforts, pre-clinical development and clinical trials, and manufacturing. In addition, we expect to rely on third parties to seek regulatory approvals for and to market our product. Although we believe that our collaborative partners will have an economic motivation to commercialize our product included in any collaborative agreement, the amount and timing of resources diverted to these activities generally is expected to be controlled by the third party. Furthermore, if we cannot maintain these relationships, our business may suffer.

We have no operating revenues and a history of losses.

To date, we have not generated sufficient revenues to offset our research and development costs and accordingly have not generated positive cash flow or made an operating profit. As of December 31, 2013, we had an accumulated deficit of \$231.3 million and we incurred net losses of \$23.5 million, \$36.4 million and \$29.0 million for the years ended December 31, 2013, 2012, and 2011, respectively. We anticipate that we will continue to incur significant losses during 2014 and in the foreseeable future. We do not expect to reach profitability at least until after successful and profitable commercialization of one or more of our products. Even if one or more of our products are profitably commercialized, the initial losses incurred by us may never be recovered.

We may not be able to obtain third-party reimbursement for the cost of our product.

Government authorities and third party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and these third party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Uncertainty exists regarding the reimbursement status of newly-approved pharmaceutical products and reimbursement may not be available for REOLYSIN®. Any reimbursements granted may not be maintained or limits on reimbursements available from third-party payors may reduce the demand for, or negatively affect the price of, these products. If REOLYSIN® does not qualify for reimbursement, if reimbursement levels diminish, or if reimbursement is denied, our sales and profitability would be adversely affected.

Third-Party Risk

In the normal course of our business, we have entered into contractual arrangements with third parties which subject us to the risk that such parties may default on their obligations. Oncolytics may be exposed to third party credit risk through our contractual arrangements with our current contract manufacturer, the institutions which operate our clinical trials, or our contract research organizations and other parties. In the event such entities fail to meet their contractual obligations to Oncolytics, such failures could have a material adverse effect on Oncolytics and our operations.

We may need additional financing in the future to fund the research and development of our products and to meet our ongoing capital requirements.

As of December 31, 2013, we had cash and cash equivalents (including short-term investments) of \$27.2 million and working capital of approximately \$21.7 million. We anticipate that we will need additional financing in the future to fund research and development and to meet our ongoing capital requirements. The amount of future capital requirements will depend on many factors, including continued scientific progress in our drug discovery and development programs, progress in our pre-clinical and clinical evaluation of drug candidates, time and expense associated with filing, prosecuting and enforcing our patent claims and costs associated with obtaining regulatory approvals. In order to meet such capital requirements, we will consider contract fees, collaborative research and development arrangements, and additional public or private financings (including the incurrence of debt and the issuance of additional equity securities) to fund all or a part of particular programs as well as potential partnering or licensing opportunities.

As a result of the weakened global economic situation, Oncolytics, along with all other pharmaceutical research and development entities, may have restricted access to capital, bank debt and equity, and is likely to face increased borrowing costs. Although our business and asset base have not changed, the lending capacity of all financial institutions has diminished and risk premiums have increased. As future operations will be financed out of funds generated from financing activities, our ability to do so is dependent on, among other factors, the overall state of capital markets and investor appetite for investments in the pharmaceutical industry and our securities in particular.

Should we elect to satisfy our cash commitments through the issuance of securities, by way of either private placement or public offering or otherwise, there can be no assurance that our efforts to raise such funding will be successful, or achieved on terms favourable to us or our existing shareholders. If adequate funds are not available on terms favorable to us, we may have to reduce substantially or eliminate expenditures for research and development, testing, production and marketing of our proposed product, or obtain funds through arrangements with corporate partners that require us to relinquish rights to certain of our technologies or product. There can be no assurance that we will be able to raise additional capital if our current capital resources are exhausted.

The cost of director and officer liability insurance may increase substantially and may affect our ability to retain quality directors and officers.

We carry liability insurance on behalf of our directors and officers. Given a number of large director and officer liability insurance claims in the U.S. equity markets, director and officer liability insurance has become increasingly more expensive with increased restrictions. Consequently, there is no assurance that we will continue to be offered this insurance or be able to obtain adequate coverage. The inability to acquire the appropriate insurance coverage may limit our ability to attract and maintain directors and officers as required to conduct our business.

We are dependent on our key employees and collaborators.

Our ability to develop the product will depend, to a great extent, on our ability to attract and retain highly qualified scientific personnel and to develop and maintain relationships with leading research institutions. Competition for such personnel and relationships is intense. We are highly dependent on the principal members of our management staff as well as our advisors and collaborators, the loss of whose services might impede the achievement of development objectives. The persons working with us are affected by a number of influences outside of our control. The loss of key employees and/or key collaborators may affect the speed and success of product development.

Barbados law differs from the laws in effect in Canada and the United States and may afford less protection to holders of our securities.

Certain of our assets and intellectual property are held by our wholly-owned subsidiary, Oncolytics Barbados, which is organized under the laws of Barbados. It may not be possible to enforce court judgments obtained in Canada or the United States against Oncolytics Barbados in Barbados based on the civil liabilities provisions of applicable securities laws. In addition, there is some doubt as to whether the courts of Barbados would recognize or enforce judgments of courts in Canada or the United States obtained against us or our directors or officers based on the civil liabilities provisions of Canadian and United States securities laws or hear actions against us or those persons based on such laws.

Changes in law could adversely affect our business and corporate structure.

There can be no assurances that changes will not occur in corporate, tax, property and other laws in Canada and/or Barbados (or the interpretation thereof by regulatory or tax authorities) which may materially and adversely affect our businesses and corporate structure.

We incur some of our expenses in foreign currencies and therefore we are exposed to foreign currency exchange rate fluctuations.

We incur some of our manufacturing, clinical, collaborative and consulting expenses in foreign currencies, primarily the U.S. dollar, the Euro and the British pound (“GBP”). We are therefore exposed to foreign currency rate fluctuations. Also, as we expand to other foreign jurisdictions there may be an increase in our foreign exchange exposure.

We earn interest income on our excess cash reserves and are exposed to changes in interest rates.

We invest our excess cash reserves in investment vehicles that provide a rate of return with little risk to principal. As interest rates change the amount of interest income we earn will be directly impacted.

The Company may fail to achieve and maintain adequate internal control over financial reporting pursuant to the requirements of the Sarbanes-Oxley Act and equivalent Canadian legislation.

The Company documented and tested during its most recent fiscal year its internal control procedures in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (“SOX”) and equivalent Canadian legislation. SOX requires an annual assessment by management of the effectiveness of the Company’s internal controls over financial reporting and an attestation report by the Company’s independent auditors addressing this assessment. The Company may fail to achieve and maintain the adequacy of its internal controls over financial reporting as such standards are modified, supplemented, or amended from time to time, and the Company may not be able to ensure that it can conclude, on an ongoing basis, that it has effective internal controls over financial reporting in accordance with Section 404 of SOX. The Company’s failure to satisfy the requirements of Section 404 of SOX on an ongoing, timely basis could result in the loss of investor confidence in the reliability of its financial statements, which in turn could harm the Company’s business and negatively impact the trading price of the common shares or the market value of its other securities. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm the Company’s operating results or cause it to fail to meet its reporting obligations. Future acquisitions of companies, if any, may provide the Company with challenges in implementing the required processes, procedures and controls in its acquired operations. No evaluation can provide complete assurance that the Company’s internal controls over financial reporting will detect or uncover all failures of persons within the Company to disclose material information otherwise required to be reported. The effectiveness of the Company’s processes, procedures and controls could also be limited by simple errors or faulty judgments. In addition, if the Company expands, the challenges involved in implementing appropriate internal controls over financial reporting will increase and will require that the Company continue to improve its internal controls over financial reporting.

Because the Company is a Canadian Company and the majority of its directors and officers are resident in Canada, it may be difficult for investors in the United States to enforce civil liabilities against the Company based solely upon the federal securities laws of the United States.

The Company is a Canadian company, with its principal place of business in Canada. A majority of the Company’s directors and officers are residents of Canada and a significant portion of the Company’s assets and the assets of a majority of the Company’s directors and officers are located outside the United States. Consequently, it may be difficult for U.S. investors to effect service of process within the United States upon the Company or its directors or officers or such experts who are not residents of the United States, or to realize in the United States upon judgments of courts of the United States predicated upon civil liabilities under the U.S. Securities Act of 1933, as amended. Investors should not assume that Canadian courts (1) would enforce judgments of U.S. courts obtained in actions against the Company or such directors, officers or experts predicated upon the civil liability provisions of the U.S. federal securities laws or the securities or “blue sky” laws of any state within the United States or (2) would enforce, in original actions, liabilities against the Company or such directors, officers or experts predicated upon the U.S. federal securities laws or any such state securities or “blue sky” laws. In addition, the protections afforded by Canadian securities laws may not be available to investors in the United States.

As a foreign private issuer, our shareholders may have less complete and timely data.

The Company is a “foreign private issuer” as defined in Rule 3b-4 under the United States Securities Exchange Act of 1934, as amended (the “U.S. Exchange Act”). Equity securities of the Company are accordingly exempt from Sections 14(a), 14(b), 14(c), 14(f) and 16 of the U.S. Exchange Act pursuant to Rule 3a12-3 of the U.S. Exchange Act. Therefore, the Company is not required to file a Schedule 14A proxy statement in relation to its annual meeting of shareholders. The submission of proxy and annual meeting of shareholder information on Form 6-K may result in shareholders having less complete and timely information in connection with shareholder actions. The exemption from Section 16 rules regarding reports of beneficial ownership and purchases

and sales of common shares by insiders and restrictions on insider trading in our securities may result in shareholders having less data and there being fewer restrictions on insiders' activities in our securities.

The Company is likely a "passive foreign investment company" which will likely have adverse U.S. federal income tax consequences for U.S. shareholders

U.S. shareholders of the Common Shares should be aware that the Company believes it was classified as a passive foreign investment company ("PFIC") during the tax year ended December 31, 2013, and based on current business plans and financial expectations, the Company anticipates that it may qualify as a PFIC for subsequent taxable years. If the Company is a PFIC for any year during a U.S. shareholder's holding period, then such U.S. shareholder generally will be required to treat any gain realized upon a disposition of Common Shares, or any so-called "excess distribution" received on its common shares, as ordinary income, and to pay an interest charge on a portion of such gain or distributions, unless the shareholder makes a timely and effective "qualified electing fund" election ("QEF Election") or a "mark-to-market" election with respect to the Common Shares. A U.S. shareholder who makes a QEF Election generally must report on a current basis its share of the Company's net capital gain and ordinary earnings for any year in which the Company is a PFIC, whether or not the Company distributes any amounts to its shareholders. For each taxable year that the Company qualifies as a PFIC, the Company will make available to each U.S. Holder that has made a QEF Election, upon written request, a "PFIC Annual Information Statement" as described in Treasury Regulation Section 1.1295-1(g) (or any successor Treasury Regulation) and use commercially reasonable efforts to provide all additional information that such U.S. Holder is required to obtain in connection with maintaining such QEF Election with regard to the Company. A U.S. shareholder who makes the mark-to-market election generally must include as ordinary income each year the excess of the fair market value of the common shares over the taxpayer's basis therein. This paragraph is qualified in its entirety by the discussion below under the heading "Certain United States Federal Income Tax Considerations." Each U.S. shareholder should consult its own tax advisor regarding the PFIC rules and the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Common Shares.

Our share price may be highly volatile.

Market prices for securities of biotechnology companies generally are volatile. This increases the risk of securities litigation. Factors such as announcements (publicly made or at scientific conferences) of technological innovations, new commercial products, patents, the development of proprietary rights, results of clinical trials, regulatory actions, publications, quarterly financial results, our financial position, public concern over the safety of biotechnology, future sales of shares by us or our current shareholders and other factors could have a significant effect on the market price and volatility of the Common Shares.

Potential dilution of present and prospective shareholdings.

In order to finance future operations and development efforts, the Company may raise funds through the issue of common shares or the issue of securities convertible into common shares. The Company cannot predict the size of future issues of common shares or the issue of securities convertible into common shares or the effect, if any, that future issues and sales of the Company's common shares will have on the market price of its common shares. Any transaction involving the issue of previously authorized but unissued shares, or securities convertible into shares, would result in dilution, possibly substantial, to present and prospective holders of shares.

The Company does not intend to pay cash dividends in the foreseeable future.

The Company has not declared or paid any dividends since its incorporation. The Company intends to retain earnings, if any, to finance the growth and development of its business and does not intend to pay cash dividends on the Common Shares in the foreseeable future. Any return on an investment in the common shares will come from the appreciation, if any, in the value of the Common Shares. The payment of future cash dividends, if any, will be reviewed periodically by the board of directors and will depend upon, among other things, conditions then existing including earnings, financial condition and capital requirements, restrictions in financing agreements, business opportunities and conditions and other factors.

Our operations may be adversely affected by disruptions to our information technology ("IT") systems, including disruptions from cybersecurity breaches of our IT infrastructure.

We rely on information technology networks and systems, including those of third-party service providers, to process, transmit and store electronic information. In particular, we depend on our information technology infrastructure for a variety of functions, including financial reporting, data management, and email communications. Any of these systems may be susceptible to outages due to fire, floods, power loss, telecommunications failures, terrorist attacks, sabotage and similar events. Global cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to our information technology

systems to sophisticated and targeted measures known as advanced persistent threats. The ever-increasing use and evolution of technology, including cloud-based computing, creates opportunities for the unintentional dissemination or intentional destruction of confidential information stored in our systems or in non-encrypted portable media or storage devices. We could also experience a business interruption, information theft of confidential information, or reputational damage from industrial espionage attacks, malware or other cyber attacks, which may compromise our system infrastructure or lead to data leakage, either internally or at our third-party providers. Despite the implementation of network security measures and disaster recovery plans, our systems and those of third parties on which we rely may also be vulnerable to computer viruses, break-ins and similar disruptions. If we or our vendors are unable (or are perceived as unable) to prevent such outages and breaches, our operations may be disrupted and our business reputation could be adversely affected.

We expect that risks and exposures related to cybersecurity attacks will remain high for the foreseeable future due to the rapidly evolving nature and sophistication of these threats.

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

Oncolytics Biotech Inc. was formed under the *Business Corporations Act* (Alberta) on April 2, 1998 as 779738 Alberta Ltd. On April 8, 1998, we changed our name to Oncolytics Biotech Inc.

Our principal executive office is located at 210, 1167 Kensington Cres. NW, Calgary, Alberta, Canada, T2N 1X7, telephone (403) 670-7377. Our agent for service in the U.S. is CT Corporation, 111 Eighth Avenue, 13th Floor, New York, New York 10011.

A description of our principal capital expenditures and divestitures and a description of acquisitions of material assets can be found in our MD&A and in the notes to our financial statements included elsewhere in this annual report.

B. Business Overview

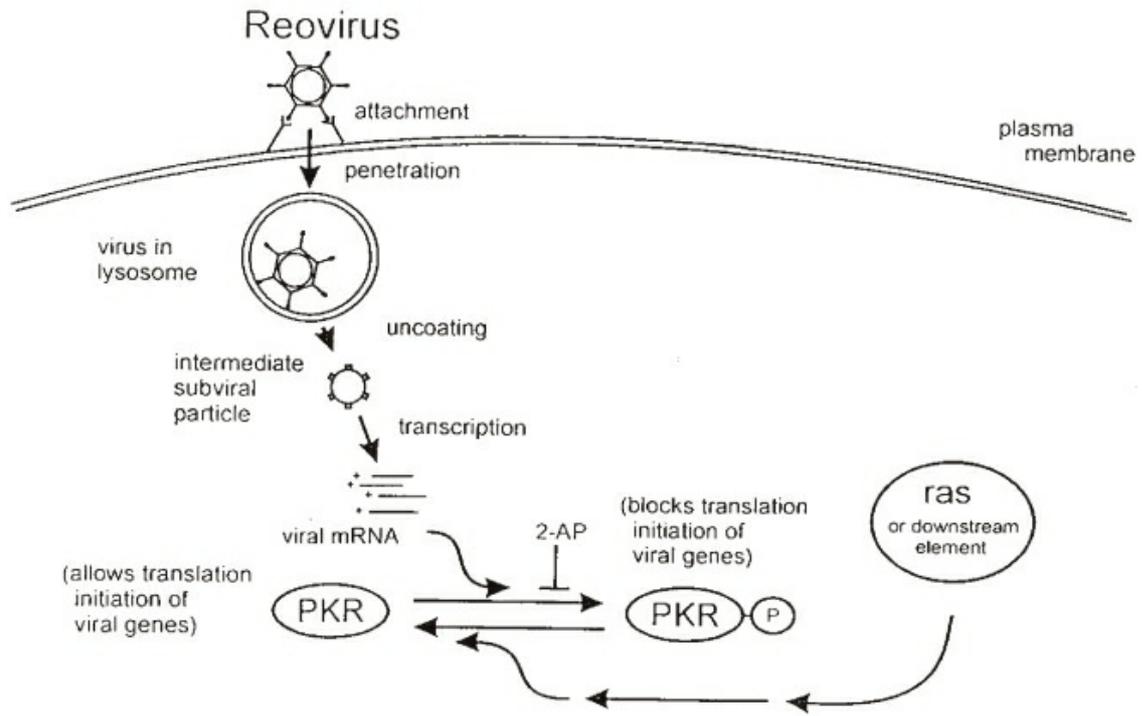
Since our inception in April of 1998, Oncolytics Biotech Inc. has been a development stage company and we have focused our research and development efforts on the development of REOLYSIN[®], our potential cancer therapeutic. We have not been profitable since our inception and expect to continue to incur 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 Business

Our potential product for human use, REOLYSIN[®], is developed from the reovirus. This virus has been demonstrated to replicate specifically in tumour cells bearing an activated Ras pathway. Activating mutations of Ras occur in approximately 30% of all human tumours directly, but considering its central role in signal transduction, activation of the Ras pathway has been shown to play a role in approximately two-thirds of all tumours.

The functionality of the product is based upon the finding that tumours bearing an activated Ras pathway are deficient in their ability to activate the anti-viral response mediated by the host cellular protein, PKR. Since PKR is responsible for preventing reovirus replication, tumour cells lacking the activity of PKR are susceptible to reovirus infections. As normal cells do not possess Ras activations, these cells are able to thwart reovirus infections by the activity of PKR. In a tumour cell with an activated Ras pathway, reovirus is able to freely replicate and hence kill the host tumour cell. The result of this replication is progeny viruses that are then free to infect surrounding cancer cells. This cycle of infection, replication and cell death is believed to be repeated until there are no longer any tumour cells carrying an activated Ras pathway available.

The following schematic illustrates the molecular basis of how the reovirus kills cancer cells.



Scientific Background

The Ras protein is a key regulator of cell growth and differentiation. It transmits signals from the cell's surface, via growth factor receptors, to downstream elements, which are in turn relayed to the nucleus. This transmission of signals from the cell surface to the cell's nucleus is collectively referred to as "signal transduction." The transmission of these signals results in cell growth, division, and in some instances cellular differentiation. In normal cells, cell growth occurs only in the presence of factors stimulating the cells to grow. Mutations in Ras itself, or any of the elements along the Ras pathway, often lead to activation of the pathway in the absence of the appropriate growth stimuli, leading to the uncontrolled growth of these cells and ultimately to the development of a cancerous state. In fact, approximately 30% of all cancers are known to be due to mutations in Ras itself. The frequency of these Ras mutations, as well as their etiology in a given tumour is, however, tissue specific. Activating mutations in Ras are found in many types of human malignancies but are highly represented in pancreatic (90%), sporadic colorectal (50%), lung carcinomas (40%), and myeloid leukemia (30%). Because Ras is a regulator of key mitogenic signals, aberrant function of upstream elements such as receptor tyrosine kinases (RTKs) can also result in Ras activation in the absence of mutations in Ras itself. Indeed, over-expression of these RTKs such as HER2/neu/ErbB2 or the epidermal growth factor receptor is common in breast cancer (25-30%), and over-expression of the platelet-derived growth factor receptor ("PDGFR") is common in glioblastomas and gliomas, all of which are tumour types in which Ras mutations are relatively rare. Although activating mutations of Ras itself are thought to occur in only about 30% of all tumours, it is expected that approximately two-thirds of all tumours have activated Ras signaling pathways as a result of mutations in genes that lie upstream of Ras. With this in mind, Ras becomes a significant therapeutic target in oncology.

All available scientific evidence developed or reviewed by us to date supports the premise that the reovirus only actively infects and replicates in cells with an activated Ras pathway. This naturally occurring virus is believed to cause only mild infections of the respiratory and gastrointestinal tract and in general, reovirus infections in humans are asymptomatic and usually sub-clinical. Research has indicated this virus replicates in, and therefore kills, only cancer cells (i.e. cancer cells with an activated Ras pathway), but does not replicate in normal cells. It has been demonstrated that reovirus replication is restricted in "normal" cells due to the activation of the double stranded RNA-activated protein kinase ("PKR"). PKR is a crucial element in protecting cells from reovirus infection and is capable of blocking viral protein translation. Activated Ras (or an activated element of the Ras pathway) prevents PKR activation, and thus allows viral replication to ensue only in this subset of cancer cells. To prove that reovirus could be used as a potential cancer therapeutic, a number of animal models were developed. Experiments using this virus to treat mouse tumours, expanded animal models as well as human brain, breast, and prostate tumours implanted in immuno-compromised mice have yielded promising results. In animals where tumour regression was noted, a single injection of reovirus is often enough to cause complete tumour regression. More importantly, it was demonstrated that this treatment is effective in causing tumour regression in immune competent animals. We believe that the nature of this virus, combined with its selective replication makes it an attractive candidate as a cancer therapy.

We also believe that this research may have broad utility in the treatment of tumours with an activated Ras pathway as well as a potential use as an adjuvant therapy following surgical tumour resection or as an adjuvant therapy to conventional chemotherapeutic or radiation therapies.

The Potential Cancer Product

Cancer is a group of related diseases characterized by the aberrant or uncontrolled growth of cells and the spread of these cells to other sites in the body. These cancer cells eventually accumulate and form tumours that can disrupt and impinge on normal tissue and organ function. In many instances, cells from these tumours can break away from the original tumour and travel through the body to form new tumours through a process referred to as metastasis.

Our cancer product is a potential therapeutic for tumours possessing an activated Ras pathway. In tumour cells with this type of activation, the virus is cytotoxic but may have no effect on the surrounding normal tissue. Activating mutations of Ras are believed to account for approximately 30% of all human tumours directly. It is also possible to activate Ras through mutation of proteins that control its activity rather than through direct mutations of Ras itself. This suggests that approximately two thirds of tumours may respond to this treatment.

Clinical Trial Program

We are directing a broad clinical trial program with the objective of developing REOLYSIN® as a human cancer therapeutic. The clinical program includes clinical trials which we sponsor directly along with Third Party Clinical Trials. Third Party Clinical Trials are clinical trials that are being sponsored by other institutions. As of the end of 2013, the U.S. National Cancer Institute ("NCI"), the University of Leeds and the Cancer Therapy & Research Center at the University of Texas Health Center in San Antonio ("CTRC") and the National Cancer Institute of Canada ("NCIC") were sponsoring part of our clinical trial program. Our

clinical trial program has included human trials using REOLYSIN® alone, and in combination with radiation and chemotherapy, and delivered via local administration and/or intravenous administration.

Clinical Trial Chart

The following chart shows our clinical trials along with the status for each as at December 31, 2013:

Trial number	Delivery Method	Trial Program and Cancer Indication	Location	Status
IND 213 (NCIC CTG Trial)	Intravenous Administration of REOLYSIN® in combination with Paclitaxel	Phase II Metastatic Breast Cancer	Canada	Ongoing
IND 211 (NCIC CTG Trial)	Intravenous Administration of REOLYSIN® in combination with Docetaxel or Pemetrexed	Phase II Metastatic Non-Small Cell Lung Cancer	Canada	Ongoing
INC 210 (NCIC CTG Trial)	Intravenous Administration of REOLYSIN® in combination with FOLFOX-6 Plus Bevacizumab (Avastin®) versus FOLFOX-6 Plus Bevacizumab alone	Phase II Metastatic Colorectal Cancer	Canada	Ongoing
IND 209 (NCIC CTG Trial)	Intravenous Administration of REOLYSIN® in combination with Docetaxel or Pemetrexed	Phase II Recurrent or Metastatic Castration Resistant Prostate Cancer	Canada	Ongoing
OSU-11148 (NCI Trial)	Intravenous Administration of REOLYSIN	Phase I Relapsed Multiple Myeloma	United States	Ongoing
OSU-10045 (NCI Trial)	REOLYSIN® in Combination with Paclitaxel and Carboplatin	Phase II Metastatic Pancreatic Cancer	United States	Ongoing
COG-ADVL1014 (NCI / COG Trial)	Intravenous Administration of REOLYSIN® in Combination with Cyclophosphamide	Phase I Pediatric Patients with Relapsed or Refractory Solid Tumors	United States	Ongoing
GOG-0186H (NCI / GOG Trial)	Intravenous Administration of REOLYSIN in Combination with Paclitaxel for Patients with Persistent or Recurrent Ovarian Cancer	Phase II ovarian cancer	United States	Ongoing
REO 022	Intravenous administration in combination with FOLFIRI	Phase I colorectal cancer	United States	Ongoing
REO 021	Intravenous administration in combination with paclitaxel and carboplatin (sponsored by the CTRC)	Phase II squamous cell carcinoma lung cancer	United States	Ongoing
REO 020	Intravenous administration in combination with paclitaxel and carboplatin (sponsored by the CTRC)	Phase II metastatic melanoma	United States	Ongoing
REO 018	Intravenous administration in combination with paclitaxel and carboplatin	Phase III squamous cell carcinoma of the head and neck	International	Ongoing
REO 017	Intravenous administration in combination with gemcitabine (sponsored by the CTRC)	Phase II advanced pancreatic cancer	United States	Ongoing
REO 016	Intravenous administration in combination with paclitaxel and carboplatin	Phase II non-small cell lung with K-RAS or EGFR-activated tumours	United States	Ongoing
REO 015	Intravenous administration in combination with paclitaxel and carboplatin	Phase II head and neck	United States	Complete
REO 014	Intravenous administration monotherapy	Phase II sarcoma	United States	Complete
REO 013 Brain	Intravenous administration prior to surgical resection	Phase I recurrent high grade primary or metastatic brain tumours	United Kingdom	Ongoing

Trial number	Delivery Method	Trial Program and Cancer Indication	Location	Status
REO 013	Intravenous administration monotherapy (sponsored by University of Leeds)	Translational metastatic colorectal	United Kingdom	Complete
Mayo-MC0672 NCI Trial	Intravenous administration monotherapy (NCI)	Phase II melanoma	United States	Complete
OSU-07022 NCI Trial	Intravenous and intraperitoneal administration monotherapy (NCI)	Phase I/II ovarian	United States	Ongoing
REO 012	Intravenous administration in combination with cyclophosphamide	Phase I/II pancreatic, lung, ovarian	United Kingdom	Complete
REO 011	Intravenous administration in combination with paclitaxel and carboplatin	Phase I/II melanoma, lung, ovarian	United Kingdom	Complete
REO 010	Intravenous administration in combination with docetaxel	Phase I/II bladder, prostate, lung, upper gastro-intestinal	United Kingdom	Complete
REO 009	Intravenous administration in combination with gemcitabine	Phase I/II pancreatic, lung, ovarian	United Kingdom	Complete
REO 008	Local therapy in combination with radiation	Phase II various metastatic tumours, including head & neck	United Kingdom	Complete
REO 007	Infusion monotherapy	Phase I/II recurrent malignant gliomas	United States	Complete
REO 006	Local therapy in combination with radiation	Phase I various metastatic tumours	United Kingdom	Complete
REO 005	Intravenous administration monotherapy	Phase I various metastatic tumours	United Kingdom	Complete
REO 004	Intravenous administration monotherapy	Phase I various metastatic tumours	United States	Complete
REO 003	Local monotherapy	Phase I recurrent malignant gliomas	Canada	Complete
REO 002	Local monotherapy	T2 prostate cancer	Canada	Complete
REO 001	Local monotherapy	Phase I trial for various subcutaneous tumours	Canada	Complete

Patents and Trade Secrets

The patent positions and proprietary rights of pharmaceutical and biotechnology firms, including us, are generally uncertain and involve complex legal and factual questions. We believe there will continue to be significant litigation in the industry regarding patent and other intellectual property rights.

Currently, we have over 369 issued patents including 53 issued U.S. patents. We also have numerous patent applications filed in the U.S., Canada, and other jurisdictions, but we cannot be certain whether any given patent application filed by us will result in the issuance of a patent or if any given patent issued to us will later be challenged and invalidated. Nor can we be certain whether any given patent that may be issued to us will provide any significant proprietary protection to our product and business.

Litigation or other proceedings may also be necessary to enforce or defend our proprietary rights and patents. In Europe, patents can be revoked through opposition or nullity proceedings. In the United States patents may be revoked or invalidated in court actions or challenged in interference, post-grant review, derivation or re-examination proceedings in the USPTO. Such litigation or proceedings could result in substantial cost or distraction to us, or result in an adverse decision as to our or our licensors' patent applications and patents.

Our commercial success depends, in part, on not infringing the patents or proprietary rights of others and not breaching licenses granted that may be granted to us. Competitors may have filed patent applications and obtained patents and may in the future file patent applications and obtain patents relevant to our product and technologies. We are not aware of competing intellectual property relating to our REOLYSIN® project. While we currently believe that we have the necessary freedom to operate in these areas, there can be no assurance that others will not challenge our position in the future. Litigation to defend our position could be costly and time consuming. We also cannot be certain that we will be successful. We may be required to obtain a license from a prevailing

party in order to continue the portion of our business that relates to the proceeding. We may also be required to obtain licenses to other third-party technologies necessary in order to market our products. Such licenses may not be available to us on acceptable terms or on any terms and we may have to discontinue that portion of our business. Any failure to license any technologies required to commercialize our technologies or products at reasonable cost may have a material adverse effect on our business, results of operations, financial condition, cash flow and future prospects. We are not currently involved in any litigation concerning our competitors' patent applications and patents. We may be involved in such litigation in the future.

We also rely on unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain our competitive position. No assurance can be given that others will not independently develop substantially equivalent proprietary information and techniques, or otherwise gain access to our trade secrets or disclose such technology, or that we can meaningfully protect our rights to our unpatented trade secrets.

We require our employees and consultants to execute confidentiality agreements upon the commencement of employment and consulting relationships with us. These agreements provide that all confidential information developed by or made known to an individual during the course of the employment or consulting relationship generally must be kept confidential. In the case of employees, the agreements provide that all inventions conceived by the individual, while employed by us, relating to our business are our exclusive property. While we have implemented reasonable business measurements to protect confidential information, these agreements may not provide meaningful protection for our trade secrets in the event of unauthorized use or disclosure of such information.

Business Strategy

Our business strategy is to develop and market REOLYSIN® in an effective and timely manner, and access additional technologies at a time and in a manner that we believe is best for our development. We intend to achieve our business strategy by focusing on these key areas:

- Develop REOLYSIN® by continuing to progress the product through our clinical trial program assessing the safety and efficacy in human subjects;
- Establish collaborations with experts to assist us with scientific and clinical developments of this new potential pharmaceutical product;
- Implement strategic alliances with selected pharmaceutical and biotechnology companies and selected laboratories, at a time and in a manner where such alliances may complement and expand our research and development efforts on the product and provide sales and marketing capabilities;
- Utilize our broadening patent base and collaborator network as a mechanism to meet our strategic objectives; and
- Develop relationships with companies that could be instrumental in assisting us to access other innovative therapeutics.

Our business strategy is based on attaining a number of commercial objectives, which, in turn, are supported by a number of product development goals. Our new product development presently being conducted is primarily of a research and development nature. In the context of this Annual Report, statements of our "belief" are based primarily upon our results derived to date from our research and development program with animals, and early stage human trials, and upon which we believe that we have a reasonable scientific basis to expect the particular results to occur. It is not possible to predict, based upon studies in animals, or early stage human trials, whether a new therapeutic will ultimately prove to be safe and effective in humans. There are no assurances that the particular result expected by us will occur.

At this time we do not intend to become a fully integrated pharmaceutical company with substantial in-house research and development, marketing and distribution or manufacturing capabilities. We are pursuing a strategy of establishing relationships with larger companies as strategic partners. We intend to partner or joint venture with larger pharmaceutical companies that have existing and relevant marketing capability for our products. It is anticipated that future clinical development into large international or pivotal trials would generally occur in conjunction with a strategic partner or partners, who would contribute expertise and financial assistance. In exchange for certain product rights and commitments to market our products, the strategic partners would be expected to share in gross proceeds from the sale of our product or products and potentially share in various market or manufacturing opportunities. The proceeds generated from partnering or joint venturing projects are expected to be distributed on the basis of relative risk taken and resources contributed by each party to the partnership or joint venture.

Regulatory Requirements

The development of new pharmaceuticals is strongly influenced by a country's regulatory environment. The drug approval process in Canada is regulated by Health Canada. The primary regulatory body in the United States is the FDA and in the UK is the Medicines and Healthcare Products Regulatory Agency (the "MHRA"). Similar processes are conducted in other countries by equivalent regulatory bodies. Regulations in each jurisdiction require the licensing of manufacturing facilities and mandate strict research and product testing standards. Companies must establish the safety and efficacy of their products, comply with current Good Manufacturing Practices and submit marketing materials before being allowed to market pharmaceutical products. While we plan to pursue or support the pursuit of the approval of our product, success in acquiring regulatory approval for any product is not assured.

In order to market our pharmaceutical product in Canada, the United States, Europe and other jurisdictions, we must successfully meet the requirements of those jurisdictions. The requirements of the Appropriate Regulatory Authority will generally include the following stages as part of the regulatory process:

- ***Pre-Pharmacological Studies*** - Pre-Pharmacological studies involve extensive testing on laboratory animals to determine if a potential therapeutic product has utility in an in vivo disease model and has any adverse toxicology in a disease model.
- ***Investigational New Drug Application*** - An Investigational New Drug ("IND") Submission, or the equivalent, must be submitted to the appropriate regulatory authority prior to conducting Pharmacological Studies.
- ***Pharmacological Studies*** (or Phase I Clinical Trials) - Pharmacological studies are designed to assess the potential harmful or other side effects that an individual receiving the therapeutic compound may experience. These studies, usually short in duration, are often conducted with healthy volunteers or actual patients and use up to the maximum expected therapeutic dose.
- ***Therapeutic Studies*** (or Phase II and III Clinical Trials) - Therapeutic studies are designed primarily to determine the appropriate manner for administering a drug to produce a preventive action or a significant beneficial effect against a disease. These studies are conducted using actual patients with the condition that the therapeutic is designed to remedy. Prior to initiating these studies, the organization sponsoring the program is required to satisfy a number of requirements via the submission of documentation to support the approval for a clinical trial.
- ***New Drug Submission*** - After all three phases of a clinical trial have been completed, the results are submitted with the original IND Submission to the appropriate regulatory authority for marketing approval. Once marketing approval is granted, the product is approved for commercial sales.

Marketing Approvals

The results of the preclinical and clinical testing, together with manufacturing and controls information, are submitted to regulatory agencies in order to obtain approval to commence commercial sales. In responding to such an application, regulatory agencies may grant marketing approval, request additional information or further research, or deny the application if they determine that the application does not satisfy their regulatory approval criteria. Approval for a pharmaceutical or biologic product may not be granted on a timely basis, if at all, or if granted may not cover all the clinical indications for which approval is sought, or may contain significant limitations in the form of warnings, precautions or contraindications with respect to conditions of use.

Satisfaction of pre-market approval requirements for new drugs and biologics typically takes several years, and the actual time required may vary substantially based upon the type, complexity and novelty of the product or targeted disease. Government regulation may delay or prevent marketing of potential products for a considerable period of time and impose costly procedures upon our activities. Success in early stage clinical trials or with prior versions of products does not assure success in later stage clinical trials. Data obtained from clinical activities are not always conclusive and may be susceptible to varying interpretations that could delay, limit or prevent regulatory approval.

Post-Marketing Regulations

Once approved, regulatory agencies may withdraw the product approval if compliance with pre- and/or post-marketing regulatory standards is not maintained or if problems occur after the product reaches the marketplace. In addition, they may require post-marketing studies, referred to as Phase 4 studies, to monitor the effect of an approved product, and may limit further marketing of the product based on the results of these post-market studies. The FDA and other foreign regulatory agencies have broad post-

market regulatory and enforcement powers, including the ability to levy fines and penalties, suspend or delay issuance of approvals, seize or recall products, or withdraw approvals.

Manufacturing Regulations

We use contract toll manufacturers to produce REOLYSIN[®]. Our toll manufacturers are subject to periodic inspection by the FDA, the United States Drug Enforcement Administration, or DEA, and other domestic and foreign authorities where applicable, and must comply with cGMP regulations. Manufacturers of biologics also must comply with general biological product standards. Failure to comply with the statutory and regulatory requirements subjects the manufacturer to possible legal or regulatory action, such as suspension of manufacturing, seizure of product, or mandatory or voluntary recall of a product. Adverse experiences with the product must be reported to the FDA and foreign agencies and could result in the imposition of market restrictions through labeling changes or in product removal. Product approvals may be withdrawn if compliance with regulatory requirements is not maintained or if problems concerning safety or efficacy of the product occur following approval.

Advertising and Promotion Regulations

With respect to both pre- and post-market product advertising and promotion, the FDA and similar foreign agencies impose a number of complex regulations on entities that advertise and promote pharmaceuticals and biologics, which include, among other things, standards and regulations relating to direct-to-consumer advertising, off-label promotion, industry sponsored scientific and educational activities, and promotional activities involving the Internet. These agencies have very broad enforcement authority and failure to abide by these regulations can result in penalties including the issuance of a warning letter directing the entity to correct deviations from requisite standards, a requirement that future advertising and promotional materials be pre-cleared by the FDA or relevant foreign agencies, and foreign, state and federal civil and criminal investigations and prosecutions.

Other Government Regulations

We are subject to various laws and regulations regarding laboratory practices, the experimental use of animals, and the use and disposal of hazardous or potentially hazardous substances in connection with our research. In each of these areas, as above, the government has broad regulatory and enforcement powers, including the ability to levy fines and civil penalties, suspend or delay issuance of approvals, seize or recall products, and withdraw approvals, any one or more of which could have a material adverse effect upon us.

Market and Competition

According to estimates for 2014 from the American Cancer Society, 1.67 million Americans are expected to be diagnosed with cancer in the year, and 585,720 Americans are forecast to die of cancer. In the United States cancer accounts for 25% of all deaths, second only to heart disease. In the United States, the relative lifetime risk of a male developing cancer is 1 in 2, while for women, this risk is 1 in 3 (Source: American Cancer Society's Cancer Facts & Figures 2014). In the developed world alone, it is estimate by the World Health Organization that at least 2.6 million patients per year die of cancers that have metastasized (Source: World Health Organization's World Cancer Report 2008).

The costs of this disease state are also significant. The global cancer market was estimated to be \$77 billion in 2011 and is expected to rise to \$105 billion in 2016 (Source; Cowen Therapeutic Categories Outlook, October 2011). In the United States, the American Cancer Society reported in its Cancer Facts & Figures 2014 that the National Institute of Health estimated the 2008 cost for cancer treatment were \$216.6 billion. Of this figure, \$86.6 billion can be attributed to direct patient costs (Source: American Cancer Society's Cancer Facts & Figures 2014).

It has been estimated that approximately 30% of all tumours are a result of activating mutations of Ras itself. Since Ras can be activated by mechanisms other than direct mutations it is believed that the number of tumours with activated Ras (either through direct activating mutation or mutation or over-expression of elements upstream of Ras) is approximately two thirds.

We face substantial competition in the development of products for cancer and other diseases. This competition from other manufacturers of the same types of products and from manufacturers of different types of products designed for the same uses is expected to continue in both U.S. and international markets. Oncolytic virus therapies, our primary focus area, are rapidly evolving areas in the biotechnology industry and are expected to undergo many changes in the coming years as a result of technological advances. We are currently aware of a number of groups that are developing oncolytic virus therapies including early-stage and established biotechnology companies, pharmaceutical companies, academic institutions, government agencies and research institutions. We face competition from all of these groups in areas such as recruiting employees, acquiring technologies that might enhance our ability to commercialize products, establishing relationships with certain research and academic institutions, enrolling

patients in clinical trials and seeking program partnerships and collaborations with larger pharmaceutical companies. It is possible that our competitors could achieve earlier market commercialization, could have superior patent protection, or could have safer, more effective or more cost-effective products. These factors could render our potential products less competitive, which could adversely affect our business.

Product Marketing Strategy

The markets for the cancer product being developed by us may be large and could require substantial sales and marketing capability. Before or upon successful completion of the development of a cancer product, we intend to enter into one or more strategic partnerships or other collaborative arrangements with a pharmaceutical company or other company with marketing and distribution expertise to address this need. If necessary, we will establish arrangements with various partners for different geographical areas or specific applications at various times in the development process. Our management and consultants have relevant experience with the partnering process.

Seasonality of Business

Our results of operations have not been materially impacted by seasonality.

C. Organizational Structure

On December 31, 2013, we had two wholly-owned subsidiaries; Oncolytics Biotech (Barbados) Inc. (“OBB”), a Barbados company, and Valens Pharma Ltd. In addition, Oncolytics Biotech (US) Inc., a Delaware corporation and Oncolytics Biotech (U.K.) are wholly owned subsidiaries of OBB.

D. Property, Plants and Equipment

We currently lease our head office in Calgary, Alberta, Canada. We do not own or lease any other office space, manufacturing facilities or equipment and do not have any current plans to construct or acquire any facilities.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

Our Management Discussion and Analysis (“MD&A”) contains 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 2014 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. See “*Cautionary Note Regarding Forward-Looking Statements*”.

With respect to the forward-looking statements made within our 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 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.

A. Operating Results

Please see our 2013 Management Discussion and Analysis in Exhibit 15.1, which is incorporated herein by reference.

B. Liquidity and Capital Resources

Please see our 2013 Management Discussion and Analysis in Exhibit 15.1, which is incorporated herein by reference.

C. Research and Development, Patents, and Licenses, etc.

Please see the disclosure in Item 4. Information on the Company B. Business Overview for information on the Company's research and development policies. Our research and development expenses were \$18,506,064, \$31,402,625, and \$23,386,685 for 2013, 2012 and 2011, respectively.

D. Trend Information

It is important to note that historical patterns of expenditures cannot be taken as an indication of future expenditures. The amount and timing of expenditures and availability of capital resources vary substantially from period to period, depending on the level of research and development activity being undertaken at any one time and the availability of funding from investors and prospective commercial partners. See our 2013 Management Discussion and Analysis for our comparative discussion on our expenditures between 2011 - 2013 and our expectations for 2014.

Except as disclosed elsewhere in our annual report, we know of no trends, uncertainties, demands, commitments or events that are reasonably likely to have a material effect on our liquidity or capital resources or that would cause reported financial information not necessarily to be indicative of future operating results or financial conditions.

E. Off-Balance Sheet Arrangements

As at December 31, 2013, we had not entered into any off-balance sheet arrangements.

F. Tabular Disclosure of Contractual Obligations

We have the following contractual obligations as at December 31, 2013:

Contractual Obligations	Payments Due by Period				
	Total \$	Less than 1 year \$	2 -3 years \$	4 - 5 years \$	After 5 years \$
Alberta Heritage Foundation ⁽¹⁾	150,000	—	—	—	150,000
Capital lease obligations	Nil	—	—	—	—
Operating lease ⁽²⁾	232,911	94,888	138,023	—	—
Purchase obligations	6,024,890	6,024,890	—	—	—
Other long term obligations	Nil	—	—	—	—
Total contractual obligations	6,407,801	6,119,778	138,023	—	150,000

- Note:**
- (1) Our Alberta Heritage Foundation obligation requires repayments equal to the lesser of 5% of gross sales generated by the Company or \$15,000 per annum (see notes to our 2013 audited consolidated financial statements).
 - (2) Our operating lease is comprised of our office lease and exclude our portion of operating costs.

We expect to fund our capital expenditure requirements and commitments with existing working capital.

G. Safe Harbor

We seek safe harbor for our forward-looking statements contained in Items 5.E and F. See "Cautionary Note Regarding Forward-Looking Statements".

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

The following table sets forth the names and municipalities of residence of all our directors and officers as at the date hereof, as well as the positions and offices held by such persons and their principal occupations.

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of the Company Since
Bradley G. Thompson Ph.D Calgary, Alberta	Chief Executive Officer and Chairman of the Board	Executive Chairman of the Board, President and Chief Executive Officer of Oncolytics since April 1999.	April 21, 1999
Kirk J. Look C.A. Calgary, Alberta	Chief Financial Officer	Chief Financial Officer of the Company since November 2012. From 2003 to November 2012, Mr. Look held the position of Controller with the Company.	N/A
Matthew C. Coffey Ph.D. Calgary, Alberta	Chief Operating Officer and Director	Chief Operating Officer of the Corporation since December 2008. Since April 1999 to December 2008, Dr. Coffey held other senior management positions with the Company and is a co-founder of Oncolytics.	May 11, 2011
George M. Gill, M.D. Cambridge, MD	Senior Vice President, Regulatory Affairs & Chief Safety Officer	Dr. Gill has been a consultant in clinical research and regulatory affairs to the pharmaceutical and biotechnology industries since he retired from Ligand Pharmaceuticals in 1999. During his 45 years in the industry, he also served in senior executive positions with ICI Pharmaceuticals (now AstraZeneca), Bristol-Myers Squibb, and Hoffmann-La Roche. Dr. Gill holds a B.Sc. in chemistry from Dickinson College in Pennsylvania and an M.D. from the School of Medicine of the University of Pennsylvania in Philadelphia.	N/A
Robert B. Schultz, F.C.P.A., F.C.A. ⁽¹⁾ , ⁽⁴⁾ Toronto, Ontario	Lead Director	Former Chairman and Director of Rockwater Capital Corporation, formerly McCarvill Corporation (a financial services company) from 2001 to 2007. Mr. Schultz has held a variety of senior positions, and has participated on various industry-related boards and committees including Director and Chairman of the Investment Dealers Association of Canada.	June 30, 2000
Fred A. Stewart, Q.C. ⁽¹⁾ Calgary, Alberta	Director	Former practising lawyer in Calgary; President of Fred Stewart & Associates Inc., consultant in commercialization of technology. Mr Stewart has served in a number of positions of corporate governance, in both private and public organizations	August 27, 1999

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of the Company Since
J. Mark Lievonen, F.C.P.A, F.C.A.(1), (3) Stouffville, Ontario	Director	President of Sanofi Pasteur Limited, a vaccine development, manufacturing and marketing company, since October 1998. Mr. Lievonen serves on a number of industry and not-for-profit boards including Rx&D, BIOTECanada, the Ontario Institute for Cancer Research and York University, and is a past Chair of BIOTECanada and the Ontario Genomics Institute.	April 5, 2004
Jim Dinning ^{(2), (3)} Calgary, Alberta	Director	Chair of Western Financial Group since September 2004. Mr. Dinning was Executive Vice President of TransAlta Corporation (power generation and wholesale marketing company) from 1997 to 2004. Mr. Dinning is the Chair and Director of other public companies and not for profit entities. He is the former Chair of Export Development Canada. He will complete his four year term as Chancellor of the University of Calgary in June 2014.	March 24, 2004
Ger van Amersfoort, ⁽²⁾ Netherlands	Director	President and Chief Executive Officer of Novartis Canada, a pharmaceutical company, until his retirement in 2001.	June 15, 2006
Ed Levy, Ph.D, ^{(2), (3)} Vancouver, BC	Director	Adjunct professor at the W. Maurice Young Centre for Applied Ethics at the University of British Columbia since retiring from QLT Inc. in late 2002.	May 17, 2006
Mary Ann Dillahunty, JD, MBA Venice, FL	Vice President, Intellectual Property	Ms. Dillahunty has been our VP-Intellectual Property since 2007. Prior to joining Oncolytics, Ms. Dillahunty was a principal in the law firm of Fish & Richardson, a leading intellectual property firm in the U.S.	N/A

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of the Company Since
Alan J Tuchman, MD, MBA (FAAN), <i>New York, NY</i>	Senior Vice President, Medical and Clinical Affairs & Chief Medical Officer	Dr. Tuchman is Clinical Professor of Neurology at New York Medical College and the author of over thirty scientific papers and book chapters. He is currently in the private practice of Neurology in Manhattan and consults to a number of biotechnology and investment firms. He has served as a partner of Xmark Opportunity Partners and as Executive Chairman of Neurophysics, Inc. He was previously the President of the Epilepsy Society of Southern New York as well as Vice Dean for Clinical Affairs at New York Medical College. Dr. Tuchman received his MD degree from the University of Cincinnati, College of Medicine, and completed his Neurology Residency at the Mt Sinai School of Medicine. Dr. Tuchman received his MBA from Columbia University.	N/A
Wayne Pisano, MBA ⁽²⁾ <i>New Jersey</i>	Director <i>Asbury,</i>	Mr. Pisano has more than 30 years of experience as a pharmaceutical industry executive and was recognized in 2010 as Pharma Executive of the Year by the World Vaccine Congress. He is currently the president and CEO of VaxInnate a privately held biotech company. Mr. Pisano is the former president and CEO of Sanofi Pasteur, one of the largest vaccine companies in the world. Prior to joining Sanofi Pasteur, he spent 11 years with Novartis (formerly Sandoz). He has a bachelor's degree in biology from St. John Fisher College, New York and an MBA from the University of Dayton, Ohio.	May 9, 2013

Notes:

- 1) These persons are members of the Audit Committee. Mr. Stewart is the Chair of the Audit Committee.
- 2) These persons are members of the Compensation Committee. Mr. Dinning is the Chair of the Compensation Committee.
- 3) These persons are members of the Governance Committee. Mr. Lievonen is the Chair of the Governance Committee.
- 4) As Lead Director, Mr. Schultz is an ex-officio member of the Compensation and Governance Committees.

As at March 19, 2014, the directors and senior officers as a group beneficially owned, directly or indirectly, 1,182,651 of our common shares, representing 1.39% of the issued and outstanding common shares.

Certain of our directors are associated with other companies, which may give rise to conflicts of interest. In accordance with the ABCA, directors who have a material interest in any person who is a party to a material contract or a proposed material contract with us are required, subject to certain exceptions, to disclose that interest and abstain from voting on any resolution to approve that contract. In addition, the directors are required to act honestly and in good faith with a view to the best interests of Oncolytics Biotech Inc.

None of our directors have been a director or officer of a company that went bankrupt in the last 10 years.

None of our directors or officers are related by blood, marriage or adoption to any other director or officer.

We are not aware of any arrangement or understanding with major shareholders, customers, suppliers or others, pursuant to which any person referred to above was selected as a director or officer.

B. Compensation

Directors

The following table sets forth information concerning the total compensation paid in 2013 to each director.

Name	Fees & Retainers Earned (\$)	Share-Based Awards (\$)	Option-Based Awards ⁽¹⁾ (\$)	Non-Equity Incentive Plan Compensation (\$)	Pension Value (\$)	All Other Compensation (\$)	Total (\$)
Mr. J. Dinning	43,250	N/A	25,879	None	N/A	None	69,129
Dr. E. Levy	40,750	N/A	22,182	None	N/A	None	62,932
Mr. M. Lievonen	45,000	N/A	25,879	None	N/A	None	70,879
Mr. R. Schultz	59,250	N/A	44,364	None	N/A	None	103,614
Mr. F. Stewart	47,500	N/A	33,273	None	N/A	None	80,773
Mr. G. van Amersfoort	37,250	N/A	22,182	None	N/A	None	59,432
Mr. W. Pisano ^{(2), (3)}	23,667	N/A	76,182	None	N/A	None	99,849

Note:

- (1) Option based awards include grants from December 2013. The options granted on December 11, 2013 have an estimated grant date fair value of \$0.74 per option using the following respective grant date assumptions: expected life of option - 3 years; volatility 63.15%; risk free interest rate 1.07%; dividend yield 0%.
- (2) Effective May 9, 2013, Mr. Pisano was elected to the Company's Board of Directors at the 2013 Annual General Meeting.
- (3) On May 9, 2013, Mr. Pisano was granted 50,000 options with an estimated fair value of \$1.08 per option using the following respective grant date assumptions: expected life of option - 2 years; volatility 67.28%; risk free interest rate 1.02%; dividend yield 0%.

Officers

Summary Compensation Table

The following table sets forth information concerning the total compensation paid to our officers in 2013.

Name and principal position	Year	Salary \$	Share-based awards \$	Option-based awards ⁽³⁾ \$	Bonus	Non-equity incentive plan compensation \$	Pension value \$	All other compensation ⁽¹⁾ (\$)	Total compensation (\$)
Dr. Bradley G. Thompson	2013	530,000	N/A	259,529	212,000	N/A	N/A	68,295	1,069,824
	2012	506,143	N/A	201,528	—	N/A	N/A	65,453	773,124
Chief Executive Officer	2011	489,500	N/A	403,080	200,000	N/A	N/A	62,834	1,155,414
Kirk J. Look ⁽⁴⁾	2013	280,000	N/A	174,767	84,000	N/A	N/A	47,638	502,405
Chief Financial Officer	2012	38,654	N/A	175,248	—	N/A	N/A	5,893	219,795
Dr. Matt C. Coffey	2013	365,000	N/A	173,020	109,500	N/A	N/A	54,682	702,202
	2012	341,363	N/A	104,963	—	N/A	N/A	51,882	498,208
Chief Operating Officer	2011	330,139	N/A	225,980	100,000	N/A	N/A	49,686	705,805
Mary Ann Dillahunt ⁽²⁾	2013	162,640	N/A	28,837	48,792	N/A	N/A	20,011	260,280
	2012	181,879	N/A	25,191	—	N/A	N/A	19,920	226,990
VP Intellectual Property	2011	159,012	N/A	69,300	40,680	N/A	N/A	19,496	288,488
Dr. George Gill ⁽²⁾	2013	312,061	N/A	57,673	93,618	N/A	N/A	25,745	489,097
Senior Vice President, Regulatory Affairs & Chief Safety Officer	2012	310,200	N/A	33,588	—	N/A	N/A	26,211	369,999
	2011	305,100	N/A	53,900	30,510	N/A	N/A	25,171	414,681
Dr. Alan J. Tuchman ^{(2), (5)}	2013	140,840	N/A	39,650	42,252	N/A	N/A	11,619	234,361
Senior Vice President, Medical and Clinical Affairs & Chief Medical Officer	2012	35,538	N/A	46,341	—	N/A	N/A	2,932	84,811

Notes:

- (1) The dollar amounts set forth under this column are related to contributions to the officer's respective retirement savings plan and amounts provided for health care benefits by the Company.
- (2) U.S. Employees are paid salaries, bonuses and other compensation in U.S. Dollars. These amounts are presented in U.S. dollars.
- (3) The value of option based awards are based on the grant date assumptions as disclosed in note 8 "Share Based Payments" in our 2013 audited consolidated financial statements.
- (4) Mr. Look was appointed Chief Financial Officer on November 12, 2012.
- (5) Dr. Tuchman was appointed Chief Medical Officer, Senior VP Clinical & Medical Development on September 27, 2012.

Narrative Discussion

We have entered into employment agreements with each of the following Executive Officers (each an "Employment Agreement"). Pursuant to the terms of the Employment Agreements,

Name and principal position	Year	Salary
Dr. Bradley G. Thompson Chief Executive Officer	2014	537,950
Kirk J. Look Chief Financial Officer	2014	284,200
Dr. Matt C. Coffey Chief Operating Officer	2014	370,475
Mary Ann Dillahunty ⁽¹⁾ VP Intellectual Property	2014	165,080
Dr. George Gill, MD ⁽¹⁾ Senior Vice President, Regulatory Affairs and Chief Safety Officer	2014	316,742
Dr. Alan J Tuchman, MD, MBA (FAAN) ⁽¹⁾ Senior Vice President, Medical and Clinical Affairs & Chief Medical Officer	2014	142,953

Note 1: U.S. Employees are paid in U.S. Dollars and salaries above are presented in U.S. dollars.

Further, each Executive Officer is entitled to additional benefits and performance-based bonuses. As well, the Employment Agreements provide that each Executive Officer is subject to certain confidentiality and non-competition restrictions during and following the course of their respective employment with the Company. Each Employment Agreement shall continue until terminated by either party in accordance with the notice provisions thereof.

There are no long term incentive, benefit or actuarial plans in place. The Company does not currently have a stock appreciation rights plan.

Termination of Employment or Change of Control

The following table reflects amounts payable to the Executive Officers based on each Executive Officer's employment agreement assuming that their employment was terminated on December 31, 2014 without cause or due to a change of control of the Company.

Name	Termination without Cause Severance ⁽¹⁾ \$	Change of Control Severance ⁽²⁾ \$
Dr. Bradley G. Thompson Chief Executive Officer	1,214,702	1,822,053
Kirk J. Look, C.A. Chief Financial Officer	332,667	665,334
Dr. Matt C. Coffey Chief Operating Officer	426,059	852,118
Mary Ann Dillahunty, ⁽³⁾ J.D. M.B.A., VP Intellectual Property	185,990	371,980
Dr. George Gill, MD ⁽³⁾ Senior Vice President, Clinical and Regulatory Affairs	346,791	693,582
Dr. Alan J Tuchman, MD, MBA (FAAN) ⁽³⁾ Senior Vice President, Medical and Clinical Affairs & Chief Medical Officer	39,232	39,232

Notes:

- (1) As at December 31, 2013, all options granted to Officers had fully vested except for the options granted on December 11, 2013 and 100,000 options granted to Mr. Look on November 13, 2012. As a result, all Officers shall be entitled to exercise all or any part of their vested Options, within the period ending on the earlier of the date of expiration of the Option and the ninetieth (90th) day after the date such Officer is terminated unless otherwise approved by the Board of Directors.
- (2) On a change of control of the Company, the Officers shall be entitled to exercise all or a part of their Options, whether vested or not, within the period ending on the earlier of the date of expiration of the Option and the ninetieth (90th) day after the date such Officer is terminated.
- (3) U.S. Employees are paid in U.S. Dollars and are presented in U.S. dollars.

C. Board Practices

Our directors are elected by the shareholders at each Annual General Meeting (or Annual Special Meeting) and typically hold office until the next meeting, at which time they may be re-elected or replaced. Casual vacancies on the board are filled by the remaining directors and the persons filling those vacancies hold office until the next Annual General Meeting (or Annual Special Meeting), at which time they may be re-elected or replaced. The officers are appointed by the Board of Directors and hold office indefinitely at the pleasure of the Board of Directors.

Name and Municipality of Residence	Position with the Corporation	Director of the Corporation Since	Date of Expiration of Current Term of Office
Bradley G. Thompson Ph.D. Calgary, Alberta	President, Chief Executive Officer and Chairman of the Board	April 21, 1999	Date of 2014 Annual General Meeting of the Shareholders
Matthew C. Coffey Ph.D. Calgary, Alberta	Chief Operating Officer	May 11, 2011	Date of 2014 Annual General Meeting of the Shareholders
Robert B. Schultz, F.C.P.A., F.C.A. ^{(1), (4)} Toronto, Ontario	Lead Director	June 30, 2000	Date of 2014 Annual General Meeting of the Shareholders
Fred A. Stewart, Q.C. ⁽¹⁾ Calgary, Alberta	Director	August 27, 1999	Date of 2014 Annual General Meeting of the Shareholders
J. Mark Lievonen, F.C.P.A., F.C.A. ^{(1), (3)} Stouffville, Ontario	Director	April 5, 2004	Date of 2014 Annual General Meeting of the Shareholders
Jim Dinning ^{(2), (3)} Calgary, Alberta	Director	March 24, 2004	Date of 2014 Annual General Meeting of the Shareholders
Ger van Amersfoort, ⁽²⁾ Netherlands	Director	June 15, 2006	Date of 2014 Annual General Meeting of the Shareholders
Ed Levy, Ph.D, ^{(2), (3)} Vancouver, BC	Director	May 17, 2006	Date of 2014 Annual General Meeting of the Shareholders
Wayne Pisano, MBA ⁽²⁾ Asbury, New Jersey	Director	May 9, 2013	Date of 2014 Annual General Meeting of the Shareholders

Notes:

- 1) These persons are members of the Audit Committee. Mr. Stewart is the Chair of the Audit Committee.
- 2) These persons are members of the Compensation Committee. Mr. Dinning is the Chair of the Compensation Committee.
- 3) These persons are members of the Governance Committee. Mr. Lievonen is the Chair of the Governance Committee.
- 4) As Lead Director, Mr. Schultz is an “ex officio” member of the Governance and Compensation Committees.

Directors’ Contracts

We receive a director’s consent from each of the independent directors upon their acceptance of their director’s position. We also enter into an Indemnity Agreement and Directors Confidentiality and Intellectual Property Assignment Agreement with each director.

The Company does not have any contracts with any of its directors which provide for benefits upon the termination of employment.

Compensation of Directors

Each director who is not a salaried employee of the Company was entitled to a fee of \$1,750 per Board and committee meeting attended. An annual retainer fee of \$25,000 was paid for service during 2013 and the lead director, Mr. Schultz was entitled to an additional annual \$15,000 retainer. Mr. Stewart, the chair of the audit committee, received an additional retainer of \$12,000. Mr. Dinning, as chair of the compensation committee, received an additional retainer of \$6,000. Mr. Lievonen, as chair of the Governance Committee, received an additional retainer of \$6,000. We also grant to directors, from time to time, stock options in accordance with the Stock Option Plan and the reimbursement of any reasonable expenses incurred by them while acting in their directors' capacity. In the aggregate, a total of \$296,667 in directors’ fees was paid to the Board of Directors during the fiscal year ended December 31, 2013. During the fiscal year ended December 31, 2013, there were 315,000 options granted to these directors in accordance with the Compensation Committee recommendation.

Compensation Committee

The Company has formed a compensation committee (the “**Compensation Committee**”) consisting of four outside directors: Mr. Dinning, Mr. van Amersfoort, Mr. Pisano and Dr. Levy, none of whom are nor have been employees or officers of the Corporation or any of its affiliates. Mr. Dinning is presently the Chair of the Compensation Committee. Mr. Schultz, lead director, serves as an ex officio member of the Compensation Committee.

The objectives of the Corporation’s compensation arrangements are: (i) to attract and retain key personnel; (ii) to encourage commitment to the Corporation and its goals; (iii) to align executive interests with those of its shareholders; and (iv) to reward executives for performance in relation to overall corporate progress goals.

The key elements of the compensation program are the base salary, health benefits, payments allocated to employees to be directed by them to their personal retirement accounts, as well as bonuses and the granting of options, both based on corporate and personal performance. Performance goals are determined based on the strategic planning and budgeting process, which is conducted at least annually. The balance of performance during the year is assessed by the board of directors of Oncolytics (the “**Board**” or “**Board of Directors**”) and is normally the key determinant for the allocation of bonuses and options. The elements of the compensation plan are intended to reward performance, and the various elements are intended to provide a blend of short-term and long-term incentives to align the interests of management and the shareholders.

In arriving at its recommendations for compensation, the Compensation Committee considers the long-term interests of the Corporation as well as its current stage of development and the economic environment within which it operates. The market for biotechnology companies in the development phase has been extremely challenging, and was exacerbated by the deterioration of the capital markets late in 2008 and 2009. Based on these factors, the Compensation Committee recognized the need to strike a balance between compensation to retain employees and resources expended to maintain operations. In the past, the Compensation Committee has engaged Lane Caputo Compensation Inc., executive compensation specialists (the “Specialist”), to assist in benchmarking its compensation practices, and provide recommendations to the committee with respect to compensation for directors and officers.

For 2013, the following guidelines were employed by the Board in granting bonuses and stock option grants to the Corporation’s executive and senior officers. For 2014, similar guidelines are expected to be applied.

Annual Bonus and Option Grants

The Chief Executive Officer of the Corporation is eligible for a cash bonus of up to 40% of his base salary, the Chief Operating Officer and the Chief Financial Officer are eligible for a cash bonus of up to 30% of their respective base salary and the other senior officers are eligible for a cash bonus of up to 20% of their base salary. In addition, when available, the Chief Executive Officer of the Corporation is eligible for an option grant of up to 15% of base salary with such numbers of options calculated using the estimated grant date fair value, and the other officers are eligible for an option grant of up to 10% of salary based upon a similar calculation. The actual bonus provided and the number of options granted hereunder is based upon the overall performance of the Corporation as assessed by the committee and approved by the Board. In the event that the Corporation is operating in a challenging environment, these guidelines could result in the Board changing the bonus awards and grants of stock options and in some circumstances result in no bonuses or stock options being granted to executive and senior officers. However, the guidelines referenced above can also be exceeded at the discretion of the Board. Upon completion of their review, the Compensation Committee then provides their specific recommendations to the Board with respect to compensation paid to the Corporation’s executive and senior officers.

Sale Transaction Bonus Pool

In addition to the annual compensation paid to the CEO, COO and CFO, in an effort to maximize value for the Corporation's shareholders, the Board has approved the recommendation from the Compensation Committee that a Sales Transaction Bonus ("STB") be created in the event of a sale transaction. A STB pool would be created based on a scale between 1% - 2.5% of the Corporation's market capitalization for a Sale Transaction with a Transaction Price over \$7.50 per share. The STB pool would be calculated as the sum of:

- a. for a Transaction Price of \$7.51 to \$10.00, the Transaction Price minus \$7.50, multiplied by 0.010;
- b. plus for a Transaction Price of \$10.01 to \$15.00, the Transaction Price minus \$10.00, multiplied by 0.015;
- c. plus for a Transaction Price of \$15.01 to \$20.00, the Transaction Price minus \$15.00, multiplied by 0.020;
- d. plus for a Transaction Price of \$20.01 and higher, the Transaction Price minus \$20.00, multiplied by 0.025

multiplied by the Outstanding Share Amount at that time.

The STB pool is split between the CEO (45%), COO (35%) and CFO (20%).

For the purposes of the STB, a sales transaction means:

- i. the sale by holders of common shares of Oncolytics of not less than fifty percent (50%) of the outstanding common shares of Oncolytics for cash or securities of another entity, provided Oncolytics has entered into an agreement with such entity or its affiliate to support the completion of such transaction;
- ii. a merger, amalgamation, arrangement or other similar transaction involving Oncolytics where the holders of common shares receive cash or securities of another entity; or
- iii. the sale of all or substantially all of Oncolytics' assets followed by a liquidating distribution to the holders of common shares of cash or securities of another entity,

provided, however, that notwithstanding the foregoing, a Sale Transaction shall be deemed not to have occurred merely by reason of an acquisition of Oncolytics' securities by, or any consolidation, merger or exchange of securities with, any entity that, immediately prior to such acquisition, consolidation, merger or exchange of securities was an affiliate of Oncolytics (within the meaning of the Securities Act (Alberta)), and for greater certainty a Sale Transaction shall be deemed not to include an internal re-organization of Oncolytics.

Compensation Committee Mandate

This Mandate was reviewed, amended and approved by the Company's board of directors on March 12, 2014.

1. Policy Statement

It is the policy of Oncolytics Biotech Inc. (the "Corporation") to establish and maintain a Compensation Committee (the "Committee"), composed entirely of independent directors, to assist the Board of Directors of the Corporation (the "Board") in carrying out its responsibility for the Corporation's human resources and compensation policies and processes. The Committee will be provided with resources commensurate with the duties and responsibilities assigned to it by the Board, including administrative support. If determined necessary by the Committee, it will have the discretion to investigate and conduct reviews of any human resource or compensation matter including the standing authority to retain experts and, with approval of the Board, special counsel.

2. Composition of Committee

- (a) The Committee shall consist of a minimum of two (2) directors. The Board shall appoint the members of the Committee and may seek the advice and assistance of the Governance Committee in identifying qualified candidates. The Board shall appoint one member of the Committee to be the Chair of the Committee, or delegate such authority to appoint the Chair of the Committee to the Committee.
- (b) The Chair of the Committee shall be responsible for the leadership of the Committee, including preparing or approving the agenda, presiding over the meetings, and making committee assignments.
- (c) Each director appointed to the Committee by the Board shall be an outside director who is unrelated. An outside, unrelated director is a director who meets the requirements of NASDAQ Rule 5605 and National Instrument 58-101 who is independent of management and is free from any interest, any business or other relationship which could, or could reasonably be perceived, to materially interfere with the director's ability to act with a view to the best interests of the Corporation, other than interests and relationships arising from shareholding. In determining whether a director is independent of management, the Board shall make reference to the then current legislation, rules, policies and instruments of applicable regulatory authorities.
- (d) Each member shall be appointed by the Board annually at the next scheduled meeting of the Board following the AGM.
- (e) The Lead Director shall be an ex officio member of the committee.

3. Meetings of the Committee

- (a) The Committee shall convene a minimum of once per year at such time and place as may be designated by the Chair of the Committee and whenever a meeting is requested by the Board, a member of the Committee, or the Chief Executive Officer of the Corporation (the "CEO").
- (b) Notice of each meeting of the Committee shall be given to each member of the Committee and the CEO, who shall each be entitled to attend each meeting of the Committee and shall attend whenever requested to do so by a member of the Committee.
- (c) Notice of a meeting of the Committee shall:
 - (i) be in writing, including by electronic communication facilities;

- (ii) state the nature of the business to be transacted at the meeting in reasonable detail;
 - (iii) to the extent practicable, be accompanied by copies of documentation to be considered at the meeting; and
 - (iv) be given at least two business days prior to the time stipulated for the meeting or such shorter period as the members of the Committee may permit.
- (d) A quorum for the transaction of business at a meeting of the Committee shall consist of a majority of the members of the Committee.
 - (e) A member or members of the Committee may participate in a meeting of the Committee by means of such telephonic, electronic or other communication facilities, as permits all persons participating in the meeting to communicate adequately with each other. A member participating in such a meeting by any such means is deemed to be present at the meeting.
 - (f) In the absence of the Chair of the Committee, the members of the Committee shall choose one of the members present to be Chair of the meeting. In addition, the members of the Committee shall choose one of the persons present to be the Secretary of the meeting.
 - (g) Minutes shall be kept of all meetings of the Committee and shall be signed by the Chair and the Secretary of the meeting.

4. **Duties and Responsibilities of the Committee**

- (a) The Committee shall, at the earliest opportunity after each meeting, report to the Board the results of its activities and any reviews undertaken and make recommendations to the Board as deemed appropriate.
- (b) The Committee's primary duties and responsibilities are to review and make recommendations to the Board in respect of:
 - (i) human resource policies, practices and structures (to monitor consistency with the Corporation's goals and near and long-term strategies, support of operational effectiveness and efficiency, and maximization of human resources potential);
 - (ii) compensation policies and guidelines;
 - (iii) management incentive and perquisite plans and any non-standard remuneration plans;
 - (iv) senior management, executive and officer appointments and their compensation;
 - (v) management succession plans, management training and development plans, termination policies and termination arrangements; and
 - (vi) Board compensation matters.
- (c) In carrying out its duties and responsibilities, the Committee shall:
 - (i) annually assess and make a recommendation to the Board with regard to the competitiveness and appropriateness of the compensation package of the CEO, all other officers of the Corporation and such other key employees of the Corporation or any subsidiary of the Corporation as may be identified by the CEO and approved by the Committee (collectively, the "Designated Employees");
 - (ii) annually review the performance goals and criteria for the CEO and evaluate the performance of the CEO against such goals and criteria and recommend to the Board the amount of regular and incentive compensation to be paid to the CEO;
 - (iii) annually, review and make a recommendation to the Board regarding the CEO's performance evaluation of Designated Employees and his recommendations with respect to the amount of regular and incentive compensation to be paid to such Designated Employees;
 - (iv) review and make a recommendation to the Board regarding any employment contracts or arrangements with each of the Designated Employees, including any retiring allowance arrangements or any similar arrangements to take effect in the event of a termination of employment;
 - (v) periodically, review the compensation philosophy statement of the Corporation and make recommendations for change to the Board as considered necessary;
 - (vi) from time to time, review and make recommendations to the Board in respect of the design, benefit provisions, investment options and text of applicable pension, retirement and savings plans or related matters;
 - (vii) annually, in conjunction with the Corporation's general and administrative budget, review and make recommendations to the Board regarding compensation guidelines for the forthcoming budget period;
 - (viii) when requested by the CEO, review and make recommendations to the Board regarding short term incentive or reward plans and, to the extent delegated by the Board, approve awards to eligible participants;
 - (ix) review and make recommendations to the Board regarding incentive stock option plans or any other long term incentive plans and to the extent delegated by the Board, approve grants to participants and the magnitude and terms of their participation;

- (x) as required, fulfill the obligations assigned to the Committee pursuant to any other employee benefit plans approved by the Board;
 - (xi) annually, prepare or review the report on executive compensation required to be disclosed in the Corporation's information circular or any other human resource or compensation matter required to be publicly disclosed by the Corporation;
 - (xii) periodically, but at least every third year, review and make a recommendation to the Board regarding the compensation of the Board of Directors;
 - (xiii) as required, retain independent advice in respect of human resources and compensation matters and, if deemed necessary by the Committee, meet separately with such advisors;
 - (xiv) review and consider the implications of the risks associated with the company's compensation policies and practices, specifically, situations that could potentially encourage an insider to expose the company to inappropriate or excessive risks; and
 - (xv) assess, on an annual basis, the adequacy of this Mandate and the performance of the Committee.
- (d) In addition to the foregoing, the Committee shall undertake on behalf of the Board such other initiatives as may be necessary or desirable to assist the Board in discharging its responsibility to ensure that appropriate human resources development, performance evaluation, compensation and succession planning programs are in place and operating effectively.

5. Date of Mandate

This Mandate was last reviewed, amended and approved by the Board on March 12, 2014.

Audit Committee

The Corporation has formed an Audit Committee in accordance with Section 3(a)(58)(A) of the United States Securities and Exchange Act of 1934, as amended ("Exchange Act"), consisting of three independent directors pursuant to the Rule 5605(a)(2) of the NASDAQ Capital Market and Rule 10A-3 of the Exchange Act: Mr. Fred Stewart, Mr. Mark Lievonen and Mr. Robert Schultz, none of whom are nor have been employees or officers of the Company or any of its affiliates. Mr. Stewart is presently the Chair of the Audit Committee. Each Audit Committee member is financially literate.

Mandate of the Audit Committee

This Mandate was reviewed and approved by the Board on March 12, 2014.

1. Policy Statement

It is the policy of Oncolytics Biotech Inc. (the "Corporation") to establish and maintain an Audit Committee, composed entirely of independent directors, to assist the Board of Directors (the "Board") in carrying out their oversight responsibility for the Corporation's internal controls, financial reporting and risk management processes. The Audit Committee will be provided with resources commensurate with the duties and responsibilities assigned to it by the Board including administrative support. If determined necessary by the Audit Committee, it will have the discretion to institute investigations of improprieties, or suspected improprieties within the scope of its responsibilities, including the standing authority to retain special counsel or experts.

2. Composition of the Committee

- (a) The Audit Committee shall consist of a minimum of three (3) directors, at least half of whom shall be resident Canadians. The Board shall appoint the members of the Audit Committee and may seek the advice and assistance of the Governance Committee in identifying qualified candidates. The Board shall appoint one member of the Audit Committee to be the Chair of the Audit Committee, or delegate such authority to appoint the Chair of the Audit Committee to the Audit Committee.
- (b) The Chair of the Committee shall be responsible for leadership of the Committee, including preparing or approving the agenda, presiding over the meetings, and making committee assignments.
- (c) Each director appointed to the Audit Committee by the Board shall be an outside director who is unrelated and independent. An outside, unrelated and independent director is a director who meets the requirements of NASDAQ Rule 5605(a)(2) and National Instrument 52-110. A director appointed to the audit committee shall also meet the requirements of NASDAQ Rule 5605(c)(2) and Rule 10A-3(b)(1) of the United States Securities Exchange Act of 1934, as amended. Such director shall be independent of management and free from any interest, any business or other relationship which could, or could reasonably be perceived, to materially interfere with the director's ability to act with a view to the best interests of the Corporation, other than interests and relationships arising from shareholding. In determining whether a director is independent of management, the Board shall

make reference to the above mentioned rules and any applicable revisions thereto, and any additional relevant and then current legislation, rules, policies and instruments of applicable regulatory authorities.

- (d) Each member of the Audit Committee shall be financially literate. In order to be financially literate, a director must be, at a minimum, able to read and understand financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Corporation's financial statements. At least one member shall have accounting or related financial management expertise, meaning the ability to analyze and interpret a full set of financial statements, including the notes attached thereto, in accordance with generally accepted accounting principles and shall be a "financial expert" as defined in Item 407 of Regulation S-K promulgated by the U.S. Securities and Exchange Commission and "financially sophisticated" as defined in NASDAQ Rule 5605(c)(2).
- (e) . In determining whether a member of the Audit Committee is financially literate or has accounting or related financial expertise, reference shall be made to the then current legislation, rules, policies and instruments of applicable regulatory authorities, which for further clarification, shall include but not be limited to the definition of A director appointed by the Board to the Audit Committee shall be a member of the Audit Committee until replaced by the Board or until his or her resignation.

3. **Meetings of the Committee**

- (a) The Audit Committee shall convene a minimum of four times each year at such times and places as may be designated by the Chair of the Audit Committee and whenever a meeting is requested by the Board, a member of the Audit Committee, the auditors, or senior management of the Corporation. Scheduled meetings of the Audit Committee shall correspond with the review of the year-end and quarterly financial statements and management discussion and analysis.
- (b) Notice of each meeting of the Audit Committee shall be given to each member of the Audit Committee and to the auditors, who shall be entitled to attend each meeting of the Audit Committee and shall attend whenever requested to do so by a member of the Audit Committee.
- (c) Notice of a meeting of the Audit Committee shall:
 - (i) be in writing, including by electronic communication facilities;
 - (ii) state the nature of the business to be transacted at the meeting in reasonable detail;
 - (iii) to the extent practicable, be accompanied by copies of documentation to be considered at the meeting; and
 - (iv) be given at least two business days prior to the time stipulated for the meeting or such shorter period as the members of the Audit Committee may permit.
- (d) A quorum for the transaction of business at a meeting of the Audit Committee shall consist of a majority of the members of the Audit Committee. However, it shall be the practice of the Audit Committee to require review, and, if necessary, approval of certain important matters by all members of the Audit Committee.
- (e) A member or members of the Audit Committee may participate in a meeting of the Audit Committee by means of such telephonic, electronic or other communication facilities, as permits all persons participating in the meeting to communicate adequately with each other. A member participating in such a meeting by any such means is deemed to be present at the meeting.
- (f) In the absence of the Chair of the Audit Committee, the members of the Audit Committee shall choose one of the members present to be Chair of the meeting. In addition, the members of the Audit Committee shall choose one of the persons present to be the Secretary of the meeting.
- (g) A member of the Board, senior management of the Corporation and other parties may attend meetings of the Audit Committee; however the Audit Committee (i) shall, at each meeting, meet with the external auditors independent of other individuals other than the Audit Committee and (ii) may meet separately with management.
- (h) Minutes shall be kept of all meetings of the Audit Committee and shall be signed by the Chair and the Secretary of the meeting.

4. **Duties and Responsibilities of the Committee**

- (a) The Audit Committee's primary duties and responsibilities are to:
 - (i) identify and monitor the management of the principal risks that could impact the financial reporting of the Corporation;
 - (ii) monitor the integrity of the Corporation's financial reporting process and system of internal controls regarding financial reporting and accounting compliance;
 - (iii) monitor the independence and performance of the Corporation's external auditors. This will include receipt, review and evaluation, at least annually, of a formal written statement from the independent auditors confirming their independence, and qualifications, including their compliance with the

- requirements of the relevant oversight boards and actively engage in a dialogue with the auditors with respect to any disclosed relationships or services that may impact objectivity and independence of the auditors and take, or recommend that the full board take, appropriate action to oversee the independence of the external auditors;
- (iv) deal directly with the external auditors to pre-approve external audit plans, other services (if any) and fees;
 - (v) directly oversee the external audit process and results (in addition to items described in Section 4(d) below);
 - (vi) provide an avenue of communication among the external auditors, management and the Board;
 - (vii) carry out a review designed to ensure that an effective "whistle blowing" procedure exists to permit stakeholders to express any concerns regarding accounting, internal controls, auditing matters or financial matters to an appropriately independent individual;
 - (viii) pre-approve any related party transactions to be entered into by the Company, and ensure appropriate disclosure thereof;
 - (ix) ensure financial disclosure incorporates inclusion of any material correcting adjustments required by the external auditors; and
 - (x) require and ensure that the external auditors are directly responsible to the Audit Committee, to whom they report.
- (b) The Audit Committee shall have the authority to:
- (i) inspect any and all of the books and records of the Corporation and its affiliates;
 - (ii) discuss with the management of the Corporation and its affiliates, any affected party and the external auditors, such accounts, records and other matters as any member of the Audit Committee considers necessary and appropriate;
 - (iii) engage independent counsel and other advisors as it determines necessary to carry out its duties;
 - (iv) communicate directly with the external auditors; and
 - (v) to set and pay the compensation for (i) any external auditor engaged for the purpose of preparing or issuing an audit report or performing other audit, review, or attest services for the Corporation, (ii) any advisors employed by the Audit Committee, and (iii) ordinary administrative expenses of the Audit Committee.
- (c) The Audit Committee shall, at the earliest opportunity after each meeting, report to the Board the results of its activities and any reviews undertaken and make recommendations to the Board as deemed appropriate.
- (d) The Audit Committee shall:
- (i) review the audit plan with the Corporation's external auditors and with management;
 - (ii) review with the independent auditors the matters required to be discussed relating to the conduct of the audit, including (a) the proposed scope of their examination, with emphasis on accounting and financial areas where the Committee, the independent auditors or management believes special attention should be directed; (b) the results of their audit, including their audit findings report and resulting letter, if any, of recommendations for management; (c) their evaluation of the adequacy and effectiveness of the Company's internal controls over financial reporting; (d) significant areas of disagreement, if any, with management; (e) co-operation received from management in the conduct of the audit; (f) significant accounting, reporting, regulatory or industry developments affecting the Company; and (g) review any proposed changes in major accounting policies or principles proposed or contemplated by the independent auditors or management, the presentation and impact of material risks and uncertainties and key estimates and judgements of management that may be material to financial reporting;
 - (iii) review with management and with the external auditors material financial reporting issues arising during the most recent fiscal period and the resolution or proposed resolution of such issues;
 - (iv) review any problems experienced or concerns expressed by the external auditors in performing an audit, including any restrictions imposed by management or material accounting issues on which there was a disagreement with management;
 - (v) review with senior management the process of identifying, monitoring and reporting the principal risks affecting financial reporting;
 - (vi) review audited annual financial statements (including management discussion and analysis) and related documents in conjunction with the report of the external auditors and obtain an explanation from management of all material variances between comparative reporting periods. Without restricting the generality of the foregoing, the committee will discuss with management and the independent auditors to the extent required, any issues and disclosure requirements regarding (a) the use of "pro forma" or "adjusted" non-GAAP information, as well as financial information and earnings guidance provided

- to analysts and rating agencies, (b) any off balance sheet arrangements, and (c) any going concern qualification.
- (vii) consider and review with management, the internal control memorandum or management letter containing the recommendations of the external auditors and management's response, if any, including an evaluation of the adequacy and effectiveness of the internal financial controls of the Corporation and subsequent follow-up to any identified weaknesses;
 - (viii) review with financial management and the external auditors the quarterly unaudited financial statements, management discussion and analysis, letter to shareholders and press release (all to be considered the "Quarterly Financial Reports") and recommend the Quarterly Financial Reports to the Board for approval by the Board before release to the public;
 - (ix) before release, review and if appropriate, recommend for approval by the Board, all public disclosure documents containing audited or unaudited financial information, including any prospectuses, financial statements, including the notes thereto, annual reports, annual information forms, management discussion and analysis and press releases; and
 - (x) oversee, any of the financial affairs of the Corporation or its affiliates, and, if deemed appropriate, make recommendations to the Board, external auditors or management.
- (e) The Audit Committee shall:
- (i) evaluate the independence and performance of the external auditors and annually recommend to the Board the appointment of the external auditor or the discharge of the external auditor when circumstances are warranted and monitor the audit partners' rotation as required by law.;
 - (ii) consider the recommendations of management in respect of the appointment of the external auditors;
 - (iii) pre-approve all non-audit services to be provided to the Corporation or its subsidiary entities by its external auditors', or the external auditors of affiliates of the Corporation subject to the over-riding principle that the external auditors not being permitted to be retained by the Corporation to perform specifically listed categories of non-audit services as set forth by the Securities and Exchange Commission as well as internal audit outsourcing services, financial information systems work and expert services. Notwithstanding, the foregoing the pre-approval of non-audit services may be delegated to a member of the Audit Committee, with any decisions of the member with the delegated authority reporting to the Audit Committee at the next scheduled meeting;
 - (iv) approve the engagement letter for non-audit services to be provided by the external auditors or affiliates, together with estimated fees, and considering the potential impact of such services on the independence of the external auditors;
 - (v) when there is to be a change of external auditors, review all issues and provide documentation related to the change, including the information to be included in the Notice of Change of Auditors and documentation required pursuant to the then current legislation, rules, policies and instruments of applicable regulatory authorities and the planned steps for an orderly transition period; and
 - (vi) review all reportable events, including disagreements, unresolved issues and consultations, as defined by applicable securities policies, on a routine basis, whether or not there is to be a change of external auditors.
- (f) The Audit Committee shall enquire into and determine the appropriate resolution of any conflict of interest in respect of audit or financial matters, which are directed to the Audit Committee by any member of the Board, a shareholder of the Corporation, the external auditors, or senior management.
- (g) The Audit Committee shall periodically review with management the need for an internal audit function.
- (h) The Audit Committee shall review the Corporation's accounting and reporting of costs, liabilities and contingencies.
- (i) The Audit Committee shall establish and maintain procedures for:
- (i) the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal controls, or auditing matters; and
 - (ii) the confidential, anonymous submission by employees of the Corporation or concerns regarding questionable accounting or auditing matters.
- (j) The Audit Committee shall review and approve the Corporation's hiring policies regarding partners and employees and former partners and employees of the present and former external auditors.
- (k) The Audit Committee shall review with the Corporation's legal counsel, on no less than an annual basis, any legal matter that could have a material impact on the Corporation's financial statements, and any enquiries received from regulators, or government agencies.
- (l) The Audit Committee shall review with management and the Corporation's external auditors, on no less than an annual basis, any taxation matters that could have a material impact on the Corporation's financial statements.
- (m) The Audit Committee shall assess, on an annual basis, the adequacy of this Mandate and the performance of the Audit Committee.

5. **Date of Mandate**

This Mandate was last reviewed and approved by the Board on March 12, 2014.

D. Employees

The following table sets out the number of our employees at the end of each of the last three fiscal years by activity and geographic location.

Activity	2013	2012	2011
Research and development	16	14	17
Operating	9	9	8
Total	25	23	25

Geographic location	2013	2012	2011
Canada	18	16	18
United States of America	4	4	5
Other	3	3	2
Total	25	23	25

E. Share Ownership

The following table sets out the share ownership and options held of our directors and officers as of March 19, 2014.

	Common Shares	Percentage of Ownership ⁽¹⁾	Options ⁽²⁾	Exercise Price	Expiry Date	Percentage of Outstanding ⁽³⁾
Officers						
Bradley Thompson	662,900	**	30,000	8.10	May 28, 2014	
			350,000	5.00	December 9, 2014	
			149,160	2.22	December 12, 2017	
			50,000	3.06	December 8, 2019	
			215,000	6.72	December 14, 2020	
			18,000	4.31	July 27, 2021	
			240,000	3.89	December 14, 2021	
			240,000	4.21	December 17, 2022	
			360,000	1.74	December 11, 2023	
			1,652,160			2.55%
Matthew Coffey	288,550	**	20,000	8.10	May 28, 2014	
			180,000	5.00	December 9, 2014	
			33,333	2.22	December 12, 2017	
			30,000	3.06	December 8, 2019	
			115,000	6.72	December 14, 2020	
			18,000	4.31	July 27, 2021	
			125,000	3.89	December 14, 2021	

			125,000	4.21	December 17, 2022
			240,000	1.74	December 11, 2023
			886,333		1.29%
Kirk Look	28,700	**	15,000	8.10	May 28, 2014
			15,000	5.00	December 9, 2014
			4,700	2.25	December 15, 2016
			9,000	2.22	December 12, 2017
			10,000	3.06	December 8, 2019
			25,000	6.72	December 14, 2020
			35,000	3.89	December 14, 2021
			200,000	2.00	November 13, 2022
			40,000	4.21	December 17, 2022
			160,000	1.74	December 11, 2023
			513,700		**
Mary Ann Dillahunty	2,201	**	100,000	3.28	February 1, 2017
			16,667	2.22	December 12, 2017
			15,000	3.06	December 8, 2019
			25,000	6.72	December 14, 2020
			45,000	3.89	December 14, 2021
			30,000	4.21	December 17, 2022
			40,000	1.74	December 11, 2023
			271,667		**
George Gill	30,000	**	7,500	8.10	May 28, 2014
			12,500	5.00	December 9, 2014
			16,667	2.22	December 12, 2017
			15,000	3.06	December 8, 2019
			25,000	6.72	December 14, 2020
			35,000	3.89	December 14, 2021
			40,000	4.21	December 17, 2022
			80,000	1.74	December 11, 2023
			231,667		**
Alan Tuchman	100	**	5,000	5	December 9, 2014
			10,000	2.85	May 11, 2020
			50,000	2.32	October 1, 2022
			15,000	4.21	December 17, 2022
			55,000	1.74	December 11, 2023
			135,000		**
Directors					
Robert Schultz	20,000	**	5,000	8.10	May 28, 2014
			22,500	5.00	December 9, 2014
			10,000	2.25	December 15, 2016
			17,500	2.22	December 12, 2017
			17,500	3.06	December 8, 2019
			50,000	3.13	July 28, 2020
			60,000	6.72	December 14, 2020

			9,000	4.31	July 27, 2021
			70,000	3.89	December 14, 2021
			60,000	4.21	December 17, 2022
			60,000	1.74	December 11, 2023
			381,500		**
Fred Stewart	59,000	**	5,000	8.10	May 28, 2014
			22,500	5.00	December 9, 2014
			17,500	2.22	December 12, 2017
			17,500	3.06	December 8, 2019
			45,000	6.72	December 14, 2020
			9,000	4.31	July 27, 2021
			55,000	3.89	December 14, 2021
			45,000	4.21	December 17, 2022
			45,000	1.74	December 11, 2023
			261,500		**
Jim Dinning	45,000	**	50,000	6.90	March 29, 2014
			5,000	8.10	May 28, 2014
			22,500	5.00	December 9, 2014
			10,000	2.25	December 15, 2016
			17,500	2.22	December 12, 2017
			17,500	3.06	December 8, 2019
			30,000	6.72	December 14, 2020
			35,000	3.89	December 14, 2021
			35,000	4.21	December 17, 2022
			35,000	1.74	December 11, 2023
			257,500		**
Mark Lievonen	3,000	**	50,000	9.38	April 5, 2014
			5,000	8.10	May 28, 2014
			22,500	5.00	December 9, 2014
			10,000	2.25	December 15, 2016
			17,500	2.22	December 12, 2017
			17,500	3.06	December 8, 2019
			30,000	6.72	December 14, 2020
			35,000	3.89	December 14, 2021
			35,000	4.21	December 17, 2022
			35,000	1.74	December 11, 2023
			257,500		**
Ed Levy	27,200	**	50,000	4.10	May 16, 2016
			10,000	2.25	December 15, 2016
			17,500	2.22	December 12, 2017
			17,500	3.06	December 8, 2019
			30,000	6.72	December 14, 2020
			30,000	3.89	December 14, 2021

			30,000	4.21	December 17, 2022
			30,000	1.74	December 11, 2023
			215,000		**
Ger van Amersfoort	16,000	**	50,000	3.60	June 15, 2016
			10,000	2.25	December 15, 2016
			17,500	2.22	December 12, 2017
			17,500	3.06	December 8, 2019
			30,000	6.72	December 14, 2020
			30,000	3.89	December 14, 2021
			30,000	4.21	December 17, 2022
			30,000	1.74	December 11, 2023
			215,000		**
Wayne Pisano	—	**	50,000	2.89	May 9, 2023
			30,000	1.74	December 11, 2023
			80,000		**
TOTAL:	1,182,651		5,358,527		

** Less than 1% ownership

Notes:

- 1) Based on 84,803,818 common shares issued and outstanding on December 31, 2013.
- 2) Options exercisable to acquire common shares.
- 3) Ownership percentage assumes aggregate beneficial ownership of common shares, common shares acquirable upon exercise of options and fully diluted share outstanding of 91,026,441.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

We are not directly or indirectly owned or controlled by another corporation(s) or by any foreign government. To the knowledge of our directors and senior officers, as at March 19, 2014, we are not aware of any shareholder who beneficially owns, directly or indirectly, or exercises control or direction over, our common shares carrying more than 5% of the voting rights.

Changes in ownership by major shareholders

During 2013, Acuity Investment Management Inc. reduced its ownership of the Company's share capital from 12,454,250 common shares to 69,300 common shares as at December 31, 2013.

Voting Rights

There were no differences between the voting rights of Acuity Investment Management Inc. and all other common shareholders.

Shares Held in the United States

The following table indicates, as of March 18, 2014, the total number of common shares issued and outstanding, the approximate total number of holders of record of common shares, the number of holders of record of common shares with U.S. addresses, the portion of the outstanding common shares held by U.S. holders of record, and the percentage of common shares held by U.S. holders of record. This table does not indicate beneficial ownership of common shares.

Total Number of Holders of Record	Total Number of Common Shares Issued and Outstanding	Number of U.S. Holders of Record	Number of Common Shares Held by U.S. Holders of Record	Percentage of Common Shares Held by U.S. Holders of Record
194	85,810,718	52	15,389,181	17.93%

Change of Control

As of March 19, 2014, there were no arrangements known to the Company which may, at a subsequent date, result in a change of control of the Company.

Control by Others

To the best of the Company's knowledge, the Company is not directly or indirectly owned or controlled by another corporation, any foreign government, or any other natural or legal person, severally or jointly.

B. Related Party Transactions

We have entered into employment contracts with each of our officers (see Item 6). Since the beginning of the fiscal year ended December 31, 2013 up to March 19, 2014, we did not enter into any other related party transactions and we do not have any loans outstanding with any officer, director or major shareholder.

C. Interests of Experts and Council

Not Applicable

ITEM 8. FINANCIAL INFORMATION

A. Consolidated Statements and Other Financial Statements

Financial Statements

The consolidated financial statements filed as part of this annual report are filed under Item 18.

Legal Proceedings

The directors and the management of the Company do not know of any material, active or pending, legal proceedings against them; nor is the Company involved as a plaintiff in any material proceeding or pending litigation.

The directors and the management of the Company know of no active or pending proceedings against anyone that might materially adversely affect an interest of the Company.

Dividend Policy

The Company has not paid any dividends on its common shares. The Company may pay dividends on its common shares in the future if it generates profits. Any decision to pay dividends on common shares in the future will be made by the board of directors on the basis of the earnings, financial requirements and other conditions existing at such time.

B. Significant Changes

There have been no significant changes to our annual financial statements.

ITEM 9. THE OFFER AND LISTING

A. Offering and Listing Details

Our Common Shares are traded on the TSX and on the NASDAQ Capital Market under the symbol "ONC" and "ONCY", respectively. The last reported sales price of our common shares on March 18, 2014 on the TSX was Cdn\$1.95 and on the NASDAQ Capital Market was US\$1.75. The following table sets forth the high and low per share sales prices for our common shares on the NASDAQ and TSX for the periods indicated.

Common Shares				
	NASDAQ		TSX	
	High	Low	High	Low
2009	3.80	1.14	4.10	1.41
2010	7.00	2.15	6.95	2.05
2011	6.70	3.35	6.65	3.42
2012	5.58	1.72	5.59	1.70
2013	4.93	1.45	4.94	1.54
2012				
Quarter 1	5.58	3.99	5.59	4.02
Quarter 2	4.41	3.14	4.38	3.25
Quarter 3	3.80	2.33	3.87	2.31
Quarter 4	3.92	1.72	3.99	1.70
2013				
Quarter 1	4.93	2.83	4.94	2.92
Quarter 2	3.15	2.21	3.20	2.25
Quarter 3	3.50	2.38	3.62	2.45
Quarter 4	3.39	1.45	3.49	1.54
September	3.50	2.38	3.62	2.45
October	3.39	2.25	3.49	2.31
November	2.72	1.64	2.83	1.70
December	1.88	1.45	1.99	1.54
2014				
January	1.92	1.54	2.10	1.65
February	1.79	1.45	1.98	1.61
March (1 – 18)	1.79	1.63	1.97	1.80

Market Price Volatility of Common Shares

Market prices for the securities of biotechnology companies, including our securities, have historically been highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Factors, such as fluctuations in our operating results, the aftermath of our public announcements, and general market conditions, can have an adverse effect on the market price of our common shares and other securities.

B. Plan of Distribution

Not Applicable

C. Markets

Our Common Shares, no par value, are traded on The NASDAQ Capital Market and the TSX under the symbol "ONCY" and "ONC", respectively.

D. Selling Shareholders

Not Applicable

E. Dilution

Not Applicable

F. Expenses of the Issue

Not Applicable

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

Not Applicable

B. Memorandum and Articles of Association

Articles of Continuance

We are governed by our amended articles of incorporation (the "Articles") under the Business Corporations Act of Alberta (the "Act") and by our by-laws (the "By-laws"). Our Alberta corporate access number is 207797382. Our Articles provide that there are no restrictions on the business we may carry on or on the powers we may exercise. Companies incorporated under the Act are not required to include specific objects or purposes in their articles or by-laws.

Directors

Subject to certain exceptions, including in respect of voting on any resolution to approve a contract that relates primarily to the director's remuneration, directors may not vote on resolutions to approve a material contract or material transaction if the director is a party to such contract or transaction. The directors are entitled to remuneration as shall from time to time be determined by the Board of Directors with no requirement for a quorum of independent directors. The directors have the ability under the Act to exercise our borrowing power, without authorization of the shareholders. The Act permits shareholders to restrict this authority through a company's articles or by-laws (or through a unanimous shareholder agreement), but no such restrictions are in place for us. Our Articles and By-laws do not require directors to hold shares for qualification.

Rights, Preferences and Dividends Attaching to Shares

The holders of common shares have the right to receive dividends if and when declared. Each holder of common shares, as of the record date prior to a meeting, is entitled to attend and to cast one vote for each common share held as of such record date at such annual and/or special meeting, including with respect to the election or re-election of directors. Subject to the provisions of our By-laws, all directors may, if still qualified to serve as directors, stand for re-election. The numbers of our Board of Directors are not replaced at staggered intervals but are elected annually.

On a distribution of assets on a winding-up, dissolution or other return of capital (subject to certain exceptions) the holders of common shares shall have a right to receive their *pro rata* share of such distribution. There are no sinking fund or redemption provisions in respect of the common shares. Our shareholders have no liability to further capital calls as all shares issued and outstanding are fully paid and non-assessable.

No other classes of shares are currently permitted to be issued.

Action Necessary to Change the Rights of Shareholders

The rights attaching to the different classes of shares may be varied by special resolution passed at a meeting of that class's shareholders.

Annual and Special Meetings of Shareholders

Under the Act and our By-laws, we are required to mail a Notice of Meeting and Management Information Circular to registered shareholders not less than 21 days and not more than 50 days prior to the date of the meeting. Such materials must be filed concurrently with the applicable securities regulatory authorities in Canada and the U.S. Subject to certain provisions of the By-laws, a quorum of two or more shareholders in person or represented by proxy holding or representing by proxy not less than five (5%) percent of the total number of issued and outstanding shares enjoying voting rights at such meeting is required to properly constitute a meeting of shareholders. Shareholders and their duly appointed proxies and corporate representatives are entitled to be admitted to our annual and/or special meetings.

Limitations on the Rights to Own Shares

The Articles do not contain any limitations on the rights to own shares. Except as described below, there are currently no limitations imposed by Canadian federal or provincial laws on the rights of non-resident or foreign owners of Canadian securities to hold or vote the securities held. There are also no such limitations imposed by the Articles and By-laws with respect to our common shares.

Disclosure of Share Ownership

In general, under applicable securities regulation in Canada, a person or company who beneficially owns, directly or indirectly, voting securities of an issuer or who exercises control or direction over voting securities of an issuer or a combination of both, carrying more than 10% of the voting rights attached to all the issuer's outstanding voting securities is an insider and must, within 10 days of becoming an insider, file a report in the required form effective the date on which the person became an insider. The report must disclose any direct or indirect beneficial ownership of, or control or direction over, securities of the reporting issuer. Additionally, securities regulation in Canada provides for the filing of a report by an insider of a reporting issuer whose holdings change, which report must be filed within 10 days from the day on which the change takes place.

The rules in the U.S. governing the ownership threshold above which shareholder ownership must be disclosed are more stringent than those discussed above. Section 13 of the Exchange Act imposes reporting requirements on persons who acquire beneficial ownership (as such term is defined in Rule 13d-3 under the Exchange Act) of more than 5% of a class of an equity security registered under Section 12 of the Exchange Act. In general, such persons must file, within 10 days after such acquisition, a report of beneficial ownership with the SEC containing the information prescribed by the regulations under Section 13 of the Exchange Act. This information is also required to be sent to the issuer of the securities and to each exchange where the securities are traded.

Other Provisions of Articles and By-laws

There are no provisions in the Articles or By-laws:

- delaying or prohibiting a change in control of our company that operate only with respect to a merger, acquisition or corporate restructuring;
- discriminating against any existing or prospective holder of shares as a result of such shareholder owning a substantial number of shares;
- requiring disclosure of share ownership;
- or
- governing changes in capital, where such provisions are more stringent than those required by law.

C. Material Contracts

We have employment contracts with each of our officers as summarized in Item 6B. Other than these employment contracts, we have not entered into any other contract other than in the ordinary course of business over the last two years.

D. Exchange Controls

Canada has no system of exchange controls. There are no Canadian restrictions on the repatriation of capital or earnings of a Canadian public company to non-resident investors. There are no laws in Canada or exchange restrictions affecting the remittance of dividends, profits, interest, royalties and other payments to non-resident holders of our securities, except as discussed below in Section E, *Taxation*.

Restrictions on Share Ownership by Non-Canadians

There are no limitations under the laws of Canada or in our organizational documents on the right of foreigners to hold or vote securities of our company, except that the *Investment Canada Act* (the "Investment Canada Act") may require review and approval by the Minister of Industry (Canada) of certain acquisitions of "control" of our Company by a "non-Canadian."

Investment Canada Act

Under the Investment Canada Act, transactions exceeding certain financial thresholds, and which involve the acquisition of control of a Canadian business by a non-Canadian, are subject to review and cannot be implemented unless the Minister of Industry and/or, in the case of a Canadian business engaged in cultural activities, the Minister of Canadian Heritage, are satisfied that the transaction is likely to be of "net benefit to Canada". If a transaction is subject to review (a "Reviewable Transaction"), an application for review must be filed with the Investment Review Division of Industry Canada and/or the Department of Canadian Heritage prior to the implementation of the Reviewable Transaction. The responsible Minister is then required to determine whether the Reviewable Transaction is likely to be of net benefit to Canada taking into account, among other things, certain factors specified in the Investment Canada Act and any written undertakings that may have been given by the applicant. The Investment Canada Act contemplates an initial review period of up to 45 days after filing; however, if the responsible Minister has not completed the review by that date, the Minister may unilaterally extend the review period by up to 30 days (or such longer period as may be agreed to by the applicant and the Minister) to permit completion of the review. Direct acquisitions of control of most Canadian businesses by or from World Trade Organization ("WTO") investors are reviewable under the Investment Canada Act only if, in the case of an acquisition of voting securities, the value of the worldwide assets of the Canadian business or, in the case of an acquisition of substantially all the assets of a Canadian business, the value of those assets exceed C\$295 million for the year 2008 (this figure is adjusted annually to reflect inflation). Indirect acquisitions (e.g., an acquisition of a U.S. corporation with a Canadian subsidiary) of control of such businesses by or from WTO investors are not subject to review, regardless of the value of the Canadian businesses' assets. Significantly lower review thresholds apply where neither the investor nor the Canadian business is WTO investor controlled or where the Canadian business is engaged in uranium mining, certain cultural businesses, financial services or transportation services.

Even if the transaction is not reviewable because it does not meet or exceed the applicable financial threshold, the non-Canadian investor must still give notice to Industry Canada and, in the case of a Canadian business engaged in cultural activities, Canadian Heritage, of its acquisition of control of a Canadian business within 30 days of its implementation.

Competition Act

The *Competition Act* (Canada) (the "Competition Act") requires that a pre-merger notification filing be submitted to the Commissioner of Competition (the "Commissioner") in respect of proposed transactions that exceed certain financial and other thresholds. If a proposed transaction is subject to pre-merger notification, a pre-merger notification filing must be submitted to the Commissioner and a waiting period must expire or be waived by the Commissioner before the transaction may be completed. The parties to a proposed transaction may choose to submit either a short-form filing (in respect of which there is a 14-day statutory waiting period) or a long-form filing (in respect of which there is a 42-day statutory waiting period). However, where the parties choose to submit a short-form filing, the Commissioner may, within 14 days, require that the parties submit a long-form filing, in which case the proposed transaction generally may not be completed until 42 days after the long-form filing is submitted by the parties.

The Commissioner may, upon request, issue an advance ruling certificate ("ARC") in respect of a proposed transaction where she is satisfied that she would not have sufficient grounds on which to apply to the Competition Tribunal for an order under the merger provisions of the Competition Act. If the Commissioner issues an ARC in respect of a proposed transaction, the transaction is exempt from the pre-merger notification provisions. In addition, if the transaction to which the ARC relates is substantially completed within one year after the ARC is issued, the Commissioner cannot seek an order of the Competition Tribunal under the merger provisions of the Competition Act in respect of the transaction solely on the basis of information that is the same or substantially the same as the information on the basis of which the ARC was issued.

If the Commissioner is unwilling to issue an ARC, she may nevertheless issue a "no action" letter waiving notification and confirming that she is of the view that grounds do not then exist to initiate proceedings before the Competition Tribunal under the merger provisions of the Competition Act with respect to the proposed transaction, while preserving, during the three years following completion of the proposed transaction, her authority to initiate proceedings should circumstances change.

Regardless of whether pre-merger notification is required, the Commissioner may apply to the Competition Tribunal (a special purpose tribunal) for an order under the merger provisions of the Competition Act. If the Competition Tribunal finds that the transaction is or is likely to prevent or lessen competition substantially, it may order that the parties not proceed with the transaction or part of it or, in the event that the transaction has already been completed, order its dissolution or the disposition of some of the

assets or shares involved. In addition, the Competition Tribunal may, with the consent of the person against whom the order is directed and the Commissioner, order that person to take any other action as is deemed necessary to remedy any substantial lessening or prevention of competition that the Competition Tribunal determines would or would likely result from the transaction.

E. Taxation

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following is a general summary of certain U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership and disposition of our common shares.

This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder arising from and relating to the acquisition, ownership and disposition of common shares.

In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax considerations applicable to such U.S. Holder. Except as specifically set forth below, this summary does not discuss applicable tax reporting requirements. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any particular U.S. Holder. This summary does not address the U.S. state and local, U.S. federal estate and gift, U.S. federal alternative minimum tax, or non-U.S. tax consequences to U.S. Holders relating to the acquisition, ownership, and disposition of common shares.

Each U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership, and disposition of common shares. No ruling from the U.S. Internal Revenue Service (the “**IRS**”) has been requested, or will be obtained, regarding the U.S. federal income tax considerations applicable to U.S. Holders as discussed in this summary. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and contrary to, the positions taken in this summary. In addition, because the authorities on which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the positions taken in this summary.

Authorities

This summary is based on the Internal Revenue Code of 1986, as amended (the “**Code**”), Treasury Regulations (whether final, temporary, or proposed), U.S. court decisions, published IRS rulings, published administrative positions of the IRS, and the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended (the “**Canada-U.S. Tax Convention**”), that are applicable and, in each case, as in effect, as of the date of this annual report. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive or prospective basis and could affect the U.S. federal income tax considerations described in this summary. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective basis.

U.S. Holders

For purposes of this summary, a “**U.S. Holder**” is a beneficial owner of common shares that is (a) an individual who is a citizen or resident of the U.S. for U.S. federal income tax purposes, (b) a corporation, or other entity classified as a corporation for U.S. federal income tax purposes, that is created or organized in or under the laws of the U.S. or any state in the U.S., including the District of Columbia, (c) an estate if the income of such estate is subject to U.S. federal income tax regardless of the source of such income, or (d) a trust if (i) such trust has validly elected to be treated as a U.S. person for U.S. federal income tax purposes or (ii) a U.S. court is able to exercise primary supervision over the administration of such trust and one or more U.S. persons have the authority to control all substantial decisions of such trust.

U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax considerations applicable to U.S. Holders that are subject to special provisions under the Code, including: (a) U.S. Holders that are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) U.S. Holders that are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies or that are broker-dealers, dealers, or traders in securities or currencies that elect to apply a mark-to-market accounting method; (c) U.S. Holders that have a “functional currency” other than the U.S. dollar; (d) U.S. Holders that own common shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other arrangement involving more than one position; (e) U.S. Holders that acquired common shares in connection with the exercise of employee stock options or otherwise as compensation for services; (f) U.S. Holders that hold common shares other than as a capital asset within the meaning of Section 1221 of the Code; or (g) U.S.

Holders that own, directly, indirectly, or by attribution, 10% or more, by voting power or value, of our outstanding shares. The summary also does not address the U.S. federal income tax considerations applicable to U.S. Holders who are (a) certain U.S. expatriates or former long-term residents of the U.S.; (b) persons that have been, are, or will be a resident or deemed to be a resident in Canada for purposes of the *Income Tax Act* (Canada) (the “**Tax Act**”); (c) persons that use or hold, will use or hold, or that are or will be deemed to use or hold common shares in connection with carrying on a business in Canada; (d) persons whose common shares constitute “taxable Canadian property” under the Tax Act; or (e) persons that have a permanent establishment in Canada for the purposes of the Canada-U.S. Tax Convention. U.S. Holders and others that are subject to special provisions under the Code, including U.S. Holders described immediately above, should consult their own tax advisors.

If an entity that is classified as partnership (or “pass-through” entity) for U.S. federal income tax purposes holds common shares, the U.S. federal income tax consequences applicable to such partnership (or “pass-through” entity) and the partners of such partnership (or owners of such “pass-through” entity) generally will depend on the activities of the partnership (or “pass-through” entity) and the status of such partners (or owners). Partners of entities that are classified as partnerships (and owners of “pass-through” entities) for U.S. federal income tax purposes should consult their own tax advisor regarding the U.S. federal income tax consequences relating to the acquisition, ownership, and disposition of common shares.

Passive Foreign Investment Company Rules

If we were a “passive foreign investment company” under the meaning of Section 1297 of the Code (a “**PFIC**”) for any year during a U.S. Holder's holding period, then certain potentially adverse rules will affect the U.S. federal income tax consequences to a U.S. Holder resulting from the acquisition, ownership and disposition of common shares. In addition, in any year in which we are classified as a PFIC, such holder may be required to file an annual report with the IRS containing such information as Treasury Regulations and/or other IRS guidance may require.

PFIC Status

We generally will be a PFIC if, for any tax year, (a) 75% or more of our gross income for such tax year is passive income (the “**income test**”) or (b) 50% or more of the value of our assets either produce passive income or are held for the production of passive income, based on the quarterly average of the fair market value of such assets (the “**asset test**”).

For purposes of the PFIC income test and asset test described above, if we own, directly or indirectly, 25% or more of the total value of the outstanding shares of another corporation, we will be treated as if we (a) held a proportionate share of the assets of such other corporation and (b) received directly a proportionate share of the income of such other corporation. In addition, for purposes of the income test and asset test, “passive income” does not include any interest, dividends, rents, or royalties that are received or accrued by us from a “related person,” to the extent such items are properly allocable to the income of such related person that is not passive income. Under certain attribution rules, if we are a PFIC, U.S. Holders will be deemed to own their proportionate share of any of our subsidiaries which is also a PFIC (a “**Subsidiary PFIC**”), and will be subject to U.S. federal income tax on (i) a distribution on the shares of a Subsidiary PFIC and (ii) a disposition or deemed disposition of shares of a Subsidiary PFIC, both as if the holder directly held the shares of such Subsidiary PFIC, even though such U.S. Holder had not received the proceeds of those distributions or dispositions.

We believe we were a PFIC for one or more prior taxable years, and based on current business plans and financial projections, we expect that we will be a PFIC for the current taxable year and for the foreseeable future. The determination of whether we were (or a Subsidiary PFIC was), or will be, a PFIC for a tax year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, whether we (or a Subsidiary PFIC) will be a PFIC for any tax year depends on our assets and income (and each Subsidiary PFIC's assets and income) over the course of each such tax year and, as a result, cannot be predicted with certainty as of the date of this annual report. Accordingly, there can be no assurance that the IRS will not challenge any determination made by us (or a Subsidiary PFIC) concerning our PFIC status or that we (and each Subsidiary PFIC) were not, or will not be, a PFIC for any tax year. Each U.S. Holder should consult its own tax advisor regarding our PFIC status and the status of each Subsidiary PFIC.

Default PFIC Rules

If we are a PFIC, the U.S. federal income tax consequences to a U.S. Holder of the acquisition, ownership, and disposition of common shares will depend on whether such U.S. Holder is eligible to make and actually makes an election to treat us (and/or a Subsidiary PFIC) as a “qualified electing fund” or “QEF” (a “**QEF Election**”) or has made a “mark-to-market election” (a “**Mark-to-Market Election**”) with respect to common shares. A U.S. Holder that does not make either a QEF Election or a Mark-to-Market Election will be referred to in this summary as a “**Non-Electing U.S. Holder**”.

A Non-Electing U.S. Holder will be subject to the default PFIC rules with respect to (a) any gain recognized on the sale or other taxable disposition (including a pledge) of common shares and (b) any “excess distribution” received on the common shares. A distribution generally will be an “excess distribution” to the extent that such distribution (together with all other distributions received in the current tax year) exceeds 125% of the average distributions received during the shorter of the three preceding tax years or a U.S. Holder's holding period for the common shares).

Any gain recognized on the sale or other taxable disposition of common shares of a PFIC (including an indirect disposition of offered shares of a Subsidiary PFIC), and any excess distribution received on such common shares (or a distribution by a Subsidiary PFIC to its shareholder that is deemed to be received by a U.S. Holder) must be ratably allocated over a Non-Electing U.S. Holder's holding period for the common shares. The amount of any such gain or excess distribution allocated to the tax year of disposition or distribution of the excess distribution and to years before the first taxable year in which the entity became a PFIC, if any, would be taxed as ordinary income. The amounts allocated to any other tax year would be subject to U.S. federal income tax at the highest tax rate applicable to ordinary income in each such year, and an interest charge generally applicable to the underpayments of tax would be imposed in respect of the tax attributable to each such year. A Non-Electing U.S. Holder that is not a corporation must treat any such interest paid as “personal interest,” which is not deductible.

If a Non-Electing U.S. Holder holds common shares during any tax year which we are a PFIC, such Non-Electing U.S. Holder's common shares will be treated as equity in a PFIC, regardless of whether we cease to be a PFIC in one or more subsequent years. A Non-Electing U.S. Holder may terminate this deemed PFIC status with respect to common shares if we cease to be a PFIC and the Non-Electing

U.S. Holder makes a “deemed sale” election with respect to its common shares. If such election is made, the U.S. Holder will be deemed to have sold such common shares on the last day of the last tax year for which we were a PFIC, and such U.S. Holder will recognize gain from such deemed sale (which will be taxed as discussed above). After the deemed sale election, a Non-Electing U.S. Holder's common shares with respect to which the deemed sale election was made will not be treated as shares in a PFIC unless we subsequently become a PFIC.

QEF Election

A U.S. Holder that makes a timely and effective QEF Election for the first tax year in which its holding period of its common shares begins, generally, will not be subject to the default PFIC rules discussed above with respect to its common shares. However, a U.S. Holder that makes a timely and effective QEF Election will be subject to U.S. federal income tax on such U.S. Holder's pro rata share of (a) our net capital gain, which will be taxed as long-term capital gain to such U.S. Holder, and (b) our ordinary earnings, which will be taxed as ordinary income to such U.S. Holder. Generally, “net capital gain” is the excess of (a) net long-term capital gain over (b) net short-term capital loss, and “ordinary earnings” are the excess of (a) “earnings and profits” over (b) net capital gain. A U.S. Holder that makes a QEF Election will be subject to U.S. federal income tax on such amounts for each tax year in which we are a PFIC, regardless of whether such amounts are actually distributed to such U.S. Holder by us. However, for any tax year in which we are a PFIC and have no net income or gain, U.S. Holders that have made a QEF Election would not have any income inclusions as a result of the QEF Election. If a U.S. Holder that made a QEF Election has an income inclusion, such a U.S. Holder may, subject to certain limitations, elect to defer payment of current U.S. federal income tax on such amounts, subject to an interest charge. If such U.S. Holder is not a corporation, any such interest paid will be treated as “personal interest,” which is not deductible.

A U.S. Holder that makes a QEF Election generally (a) may receive a tax-free distribution from us to the extent that such distribution represents our “earnings and profits” that were previously included in income by the U.S. Holder because of such QEF Election and (b) will adjust such U.S. Holder's tax basis in the common shares to reflect the amount included in income or allowed as a tax-free distribution because of such QEF Election. In addition, a U.S. Holder that makes a QEF Election generally will recognize capital gain or loss on the sale or other taxable disposition of common shares.

The procedure for making a QEF Election, and the U.S. federal income tax consequences of making a QEF Election, will depend on whether such QEF Election is timely. A QEF Election will be treated as “timely” if such QEF Election is made for the first year in the U.S. Holder's holding period for the common shares in which we were a PFIC. A U.S. Holder may make a timely QEF Election by filing the appropriate QEF Election documents at the time such U.S. Holder files a U.S. federal income tax return for such year.

A QEF Election will apply to the tax year for which such QEF Election is made and to all subsequent tax years, unless such QEF Election is invalidated or terminated or the IRS consents to revocation of such QEF Election by the U.S. Holder. If a U.S. Holder makes a QEF Election and, in a subsequent tax year, we cease to be a PFIC, the QEF Election will remain in effect (although it will not be applicable) during those tax years in which we are not a PFIC. Accordingly, if we become a PFIC in another subsequent tax year, the QEF Election will be effective and the U.S. Holder will be subject to the QEF rules described above during a subsequent tax year in which we qualify as a PFIC. The QEF Election is made on a shareholder-by-shareholder

basis and, once made, can be revoked only with the consent of the IRS. A U.S. Holder generally makes a QEF Election by attaching an appropriately completed IRS Form 8621 (Return by a Shareholder of a Passive Foreign Investment Company or Qualified Electing Fund), including the information provided in a PFIC annual information statement, to a timely filed U.S. federal income tax return for the tax year to which the election relates. Retroactive QEF Elections generally may be made only by filing a protective statement with such return and if certain other conditions are met or with the consent of the IRS. In order to comply with the requirements of a QEF Election, a U.S. Holder must receive certain information from us.

We will make available to each U.S. Holder that has made a QEF Election, upon written request, a "PFIC Annual Information Statement" as described in Treasury Regulation Section 1.1295-1 (g) (or any successor Treasury Regulation) and use commercially reasonable efforts to provide all additional information that such U.S. Holder is required to obtain in connection with maintaining such QEF Election with regard to the Company. We may elect to provide such information to U.S. Holders through our website. Because we may hold 50% or less of the aggregate voting power of one or more Subsidiary PFICs at any time, U.S. Holders should be aware that there can be no assurance that we will satisfy record keeping requirements that apply to a QEF, or that we will supply U.S. Holders with information that such U.S. Holders require to report under the QEF rules, in the event that we are a PFIC and a U.S. Holder wishes to make a QEF Election with respect to any such Subsidiary PFIC. With respect to Subsidiary PFICs for which we do not or the U.S. Holders do not obtain the required information, U.S. Holders will continue to be subject to the rules discussed above that apply to Non-Electing U.S. Holders with respect to the taxation of gains and excess distributions. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a QEF Election with respect to us and any Subsidiary PFIC.

Mark-to-Market Election

A U.S. Holder may make a Mark-to-Market Election only if the common shares are marketable stock. The common shares generally will be "marketable stock" if the common shares are regularly traded on (a) a national securities exchange that is registered with the SEC, (b) the national market system established pursuant to section 11A of the Securities and Exchange Act of 1934, or (c) a foreign securities exchange that is regulated or supervised by a governmental authority of the country in which the market is located, provided that (i) such foreign exchange has trading volume, listing, financial disclosure, and other requirements and the laws of the country in which such foreign exchange is located, together with the rules of such foreign exchange, ensure that such requirements are actually enforced and (ii) the rules of such foreign exchange effectively promote active trading of listed stocks. If such stock is traded on such a qualified exchange or other market, such stock generally will be "regularly traded" for any calendar year during which such stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter.

A U.S. Holder that makes a Mark-to-Market Election with respect to its common shares generally will not be subject to the default PFIC rules discussed above. A U.S. Holder that makes a Mark-to-Market Election will include in ordinary income, for each tax year in which we are a PFIC, an amount equal to the excess, if any, of (a) the fair market value of the common shares, as of the close of such tax year over (b) such U.S. Holder's adjusted tax basis in such common shares. A U.S. Holder that makes a Mark-to-Market election will be allowed a deduction in an amount equal to the excess, if any, of (a) such U.S. Holder's adjusted tax basis in the common shares, over (b) the fair market value of such common shares as of the close of such tax year (but only to the extent of the net amount of previously included income as a result of the Mark-to-Market Election for prior tax years).

A U.S. Holder that makes a Mark-to-Market Election generally also will adjust such U.S. Holder's tax basis in the common shares to reflect the amount included in gross income or allowed as a deduction because of such Mark-to-Market Election. In addition, upon a sale or other taxable disposition of common shares, a U.S. Holder that makes a Mark-to-Market Election will recognize ordinary income or loss (not to exceed the excess, if any, of (a) the amount included in ordinary income because of such Mark-to-Market Election for prior tax years over (b) the amount allowed as a deduction because of such Mark-to-Market Election for prior tax years). Any distributions we made would be subject to the rules discussed below under "U.S. Federal Income Tax Consequences of the Acquisition, Ownership, and Disposition of common shares-Distributions on common shares".

A Mark-to-Market Election applies to the tax year in which such Mark-to-Market Election is made and to each subsequent tax year, unless the common shares cease to be "marketable stock" or the IRS consents to revocation of such election. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a Mark-to-Market Election.

Although a U.S. Holder may be eligible to make a Mark-to-Market Election with respect to the common shares, no such election may be made with respect to the stock of any Subsidiary PFIC that a U.S. Holder is treated as owning because such stock is not marketable. Hence, the Mark-to-Market Election will not be effective to eliminate the interest charge described above with respect to deemed dispositions of Subsidiary PFIC stock or distributions from a Subsidiary PFIC.

Other PFIC Rules

The IRS has issued proposed Treasury Regulations that, subject to certain exceptions, would cause a U.S. Holder that had not made a timely QEF Election to recognize gain (but not loss) upon certain transfers of common shares that would otherwise be tax-deferred (e.g., gifts and exchanges pursuant to corporate reorganizations). However, the specific U.S. federal income tax consequences to a U.S. Holder may vary based on the manner in which common shares are transferred.

Certain additional adverse rules will apply with respect to a U.S. Holder if we are a PFIC, regardless of whether such U.S. Holder makes a QEF Election. For example, a U.S. Holder that uses common shares as security for a loan will, except as may be provided in Treasury Regulations, be treated as having made a taxable disposition of such common shares.

Special rules also apply to the amount of foreign tax credit that a U.S. Holder may claim on a distribution from a PFIC. Subject to such special rules, foreign taxes paid with respect to any distribution in respect of stock in a PFIC are generally eligible for the foreign tax credit. The rules relating to distributions by a PFIC and their eligibility for the foreign tax credit are complicated, and a U.S. Holder should consult with its own tax advisor regarding the availability of the foreign tax credit with respect to distributions by a PFIC.

The PFIC rules are complex, and each U.S. Holder should consult its own tax advisor regarding the PFIC rules and how the PFIC rules may affect the U.S. federal income tax consequences of the acquisition, ownership, and disposition of common shares.

U.S. Federal Income Tax Consequences of the Acquisition, Ownership, and Disposition of common shares

The following discussion is subject to the rules described above under the heading “Passive Foreign Investment Company Rules”.

Distributions on common shares

Subject to the PFIC rules discussed above, a U.S. Holder that receives a distribution, including constructive distribution, with respect to common shares will be required to include the amount of such distribution in gross income as a dividend (without reduction for any Canadian income tax withheld from such distribution) to the extent of our current or accumulated “earnings and profits,” as computed for U.S. federal income tax purposes. A dividend generally will be taxed to a U.S. Holder at ordinary income tax rates. To the extent that a distribution exceeds our current and accumulated “earnings and profits,” such distribution will be treated first as a tax-free return of capital to the extent of a U.S. Holder's tax basis in the common shares and thereafter as gain from the sale or exchange of such common shares. See “Sale or Other Taxable Disposition of common shares” below. However, we do not intend to maintain the calculations of earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder should therefore assume that any distribution by us with respect to the common shares will constitute ordinary dividend income. Dividends received on common shares generally will not be eligible for the “dividends received deduction”.

Subject to applicable limitations, dividends paid with respect to the common shares to non-corporate U.S. Holders, including individuals, generally will be eligible for the preferential tax rates applicable to long-term capital gains for dividends, provided certain holding period and other conditions are satisfied, including that we not be classified as a PFIC in the tax year of distribution or in the preceding tax year. Since we expect to be classified as a PFIC for the foreseeable future, dividends received on common shares generally are expected not to be considered “qualified dividend income,” and thus are not expected to be eligible for the preferential tax rates applicable to long-term capital gains for the foreseeable future. The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the application of such rules.

Sale or Other Taxable Disposition of common shares

Subject to the PFIC rules discussed above, upon the sale or other taxable disposition of common shares, a U.S. Holder generally will recognize capital gain or loss in an amount equal to the difference between (i) the amount of cash plus the fair market value of any property received and (ii) such U.S. Holder's tax basis in such common shares sold or otherwise disposed of. While gain or loss recognized on such sale or other disposition generally would be long-term capital gain or loss if, at the time of the sale or other disposition, the common shares have been held for more than one year, the PFIC rules discussed above may render such gain ordinary income. Preferential tax rates apply to long-term capital gain of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gain of a U.S. Holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Code.

Foreign Tax Credit

Subject to the PFIC rules discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the common shares generally will be entitled, at the election of such U.S. Holder, to

receive either a deduction or a credit for such Canadian income tax paid. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder during a year. Complex limitations apply to the foreign tax credit, including the general limitation that the credit cannot exceed the proportionate share of a U.S. Holder's U.S. federal income tax liability that such U.S. Holder's "foreign source" taxable income bears to such U.S. Holder's worldwide taxable income for the same tax year. In applying this limitation, a U.S. Holder's various items of income and deduction must be classified, under complex rules, as either "foreign source" or "U.S. source".

Generally, dividends paid by a foreign corporation should be treated as foreign source for this purpose, and gains recognized on the sale of stock of a foreign corporation by a U.S. Holder should be treated as U.S. source for this purpose, except as otherwise provided in an applicable income tax treaty, and if an election is properly made under the Code. However, the amount of a distribution with respect to the common shares that is treated as a "dividend" may be lower for U.S. federal income tax purposes than it is for Canadian federal income tax purposes, resulting in a reduced foreign tax credit allowance to a U.S. Holder. In addition, this limitation is calculated separately with respect to specific categories of income. The foreign tax credit rules are complex, and each U.S. Holder should consult its own tax advisor regarding the foreign tax credit rules.

Receipt of Foreign Currency

The amount of any distribution paid in foreign currency to a U.S. Holder in connection with the ownership of common shares, or on the sale, exchange or other taxable disposition of our common shares, generally will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of actual or constructive receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). If the foreign currency received is not converted into U.S. dollars on the date of receipt, a U.S. Holder will have a basis in the foreign currency equal to its U.S. dollar value on the date of receipt. A U.S. Holder that receives foreign currency and converts such foreign currency into U.S. dollars at a conversion rate other than the rate in effect on the date of receipt may have a foreign currency exchange gain or loss, which generally would be treated as U.S. source ordinary income or loss for foreign tax credit purposes. Each U.S. Holder should consult its own tax advisor regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

Additional Tax on Passive Income

Certain individuals, estates and trusts whose income exceeds certain thresholds will be required to pay a 3.8% Medicare surtax on "net investment income" including, among other things, dividends and net gain from dispositions of property (other than property held in a trade or business). U.S. Holders should consult with their own tax advisors regarding the effect, if any, of this tax on their ownership and disposition of common shares.

Information Reporting; Backup Withholding Tax

Under U.S. federal income tax law and Treasury Regulations, certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, recently enacted legislation generally imposes new U.S. return disclosure obligations (and related penalties) on U.S. Holders that hold certain specified foreign financial assets in excess of \$50,000. The definition of specified foreign financial assets includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person, any financial instrument or contract held for investment that has an issuer or counterparty other than a U.S. person and any interest in a foreign entity. U.S. Holders may be subject to these reporting requirements unless their common shares are held in an account at certain financial institutions. Penalties for failure to file certain of these information returns are substantial. U.S. Holders should consult with their own tax advisors regarding the requirements of filing information returns, including the requirement to file an IRS Form 8938.

Payments made within the U.S., or by a U.S. payor or U.S. middleman, of dividends on, and proceeds arising from certain sales or other taxable dispositions of the common shares may be subject to information reporting and backup withholding tax, at the current rate of 28%, if a U.S. Holder (a) fails to furnish such U.S. Holder's correct U.S. social security or other taxpayer identification number (generally on Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails under certain circumstances to certify, under penalty of perjury, that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax.

Backup withholding is not an additional tax. Any amounts withheld under the U.S. backup withholding tax rules generally will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS. The discussion of reporting requirements set forth above is not intended to constitute a complete description of all reporting requirements that may apply to a U.S. Holder. A failure to satisfy certain reporting requirements may result in an extension of the time period during which the IRS can assess a tax, and under certain circumstances, such an extension may apply to assessments of amounts unrelated to any unsatisfied reporting requirement. Each U.S. Holder should consult its own tax advisor regarding the information reporting and backup withholding tax rules.

F. Dividends and Paying Agents

Not Applicable

G. Statements by Experts

Not Applicable

H. Documents on Display

We are subject to the informational requirements of the Exchange Act and file reports and other information with the SEC. You may read and copy any of our reports and other information at, and obtain copies upon payment of prescribed fees from, the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. In addition, the SEC maintains a Website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC at <http://www.sec.gov>. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

We are required to file reports and other information with the securities commissions in Canada. You are invited to read and copy any reports, statements or other information, other than confidential filings, that we file with the provincial securities commissions. These filings are also electronically available from the Canadian System for Electronic Document Analysis and Retrieval ("SEDAR") (<http://www.sedar.com>), the Canadian equivalent of the SEC's electronic document gathering and retrieval system.

We "incorporate by reference" information that we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this Form 20-F and more recent information automatically updates and supersedes more dated information contained or incorporated by reference in this Form 20-F.

As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of proxy statements to shareholders.

We will provide without charge to each person, including any beneficial owner, to whom a copy of this annual report has been delivered, on the written or oral request of such person, a copy of any or all documents referred to above which have been or may be incorporated by reference in this annual report (not including exhibits to such incorporated information that are not specifically incorporated by reference into such information). Requests for such copies should be directed to us at the following address: Oncolytics Biotech Inc., 210 – 1167 Kensington Crescent, NW, Calgary, Alberta, Canada, T2N 1X7, Attention: Kirk Look. Telephone (403) 670 - 7377. Facsimile (403) 283-0858 EMAIL: info@oncolytics.ca.

I. Subsidiary Information

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Foreign Currency Risk

We operate primarily in Canada, the U.S., the U.K. and Europe. Therefore, we are exposed to foreign currency risk associated with our expenses outside of Canada. We do not use financial derivative instruments to manage this market risk.

Interest Rate Risk

The primary objective of our policy for the investment of temporary cash surpluses is the protection of principal, and, accordingly, we generally invest in investment-grade debt securities with varying maturities. As it is our intent and policy to hold these investments until maturity, we do not have a material exposure to interest rate risk.

We do not currently have any long-term debt, nor do we currently utilize interest rate swap contracts to hedge against interest rate risk.

We do not use financial instruments for trading purposes and are not parties to any leverage derivatives. We do not currently engage in hedging transactions. See "Currency and Exchange Rates" and Item 4 – "Information on the Company".

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES.

A. Debt Securities

Not Applicable

B. Warrants and Rights

Not Applicable

C. Other Securities

Not Applicable

D. American Depository Shares

The Company's Common Shares are not represented by American Depository Receipts.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES.

None

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS.

A. Modification of Instruments Defining Rights of Security Holders

None

B. Modification or Issuance of Other Class of Securities

None

C. Withdrawal or Substitution of Security

None

D. Change of Trustee or Paying Agent

None

E. Use of Proceeds

There has been no change to the information provided in our first annual report on Form 20-F.

ITEM 15. CONTROLS AND PROCEDURES

A. Evaluation of Disclosures and Procedures

It is the conclusion of our Chief Executive Officer and Chief Financial Officer that our Company's disclosure controls and procedures (as defined in Exchange Act rules 13a-15(e) and 15d-15(e)), based on their evaluation of these controls and procedures as of the end of the period covered by this annual report, are effective in ensuring that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

B. Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. As defined in Exchange Act Rule 13a-15(f), internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer and effected by the board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Reporting Standards as issued by the International Accounting Standards Board ("IFRS"), and includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts and expenditures of the Company are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management, including the Company's Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2013. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission, 1992 Framework, (COSO) in Internal Control-Integrated Framework. Based on this assessment, management believes that, as of December 31, 2013, the Company's internal control over financial reporting was effective based on those criteria.

The Company is required to provide an auditor's attestation report on internal control over financial reporting for the fiscal year ended December 31, 2013. In this report, the Company's independent registered auditor, Ernst & Young LLP, must state its opinion as to the effectiveness of the Company's internal control over financial reporting for the fiscal year ended December 31, 2013. Ernst & Young LLP has audited the Company's financial statements included in this annual report on Form 20-F and has issued an attestation report on the Company's internal control over financial reporting.

C. Attestation Report of the Register Public Accounting Firms

The Auditor Attestation Report is included in the Ernst & Young LLP Independent Auditor's Report, included in the Company's financial statements, beginning on page F-1 of this annual report on Form 20-F.

D. Changes in Internal Controls over Financial Reporting

There were no changes in our internal controls over financial reporting that occurred during the period that is covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

ITEM 16. [RESERVED]

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our Board has determined that each of the Audit Committee members, Fred Stewart, Robert Schultz and Mark Lievonon, is a financial expert and each is independent pursuant to the Rule 5605(a)(2) of the NASDAQ Capital Market and Rule 10A-3 of the Exchange Act.

ITEM 16B. CODE OF ETHICS

Our Board of Directors has adopted a Code of Ethics for our CEO, CFO and Accounting Officer that applies to our CEO, CFO, and Controller. A copy of this Code of Ethics may be found on the Company's website at <http://www.oncolyticsbiotech.com>. Requests for such copies should be directed to us at the following address: Oncolytics Biotech Inc., 210 – 1167 Kensington Crescent, NW, Calgary, Alberta, Canada, T2N 1X7, Attention: Kirk Look Telephone (403) 670 - 7377. Facsimile (403) 283-0858 EMAIL: info@oncolyticsbiotech.com.

There were no amendments to our Code of Ethics during the fiscal year ended December 31, 2013. We did not grant any waivers to the provisions of our Code of Ethics during the fiscal year ended December 31, 2013.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Audit Fees and Services

During the financial years ended December 31, 2013, 2012, and 2011, Ernst & Young LLP received the following fees:

	2013	2012	2011
Item	\$	\$	\$
Audit fees	160,737	125,370	181,709
Audit-related fees ^{(1),(3)}	133,800	83,068	107,085
Tax fees ⁽²⁾	18,832	18,912	32,147
All other fees ⁽⁴⁾	—	—	—

Notes:

- 1) Includes review of interim financial statements, accounting consultations and subscription to on-line accounting services.
- 2) Comprised of tax return preparation, scientific research and development return and other tax consultation fees.
- 3) Includes fees associated with matters relating to the provision of a consent letter for various filings.
- 4) Includes fees associated with the adoption of International Financial Reporting Standards and the expansion of our corporate structure.

Audit Fees

Audit fees were for professional services rendered by Ernst & Young, LLP for the audit of our annual financial statements and services provided in connection with statutory and regulatory filings or engagements.

Audit-Related Fees

Audit-related fees were for assurance and related services reasonably related to the performance of the audit or review of the annual statements and are not reported under the heading Audit Fees above. These services consisted of accounting consultations, assistance with prospectus filings and assistance with preparations for compliance with section 404 of the Sarbanes-Oxley Act of 2002.

Tax Fees

Tax fees were for tax compliance and professional tax consultations.

All Other Fees

Other fees are for products and services other than those described under the headings Audit Fees, Audit-Related Fees and Tax Fees above.

The Audit Committee pre-approves all audit services to be provided to us by our independent auditors. The Audit Committee's policy regarding the pre-approval of non-audit services to be provided to us by our independent auditors is that all such services shall be pre-approved by the Audit Committee or by the Chairman of the Audit Committee, who must report all such pre-approvals to the Audit Committee at their next meeting following the granting thereof. Non-audit services that are prohibited to be provided to us by our independent auditors may not be pre-approved. In addition, prior to the granting of any pre-approval, the Audit Committee or the Chairman, as the case may be, must be satisfied that the performance of the services in question will not compromise the independence of the independent auditors.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

None

ITEM 16E. PURCHASE OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASES

None

ITEM 16F. CHANGE IN REGISTRANT’S CERTIFYING ACCOUNTANTS

None

ITEM 16G. CORPORATE GOVERNANCE

NASDAQ CORPORATE GOVERNANCE

Our common shares are quoted for trading on the NASDAQ Capital Market. Section 5615(a)(3) of the NASDAQ Marketplace Rules permits NASDAQ to grant exemptions to a foreign private issuer for the provisions of the Rule 5600 series, Rule 5250 (d), and Rules 5210(c) and 5255 related to qualitative listing requirements. We are organized under the laws of the Province of Alberta and our common shares are listed for trading on The Toronto Stock Exchange. We comply with the laws of the Province of Alberta and rules and regulations of The Toronto Stock Exchange, including rules related to corporate governance practices. A description of the significant ways in which our governance practices differ from those followed by domestic companies pursuant to the NASDAQ Marketplace Rules is as follows:

Shareholder Meeting Quorum Requirement. The NASDAQ minimum quorum requirement for a shareholder meeting under Section 5620(c) of the NASDAQ Marketplace Rules is one-third of the outstanding shares of common stock. In addition, a company listed on NASDAQ is required to state our quorum requirement in our bylaws. Our quorum requirement is set forth in our corporate bylaws. A quorum for our shareholder meeting is two persons present and being, or representing by proxy, members holding not less than 5% of the issued shares entitled to be voted at such meeting.

The foregoing is consistent with the laws, customs and practices in Canada and the rules of The Toronto Stock Exchange.

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

PART III

ITEM 17. FINANCIAL STATEMENTS.

Not applicable.

ITEM 18 FINANCIAL STATEMENTS

The financial statements appear on pages F-1 through F-24.

ITEM 19. EXHIBITS.

The following exhibits are filed as part of this annual report:

<u>EXHIBIT NUMBER</u>	<u>DESCRIPTION</u>
	Constating Documents
1.1 ^(a)	Articles of Incorporation
1.2 ^(a)	By-laws
	Material Contracts
4.1 ^(b)	Services Agreement, dated October 16, 2002, between the Company and its Senior Vice President, Clinical and Regulatory Affairs, George Gill
4.2 ^(c)	Amending Agreement No. 1, dated January 6, 2005, to the Services Agreement between the Company and its Senior Vice President, Clinical and Regulatory Affairs, George Gill, dated October 16, 2001
4.3 ^(c)	Employment Agreement, dated January 12, 2007, between the Company and its Vice President, Intellectual Property, Mary Ann Dillahunty
4.4 ^(c)	Executive Employment Agreement, dated May 29, 2007, between the Company and its Chief Scientific Officer, Matthew Coffey
4.5 ^(c)	Executive Employment Agreement, dated May 29, 2007, between the Company and its Chief Medical Officer, Dr. Karl Mettinger
4.6 ^(c)	Executive Employment Agreement, dated May 30, 2007, between the Company and its Chief Financial Officer, Douglas Ball
4.7 ^(c)	Executive Employment Agreement, dated June 6, 2007, between the Company and its Chief Executive Officer, Bradley Thompson
4.8 ^(c)	Amending Agreement No. 1, dated December 3, 2007, to the Employment Agreement between the Company and its Vice President, Intellectual Property, Mary Ann Dillahunty, dated January 12, 2007
4.9 ^(d)	Amendment No. 1, dated March 7, 2008, to the Executive Employment Agreement between the Company and its Chief Financial Officer, Douglas Ball, dated May 30, 2007
4.10 ^(d)	Amendment No.1, dated March 7, 2008, between the Company and its Chief Scientific Officer, Matthew Coffey, dated May 29, 2007
4.11 ^(d)	Amendment No. 1, dated March 7, 2008, to the Executive Employment Agreement between the Company and its Chief Executive Officer, Bradley Thompson, dated June 6, 2007
4.12 ^(d)	Amendment No. 1, dated March 20, 2008, to the Employment Agreement between the Company and its Vice President, Intellectual Property, Mary Ann Dillahunty, dated January 12, 2007
4.13 ^(d)	Amendment No. 1, dated March 28, 2008, to the Executive Employment Agreement between the Company and its Chief Medical Officer, Dr. Karl Mettinger, dated May 29, 2007
4.14 ^(d)	Amendment No. 2, dated March 31, 2008, to the Services Agreement between the Company and its Senior Vice President, Clinical and Regulatory Affairs, George Gill, dated October 16, 2001
4.15 ^(d)	Executive Employment Agreement, dated January 26, 2009, between Oncolytics Biotech (U.S.) Inc. and its Chief Medical Officer, Dr. Karl Mettinger
4.16 ^(d)	Executive Employment Agreement, dated January 22, 2009 between the Company and its Vice President, Intellectual Property, Mary Ann Dillahunty.
4.17 ^(e)	Amendment No. 2, dated January 1, 2011, to the Executive Employment Agreement between the Company and its Chief Executive Officer, Bradley Thompson, dated June 6, 2007
4.18 ^(f)	Employment Agreement, dated January 1, 2011 between the Company and its Senior Vice President, Clinical and Regulatory Affairs, George Gill.
4.19 ^(f)	Executive Employment Agreement, dated November 10, 2011 between the Company and its Senior Vice President of Clinical Development and Chief Medical Officer, Gerard T. Kennealey.
4.20 ^(g)	Executive Employment Agreement, dated March 22, 2013, between the Company and its Chief Operating Officer, Matthew Coffey
4.21 ^(g)	Executive Employment Agreement, dated September 27, 2012, between Oncolytics Biotech (U.S.) Inc. and its Senior Vice President, Medical and Clinical Affairs Chief Medical Officer, Dr. Alan Tuchman
4.22 ^(g)	Executive Employment Agreement, dated March 22, 2013, between the Company and its Chief Financial Officer, Kirk Look
4.23 ^(g)	Executive Employment Agreement, dated March 22, 2013, between the Company and its Chief Executive Officer, Bradley Thompson
4.24	Amending Agreement, dated March 12, 2014, between the Company and its Chief Executive Officer, Bradley Thompson
4.25	Amending Agreement, dated March 12, 2014, between the Company and its Chief Financial Officer, Kirk Look
4.26	Amending Agreement, dated March 12, 2014, between the Company and its Chief Operating Officer, Matthew Coffey
	Subsidiaries
8.0	List of subsidiaries
	Certifications
12.1	Certificate of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2	Certificate of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1	Certificate of the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

13.2 Certificate of the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Other Exhibits

15.1 The Registrant's Management's Discussion and Analysis for the Year Ended December 31, 2012

15.2 Consent of Ernst & Young LLP

- (a) Previously filed with the SEC on Form 20-F dated June 14, 2002
- (b) Previously filed with the SEC on Form 20-F dated June 27, 2003
- (c) Previously filed with the SEC on Form 20-F dated March 23, 2008
- (d) Previously filed with the SEC on Form 20-F dated March 6, 2009.
- (e) Previously filed with the SEC on Form 20-F dated March 24, 2011.
- (f) Previously filed with the SEC on Form 20-F dated March 23, 2012.
- (g) Previously filed with the SEC on Form 20-F dated March 22, 2013.

SIGNATURE

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Date: March 19, 2014

ONCOLYTICS BIOTECH INC.

/s/ Brad Thompson

Brad Thompson, Ph.D
Chief Executive Officer

/s/ Kirk Look

Kirk Look, CA
Chief Financial Officer

Consolidated Financial Statements

Oncolytics Biotech® Inc.

December 31, 2013 and 2012

STATEMENT OF MANAGEMENT'S RESPONSIBILITY

Management is responsible for the preparation and presentation of the consolidated financial statements, Management's Discussion and Analysis ("MD&A") and all other information in the Annual Report.

In management's opinion, the accompanying consolidated financial statements have been properly prepared within reasonable limits of materiality and in accordance with the appropriately selected International Financial Reporting Standards as issued by the International Accounting Standards Board consistently applied and summarized in the consolidated financial statements.

The MD&A has been prepared in accordance with the requirements of securities regulators as applicable to Oncolytics Biotech Inc.

The consolidated financial statements and information in the MD&A generally include estimates that are necessary when transactions affecting the current accounting period cannot be finalized with certainty until future periods. Based on careful judgments by management, such estimates have been properly reflected in the accompanying consolidated financial statements and MD&A. The MD&A also includes information regarding the impact of current transactions and events, sources of liquidity and capital resources and risks and uncertainty. Actual results in the future may differ materially from our present assessment of this information because future events and circumstances may not occur as expected.

Systems of internal controls, including organizational and procedural controls and internal controls over financial reporting, assessed as reasonable and appropriate in the circumstances, are designed and maintained by management to provide reasonable assurance that assets are safeguarded from loss or unauthorized use and to produce reliable records for financial purposes.

We, as the Chief Executive Officer and Chief Financial Officer, will certify to our annual filings with the CSA and the SEC as required in Canada by National Instrument 52-109 (Certification of Disclosure in Issuers' Annual Interim Filings) and in the United States by the Sarbanes-Oxley Act.

The external auditors conducted an independent examination of corporate and accounting records in accordance with generally accepted auditing standards to express their opinion on the consolidated financial statements. Their examination included such tests and procedures as they considered necessary to provide reasonable assurance that the consolidated financial statements are presented fairly. The external auditors have full and free access to our Board of Directors and its Committees to discuss audit, financial reporting and related matters.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal control. The Board exercises this responsibility through the Audit Committee of the Board. This Committee meets with management and the external auditors to satisfy itself that management's responsibilities are properly discharged and to review the consolidated financial statements and MD&A before they are presented to the Board of Directors for approval.

/s/ Brad Thompson

Brad Thompson, Ph.D
Chief Executive Officer

/s/ Kirk Look

Kirk Look, CA
Chief Financial Officer

INDEPENDENT AUDITORS' REPORT OF REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders of **Oncolytics Biotech Inc.**

We have audited the accompanying consolidated financial statements of **Oncolytics Biotech Inc.**, which comprise the consolidated statements of financial position as at December 31, 2013 and 2012, and the consolidated statements of loss and comprehensive loss, changes in equity and cash flows for each of the years in the three-year period ended December 31, 2013, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

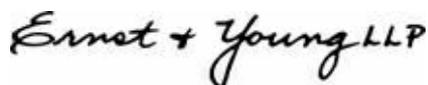
We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Oncolytics Biotech Inc. as at December 31, 2013 and 2012, and its financial performance and cash flows for each of the years in the three-year period ended December 31, 2013 in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Other matter

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Oncolytics Biotech Inc.'s internal control over financial reporting as at December 31, 2013, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 Framework), and our report dated March 12, 2014 expressed an unqualified opinion on Oncolytics Biotech Inc.'s internal control over financial reporting.



Calgary, Canada
March 12, 2014

Chartered Accountants

Independent Auditors' Report on Internal Controls Under Standards of the Public Company Accounting Oversight Board (United States)

To the Shareholders of **Oncolytics Biotech Inc.**

We have audited **Oncolytics Biotech Inc.**'s internal control over financial reporting as at December 31, 2013, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission 1992 Framework (the COSO criteria). Oncolytics Biotech Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

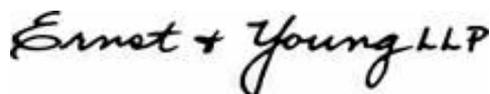
We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Oncolytics Biotech Inc. maintained, in all material respects, effective internal control over financial reporting as at December 31, 2013, based on the COSO criteria.

We also have audited, in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States), the consolidated statements of financial position of Oncolytics Biotech Inc. as at December 31, 2013 and 2012 and the consolidated statements of loss and comprehensive loss, changes in equity and cash flows for each of the years in the three-year period ended December 31, 2013 and our report dated March 12, 2014 expressed an unqualified opinion thereon.



Calgary, Canada
March 12, 2014

Chartered Accountants

ONCOLYTICS BIOTECH INC.
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As at December 31,	Notes	2013 \$	2012 \$
Assets			
Current assets			
Cash and cash equivalents	5	25,220,328	19,323,541
Short-term investments	5	2,001,644	1,969,228
Accounts receivable		105,853	44,979
Prepaid expenses		361,743	331,094
Total current assets		27,689,568	21,668,842
Non-current assets			
Property and equipment	6	532,459	409,248
Total non-current assets		532,459	409,248
Total assets		28,222,027	22,078,090
Liabilities And Shareholders' Equity			
Current Liabilities			
Accounts payable and accrued liabilities		6,008,661	7,291,310
Total current liabilities		6,008,661	7,291,310
<i>Commitments and contingencies</i>	<i>10, 11, 16 and 17</i>		
Shareholders' equity			
Share capital			
Authorized: unlimited			
Issued:			
December 31, 2013 – 84,803,818			
December 31, 2012 – 76,710,285	7	228,612,564	198,155,091
Warrants	7	376,892	376,892
Contributed surplus	7, 8	24,491,212	24,126,265
Accumulated other comprehensive loss		79,698	(57,115)
Accumulated deficit		(231,347,000)	(207,814,353)
Total shareholders' equity		22,213,366	14,786,780
Total liabilities and equity		28,222,027	22,078,090

See accompanying notes

On behalf of the Board:

/s/ Fred Stewart

/s/ Bob Schultz

Director

Director

ONCOLYTICS BIOTECH INC.
CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS

For the years ending December 31,	Notes	2013 \$	2012 \$	2011 \$
Expenses				
Research and development	8, 19, 20	18,506,064	31,402,625	23,386,685
Operating	8, 19, 20	5,392,660	5,285,425	5,334,582
Loss before the following		(23,898,724)	(36,688,050)	(28,721,267)
Write down of asset available for sale	21	—	—	(735,681)
Change in fair value of warrant liability	7	—	—	36,000
Interest		371,485	345,003	416,247
Loss before income taxes		(23,527,239)	(36,343,047)	(29,004,701)
Income tax expense	12	(5,408)	(30,474)	(40,000)
Net loss		(23,532,647)	(36,373,521)	(29,044,701)
<i>Other comprehensive income items that may be reclassified to net loss</i>				
Translation adjustment		136,813	60,386	39,159
Net comprehensive loss		(23,395,834)	(36,313,135)	(29,005,542)
Basic and diluted loss per common share		9 (0.28)	(0.48)	(0.41)
Weighted average number of shares (basic and diluted)		83,530,981	76,102,062	70,911,526

See accompanying notes

ONCOLYTICS BIOTECH INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

	Share Capital \$	Warrants \$	Contributed Surplus \$	Accumulated Other Comprehensive Income \$	Accumulated Deficit \$	Total \$
As at December 31, 2010	155,439,610	4,108,652	19,399,489	(156,660)	(142,396,131)	36,394,960
Net loss and comprehensive income	—	—	—	39,159	(29,044,701)	(29,005,542)
Exercise of warrants	21,487,080	(1,455,025)	—	—	—	20,032,055
Exercise of stock options	355,876	—	(62,473)	—	—	293,403
Share based compensation	—	—	1,805,503	—	—	1,805,503
As at December 31, 2011	177,282,566	2,653,627	21,142,519	(117,501)	(171,440,832)	29,520,379
Net loss and comprehensive income	—	—	—	60,386	(36,373,521)	(36,313,135)
Issued, pursuant to a bought deal financing	19,386,903	376,892	—	—	—	19,763,795
Expiry of warrants	—	(2,653,627)	2,653,627	—	—	—
Exercise of stock options	1,485,622	—	(400,632)	—	—	1,084,990
Share based compensation	—	—	730,751	—	—	730,751
As at December 31, 2012	198,155,091	376,892	24,126,265	(57,115)	(207,814,353)	14,786,780
Net loss and comprehensive income	—	—	—	136,813	(23,532,647)	(23,395,834)
Issued, pursuant to a bought deal financing	30,218,796	—	—	—	—	30,218,796
Exercise of stock options	238,677	—	(59,437)	—	—	179,240
Share based compensation	—	—	424,384	—	—	424,384
As at December 31, 2013	228,612,564	376,892	24,491,212	79,698	(231,347,000)	22,213,366

See accompanying notes

ONCOLYTICS BIOTECH INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ending December 31,	Notes	2013 \$	2012 \$	2011 \$
Operating Activities				
Net loss for the year		(23,532,647)	(36,373,521)	(29,044,701)
Amortization - property and equipment		131,623	109,275	92,590
Share based compensation	8, 19, 20	424,384	730,751	1,805,503
Change in fair value of warrant liability		—	—	(36,000)
Write down of asset available for sale		—	—	735,681
Unrealized foreign exchange loss	19	(89,721)	89,890	115,234
Net change in non-cash working capital	15	(1,374,172)	1,187,967	3,790,510
Cash used in operating activities		(24,440,533)	(34,255,638)	(22,541,183)
Investing Activities				
Acquisition of property and equipment	6	(254,834)	(126,412)	(257,790)
Redemption (purchase) of short-term investments	5	(32,416)	(32,441)	1,672,459
Cash provided by (used in) investing activities		(287,250)	(158,853)	1,414,669
Financing Activities				
Proceeds from exercise of stock options and warrants	7, 8	179,240	1,084,990	14,824,658
Proceeds from public offering	7	30,218,796	19,763,795	—
Cash provided by financing activities		30,398,036	20,848,785	14,824,658
Increase (decrease) in cash		5,670,253	(13,565,706)	(6,301,856)
Cash and cash equivalents, beginning of year		19,323,541	32,918,751	39,296,682
Impact of foreign exchange on cash and cash equivalents		226,534	(29,504)	(76,075)
Cash and cash equivalents, end of year		25,220,328	19,323,541	32,918,751

See accompanying notes

**ONCOLYTICS BIOTECH INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

December 31, 2013

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 year ended December 31, 2013, were authorized for issue in accordance with a resolution of the Board of Directors (the "Board") on March 12, 2014. 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 Oncolytics Biotech (Barbados) Inc., Oncolytics Biotech (US) Inc., and Oncolytics Biotech (UK) Inc. and are presented in Canadian dollars, our functional currency.

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 accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

Basis of consolidation

Our accounts include the accounts of Oncolytics Biotech Inc. and our subsidiaries. Subsidiaries are entities over which we have control which is achieved when we are exposed, or have the rights, to variable returns from our involvement with the investee and has the ability to affect those returns through our power to govern. 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: 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

ONCOLYTICS BIOTECH INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2013

Foreign currency translation

The financial statements for each of our subsidiaries are prepared using their functional currency. 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 and comprehensive loss.

Exceptions to this are where the monetary items form part of the net investment in a foreign operation and the foreign operation's functional currency is the local currency. 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 and comprehensive loss.

Research and development costs

Research costs are expensed as incurred, net of recoveries. 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 and government assistance

Investment tax credits and government assistance 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.

Share based payments

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 is set at equal to or higher than 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. Exercised stock options are settled with common shares issued from treasury.

We use the fair value based method of accounting for stock option awards granted under the Plan. We recognize compensation expense and a corresponding adjustment to contributed surplus equal to the fair value of the stock options granted using the Black Scholes Option Pricing Model. The fair value of stock options with a graded vesting schedule is determined based on different expected lives for the options that vest each year, as it would be if the award were viewed as several separate awards, each with

ONCOLYTICS BIOTECH INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2013

a different vesting date, and it is accounted for over the respective vesting period taking into consideration forfeiture estimates. Compensation expense is adjusted for subsequent changes in management's estimate of the number of options that are expected to vest.

Share based payments to non-employees are measured at the date we obtain the goods or the date the counterparty renders the service.

Financial instruments

Financial assets

Financial assets are comprised of cash and cash equivalents, accounts receivable, and short-term investments. 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 reporting 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 - Impact upon adoption of IFRS 13

We adopted IFRS 13 on January 1, 2013 on a prospective basis. Under previous IFRS, guidance on measuring and disclosing fair value was dispersed among the specific standards requiring fair value measurements. IFRS 13 is a comprehensive standard for fair value measurement and disclosure requirements for use across all IFRS standards. This new standard clarifies that fair value

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is the price that would be received to sell an asset, or paid to transfer a liability in an orderly transaction between market participants, at the measurement date. It also establishes disclosures about fair value measurement. The adoption of IFRS 13 did not require any adjustments to the valuation techniques we have used to measure fair value and did not result in any measurement adjustments as at January 1, 2013.

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.

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.

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 is related to items charged or credited to either other comprehensive income or directly to equity.

Accounting Standards and Interpretations Adopted on January 1, 2013

In addition to the adoption of the accounting standard changes for IFRS 13 – Fair Value Measurement described above, we adopted the following accounting standard changes effective January 1, 2013.

IFRS 10, *Consolidated Financial Statements*, (“IFRS 10”) replaces consolidation requirements in IAS 27, *Consolidated and Separate Financial Statements*, and SIC-12, *Consolidation – Special Purpose Entities*, and establishes principles for identifying when an entity controls other entities.

IFRS 11, *Joint Arrangements*, (“IFRS 11”) replaces IAS 31, *Interests in Joint Ventures*, and SIC-13, *Jointly Controlled Entities – Non-monetary Contributions by Venturers*, and requires a single method to account for interests in jointly controlled entities.

IFRS 12, *Disclosure of Interests in Other Entities*, (“IFRS 12”) establishes comprehensive disclosure requirements for all forms of interests in other entities, including joint arrangements, associates, and special purpose vehicles.

Amendments to IAS 1, *Presentation of Financial Statements*, require entities to group items within other comprehensive income that may be reclassified to net income.

The standards and amendments listed above did not have a significant impact on the Company's financial statements.

Accounting Standards and Interpretations Issued but Not Yet Effective

Financial Instruments

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 IASB removed the January 1,

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2015 mandatory effective date from IFRS 9. The IASB will decide on a new effective date when the entire IFRS 9 project is closer to completion. Entities may still early-adopt the finalized and issued provisions of IFRS 9. We do not anticipate that there will be a material impact on our financial position or results of operations.

Offsetting Financial Assets and Liabilities

In December 2011, the IASB issued amendments to IAS 32 Financial Instruments: Presentation. The amendments are intended to clarify certain aspects of the existing guidance on offsetting financial assets and financial liabilities due to the diversity in application of the requirements on offsetting. The IASB also amended IFRS 7 to require disclosures about all recognized financial instruments that are set off in accordance with IAS 32. The amendments also require disclosure of information about recognized financial instruments subject to enforceable master netting arrangements and similar agreements even if they are not set off under IAS 32.

The amendments to IAS 32 are effective for annual periods beginning on or after Jan. 1, 2014. We are currently assessing the impact of adopting the IAS 32 amendments on our consolidated financial statements. The new offsetting disclosures are required for annual or interim periods beginning on or after Jan. 1, 2013, and are expected to be included in our March 31, 2013 interim reporting period. The amendments need to be provided retrospectively to all comparative periods.

Note 4: 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:

Share based payments and warrants

We measure our share based payment expense and our warrant value 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 and warrants 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, dividend yield, and rate of forfeitures and making assumptions about them. The value of the share based payment expense and for the warrants for the year along with the assumptions and model used for estimating fair value for share based compensation transactions are disclosed in notes 7 and 8.

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.

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.

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To date we have determined that none of our deferred tax assets should be recognized. Our deferred tax assets are mainly comprised 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 5: Cash Equivalents and Short Term Investments

Cash Equivalents

Cash equivalents consist of interest bearing deposits with our bank totaling \$22,032,832 (December 31, 2012 - \$15,058,729). The current annual interest rate earned on these deposits is 1.08% (December 31, 2012 – 1.28%).

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 %
December 31, 2013						
Short-term investments	2,001,644	2,001,644	—	2,001,644	2,001,644	1.50%
December 31, 2012						
Short-term investments	1,969,228	1,969,228	—	1,969,228	1,969,228	1.64%

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

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Note 6: Property and Equipment

	Medical Equipment	Computer Equipment	Office Furniture	Office Equipment	Leasehold Improvements	Total
Cost						
As at December 31, 2011	144,259	459,194	146,990	56,102	191,999	998,544
Additions	44,280	46,001	23,035	21,953	(8,857)	126,412
As at December 31, 2012	188,539	505,195	170,025	78,055	183,142	1,124,956
Additions	—	84,507	3,619	—	166,708	254,834
As at December 31, 2013	188,539	589,702	173,644	78,055	349,850	1,379,790
Amortization						
As at December 31, 2011	69,146	275,514	85,585	31,279	144,909	606,433
Amortization for the year	18,358	62,747	9,947	7,561	10,662	109,275
As at December 31, 2012	87,504	338,261	95,532	38,840	155,571	715,708
Amortization for the year	16,405	59,727	9,186	7,162	39,143	131,623
As at December 31, 2013	103,909	397,988	104,718	46,002	194,714	847,331
Net book value						
As at December 31, 2013	84,630	191,714	68,926	32,053	155,136	532,459
As at December 31, 2012	101,035	166,934	74,493	39,215	27,571	409,248

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Note 7: Share Capital

Authorized:

Unlimited number of no par value common shares

Issued:	Shares		Warrants		
	Number	Amount \$	Number	Equity Amount \$	Liability Amount \$
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	136,683	355,876	—	—	—
Expired warrants	—	—	(12,000)	—	(36,000)
Balance, December 31, 2011	71,251,335	177,282,566	2,170,110	2,653,627	—
Exercise of stock options	393,200	1,485,622	—	—	—
Issued for cash, pursuant to February 8, 2012 bought deal financing ^(a)	5,065,750	21,276,150	303,945	376,892	—
Expired warrants	—	—	(2,170,110)	(2,653,627)	—
Share issue costs	—	(1,889,247)	—	—	—
Balance, December 31, 2012	76,710,285	198,155,091	303,945	376,892	—
Issued for cash pursuant to February 25, 2013 public offering ^(b)	8,000,000	32,848,000	—	—	—
Exercise of stock options	93,533	238,676	—	—	—
Share issue costs	—	(2,629,203)	—	—	—
Balance, December 31, 2013	84,803,818	228,612,564	303,945	376,892	—

(a) Pursuant to a bought deal financing, we issued 5,065,750 common shares at an issue price of \$4.20 per common share for gross proceeds of \$21,276,150. In connection with this bought deal financing, we issued 303,945 compensation options to the underwriters with an exercise price of \$4.20 expiring on February 8, 2014 ("Broker Warrants"). The fair value of the Broker Warrants was \$376,892 (\$1.24 per Broker Warrant) and has been included in the share issue costs of the financing. The fair value was determined using the Black Scholes Option Pricing Model.

(b) Pursuant to a public offering, we issued 8,000,000 common shares at an issue price of US\$4.00 per common share for gross proceeds of US\$32,000,000.

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 met this requirement and we had presented the value of these warrants as a deemed current liability on the consolidated statement of financial position. As these warrants were exercised, the value of the recorded warrant liability

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was 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 was no cash flow impact as a result of the accounting treatment for changes in the fair value of the warrant liability or when warrants expire unexercised.

As at December 31, 2013, our warrant liability is \$nil (December 31, 2012 - \$nil) 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:

	2013	2012
Risk-free interest rate	—%	1.09%
Expected hold period to exercise (years)	—	2.00
Volatility in the price of the Company's shares	—%	52.28%
Dividend yield	Zero	Zero

The following table summarizes our outstanding warrants as at December 31, 2013:

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)
\$4.20	303,945	—	—	—	303,945	0.08
	303,945	—	—	—	303,945	0.08

Note 8: 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 December 31:

	2013		2012		2011	
	Stock Options	Weighted Average Exercise Price \$	Stock Options	Weighted Average Exercise Price \$	Stock Options	Weighted Average Exercise Price \$
Outstanding, beginning of the year	5,925,377	4.31	5,677,577	4.35	4,703,760	4.53
Granted during the year	1,666,000	2.12	1,155,500	3.57	1,325,000	4.21
Forfeited during the year	(151,666)	4.57	(274,500)	5.10	(15,500)	5.66
Expired during the year	(1,427,500)	4.20	(240,000)	3.90	(199,000)	8.35
Exercised during the year	(93,533)	1.92	(393,200)	2.76	(136,683)	2.15
Outstanding, end of the year	5,918,678	3.75	5,925,377	4.31	5,677,577	4.37
Options exercisable, end of the year	4,597,678	4.32	5,744,044	4.37	5,384,911	4.35

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The following table summarizes information about the stock options outstanding and exercisable at December 31, 2013:

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	2,171,928	8.6	1.89	850,928	2.08
\$2.70 - \$3.89	1,274,000	7	3.59	1,274,000	3.59
\$4.00 - \$5.92	1,593,750	5.1	4.57	1,593,750	4.57
\$6.72 - \$9.76	879,000	5.3	7.06	879,000	7.06
	5,918,678	6.8	3.75	4,597,678	4.32

Non-exercisable options vest annually over periods ranging from one to three years or upon satisfaction of certain performance conditions. We have reserved 7,427,208 common shares for issuance relating to outstanding stock options.

Compensation expense related to options granted to employees, directors and consultants for the year ended December 31, 2013 was \$424,384 (2012 - \$730,751; 2011 - \$1,805,503).

The estimated fair value of stock options issued during the year was determined using the Black Scholes Option Pricing Model using the following weighted average assumptions and fair value of options:

	2013	2012	2011
Risk-free interest rate	1.08%	1.15%	1.31%
Expected hold period to exercise	2.89 years	2.13 years	3.35 years
Volatility in the price of the Company's shares	62.62%	56.58%	57.28%
Rate of forfeiture	2.5%	—%	—%
Dividend yield	Nil	Nil	Nil
Weighted average fair value of options	\$0.85	\$0.80	\$1.74

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.

Note 9: Loss Per Common Share

Loss per common share is calculated using net loss for the year and the weighted average number of common shares outstanding for the year ended December 31, 2013 of 83,530,981 (2012 - 76,102,062; 2011 - 70,911,526). 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 10: Commitments

We are committed to payments totaling \$6,024,890 during 2014 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:

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	Amount \$
2014	94,888
2015	97,428
2016	40,595
	232,911

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

Note 11: Contingencies

Assumption Agreement

In 1999, we entered into an agreement that assumed certain obligations (the “Assumption Agreement”) in connection with a Share Purchase Agreement (the “Agreement”) between SYNSORB and our former shareholders to make milestone payments and royalty payments.

As of December 31, 2013, 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 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 December 31, 2013, we estimate that the accumulated work in kind totals approximately \$301,000.

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Note 12: Income Taxes

The provision for income taxes recorded in the consolidated financial statements differs from the amount which would be obtained by applying the statutory income tax rate to the loss before income taxes as follows:

	2013	2012	2011
Loss before income taxes	(23,527,239)	(36,343,047)	(29,004,701)
Statutory Canadian corporate tax rate	25.00%	25.00%	26.50%
Anticipated tax recovery	(5,881,810)	(9,085,762)	(7,686,246)
Foreign jurisdiction tax rate difference	4,567,094	7,218,015	5,797,338
Employee stock based compensation	106,096	182,688	478,458
Write down of asset available for sale	—	—	97,478
Revaluation of the fair value of the warrant liability	—	—	(9,540)
Change in tax rate	—	(686,250)	64,163
Adjustment to opening tax pools	114,629	24,534	145,990
Other permanent differences	29,432	243,324	(144,093)
Change in deferred tax benefits deemed not probable to be recovered	1,098,159	2,133,925	1,296,452
Deferred income tax recovery	—	—	—
Current income taxes	33,600	30,474	40,000
Adjustment in respect to prior periods	(28,192)	—	—
Net current tax expense	5,408	30,474	40,000

As at December 31, 2013, we have the following non-capital losses for income tax purposes in Canada:

Expiry	\$
2026	9,809,000
2027	12,170,000
2029	4,009,000
2030	4,774,000
2031	4,343,000
2032	2,873,000
2033	2,068,000
	40,046,000

As at December 31, 2013, we have non-refundable federal investment tax credits of approximately \$5,093,000 which are available to reduce future taxes payable and unclaimed scientific research and experimental development expenditures available to reduce future years' taxable income of approximately \$23,405,000 over an indefinite future period. We have not recorded the potential benefits of these tax pools in the consolidated financial statements.

Deferred tax assets are recognized, to the extent that it is probable that taxable income will be available, against which the deductible temporary differences and the carry-forward of unused tax credits and unused tax losses can be utilized. The components of our unrecognized deferred tax asset are as follows:

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	2013	2012	2011
	\$	\$	\$
Net operating losses carried forward	12,180,030	11,874,273	9,569,715
Scientific research and experimental development	5,851,177	4,639,667	4,528,214
Investment tax credits	3,820,063	3,075,619	2,990,243
Undepreciated capital costs in excess of book value of property and equipment and intellectual property	1,784,713	1,764,604	1,049,984
Share issue costs	853,578	635,495	592,848
Net capital losses carried forward	7,035	7,035	91,960
Unrecognized deferred tax asset	24,496,596	21,996,693	18,822,964

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, cash and cash equivalents and short-term investments in the definition of capital.

	2013	2012
	\$	\$
Cash and cash equivalents	25,220,328	19,323,541
Short-term investments	2,001,644	1,969,228
Shareholders' equity	22,213,366	14,786,780

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 July 3, 2012, 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. Our renewed Base Shelf expires on August 3, 2014.

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We are not subject to externally imposed capital requirements and there have been no changes in how we define or manage our capital in 2013.

Note 14: Financial Instruments

Our financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, and accounts payable. As at December 31, 2013, 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. 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 2013 by approximately \$145,337. 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 2013 by approximately \$71,380. The impact of a \$0.10 increase in the value of the Euro against the Canadian dollar would have increased our net loss in 2013 by approximately \$220,726.

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 December 31, 2013 are as follows:

	U.S. dollars \$	British pounds £	Euro €
Cash and cash equivalents	1,721,819	107,027	79,325
Accounts payable	(6,358,709)	(72,393)	(44,237)
	(4,636,890)	34,634	35,088

ONCOLYTICS BIOTECH INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2013

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

	2013	2012	2011
	\$	\$	\$
<i>Change in:</i>			
Accounts receivable	(60,874)	10,413	229,596
Prepaid expenses	(30,649)	390,482	(442,642)
Accounts payable and accrued liabilities	(1,282,649)	787,072	4,003,556
Change in non-cash working capital related to operating activities	(1,374,172)	1,187,967	3,790,510

Other Cash Flow Disclosures

	2013	2012	2011
	\$	\$	\$
Cash interest received	371,485	341,503	416,247
Cash taxes paid	6,102	22,800	3,094

Note 16: Alberta Heritage Loan

We received a loan of \$150,000 from the Alberta Heritage Foundation for Medical Research. Pursuant to the terms of the agreement, the Company is required to repay this amount in annual installments from the date of commencement of sales in an amount equal to the lesser of: (a) 5% of the gross sales generated by the Company; or (b) \$15,000 per annum until the entire loan has been paid in full.

Note 17: Indemnification of Officers and Directors

Our corporate by-laws require that, except to the extent expressly prohibited by law, we will indemnify our officers and directors against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment reasonably incurred in respect of any civil, criminal or administrative action or proceeding as it relates to their services to the Company. The by-laws provide no limit to the amount of the indemnification. We have purchased directors' and officers' insurance coverage to cover claims made against the directors and officers during the applicable policy periods. The amounts and types of coverage have varied from period to period as dictated by market conditions. We believe that we have adequate insurance coverage; however, there is no guarantee that all indemnification payments will be covered under our existing insurance policies.

There is no pending litigation or proceeding involving any of our officers or directors as to which indemnification is being sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

Note 18: Economic Dependence

We are economically dependent on our toll manufacturers. We primarily use one toll manufacturer in the U.S. to produce the clinical grade REOLYSIN required for our clinical trial program. Any significant disruption of the services provided by our primary toll manufacturer has the potential to delay the progress of our clinical trial program. We have used another toll manufacturer in the U.K. that has also produced clinical grade REOLYSIN at a smaller scale. We have attempted to mitigate this risk by producing sufficient REOLYSIN in advance of patient enrollment in a particular clinical trial.

ONCOLYTICS BIOTECH INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2013

Note 19: 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.

	2013	2012	2011
	\$	\$	\$
<i>Included in research and development expenses:</i>			
Realized foreign exchange loss (gain)	170,036	(123,749)	56,721
Unrealized non-cash foreign exchange loss	(89,721)	89,890	115,234
Non-cash share based compensation	142,972	406,129	1,137,467
<i>Included in operating expenses</i>			
Amortization of property and equipment	131,623	109,275	92,950
Non-cash share based compensation	281,412	324,622	668,036
Office minimum lease payments	91,332	88,792	69,197

Note 20: 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.

	2013	2012	2011
	\$	\$	\$
Short-term employee benefits	2,950,984	2,544,285	2,570,064
Share-based payments	184,037	809,381	1,444,260
	3,135,021	3,353,666	4,014,324

Note 21: 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 had reflected our investment in BCBC's intellectual property as an asset held for sale. In 2011, despite our efforts to sell our investment in BCBC, we were unsuccessful in completing a sale and as a result, we wrote down our investment in BCBC to \$nil.

ONCOLYTICS BIOTECH INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2013

Note 22: Subsequent Event

On February 27, 2014, we entered into a common share purchase agreement (the "Purchase Agreement") with Lincoln Park Capital Fund, LLC ("LPC") that will provide an initial investment in Oncolytics of US\$1.0 million and make available additional periodic investments of up to US\$25.0 million over a 30-month term (the "Financing").

Upon execution of the Purchase Agreement, we received an investment of US\$1.0 million in exchange for the issuance of 600,962 common shares to LPC. In addition, subject to the terms and conditions of the Purchase Agreement, we, at our sole discretion, may sell up to US\$25.0 million worth of common shares to LPC over the 30-month term. The purchase price of the common shares will be based on prevailing market prices of our common shares immediately preceding the notice of a sale without any fixed discount. Subject to the Purchase Agreement, we control the timing and amount of any future investment and LPC is obligated to make such purchases, if and when we elect. The Purchase Agreement does not impose any upper price limit restrictions, negative covenants or restrictions on our future financing activities and we can terminate the Purchase Agreement at any time at our sole discretion without any monetary cost or penalty. We will issue a commitment fee in common shares to LPC in connection with the Purchase Agreement and on a pro rata basis as the US\$26.0 million is funded by LPC. LPC has also agreed not to cause, or engage in any manner whatsoever in, any direct or indirect short selling or hedging of our common shares.

AMENDING AGREEMENT

THIS AMENDING AGREEMENT made effective as of the 12 day of March, 2014.

BETWEEN:

ONCOLYTICS BIOTECH INC.,
("ONCOLYTICS")

- and -

BRADLEY GEORGE THOMPSON,
(the "Employee")

WHEREAS the Employee is an officer of Oncolytics whose terms of employment are set forth in the Executive Employment Agreement ("Employment Agreement") dated effective January 1, 2013;

AND WHEREAS Oncolytics and the Employee wish to amend the Employment Agreement;

NOW THEREFORE in consideration of the mutual covenants contained in this Amending Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, it is agreed as follows:

1 Interpretation

This Amending Agreement is supplemental to and shall form one agreement with the Employment Agreement, and the Employment Agreement and this Amending Agreement shall be read together and have effect so far as practicable as though all the provisions thereof and hereof were contained in one instrument. In this Amending Agreement, including the recitals hereto, unless there is something within the subject matter or context inconsistent therewith, expressions herein, unless otherwise defined herein, have the same meanings as the corresponding expressions defined in the Employment Agreement.

2 Amendment to the Employment Agreement

The Employment Agreement is amended to add the following as a new Section 3.1:

"Section 3.1 - Sale Transaction Bonus"

(1) Upon the completion of any Sale Transaction (as defined below) which is publicly announced during the term of this Agreement in which the Transaction Price (as defined below) is greater than \$CDN7.50 per share, the Employee shall be entitled to receive a cash payment ("Sale Transaction Bonus") in an amount calculated as the sum of:

- (a) for a Transaction Price of \$7.51 to \$10.00, the Transaction Price minus \$7.50, multiplied by 0.0045;
- (b) plus for a Transaction Price of \$10.01 to \$15.00, the Transaction Price minus \$10.00, multiplied by 0.00675;
- (c) plus for a Transaction Price of \$15.01 to \$20.00, the Transaction Price minus \$15.00, multiplied by 0.009;
- (d) plus for a Transaction Price of \$20.01 and higher, the Transaction Price minus \$20.00, multiplied by 0.01125

multiplied by the Outstanding Share Amount.

(2) For the purposes of Section 3.1(1), the following defined terms shall have the meanings indicated:

- (a) "Outstanding Share Amount" means (a) in respect of a transaction referred to in (i) of the definition of Sale Transaction, the number of common shares of Oncolytics sold by shareholders of Oncolytics pursuant to such transaction; and (b) in respect of a transaction referred to in (ii) and (iii) of the definition of Sale Transaction, the aggregate number of issued and outstanding common shares of Oncolytics as at the date of completion of such transaction;
- (b) "Sale Transaction" means:
 - (i) the sale by holders of common shares of Oncolytics of not less than fifty percent (50%) of the outstanding common shares of Oncolytics for cash or securities of another entity, provided Oncolytics has entered into an agreement with such entity or its affiliate to support the completion of such transaction;
 - (ii) a merger, amalgamation, arrangement or other similar transaction involving Oncolytics where the holders of common shares receive cash or securities of another entity; or
 - (iii) the sale of all or substantially all of Oncolytics's assets followed by a liquidating distribution to the holders of common shares of cash or securities of another entity,

provided, however, that notwithstanding the foregoing, a Sale Transaction shall be deemed not to have occurred merely by reason of an acquisition of Oncolytics's securities by, or any consolidation, merger or exchange of securities with, any entity that, immediately prior to such acquisition, consolidation, merger or exchange of securities was an affiliate of Oncolytics (within the meaning of the *Securities Act* (Alberta), and for greater certainty

a Sale Transaction shall be deemed not to include an internal re-organization of Oncolytics; and

- (c) "Transaction Price" means, in respect of a transaction referred to in (i) or (ii) of the definition of Sale Transaction, the amount per common share received by shareholders of Oncolytics pursuant to such transaction which, in the case of a transaction in which securities of another entity form part of the consideration for paid for the common shares of Oncolytics pursuant to such transaction, the amount deemed to be received by shareholders per common share in respect of each such security shall be the "fair market value" of the security, as determined by the Board; and (b) in respect of a transaction referred to in (iii) of the definition of Sale Transaction, the gross proceeds received by Oncolytics pursuant to such transaction, divided by the Outstanding Share Amount.

3 Confirmation

The parties hereto hereby acknowledge and confirm that, except as specifically amended by the provisions of this Amending Agreement, all of the terms and conditions contained in the Employment Agreement are and shall remain in full force and effect, unamended, in accordance with the provisions thereof.

4 Miscellaneous

- (a) This Agreement shall be governed by and construed in accordance with the laws in force in the Province of Alberta. The parties hereby submit to the jurisdiction of the Courts of Alberta.
- (b) The parties shall with reasonable diligence take all action, do all things, attend or cause their representatives to attend all meetings and execute all further documents, agreements and assurances as may be required from time to time in order to carry out the terms and conditions of this Agreement in accordance with their true intent.

IN WITNESS WHEREOF the parties hereto have executed this Amending Agreement as of the date and year first above written.

ONCOLYTICS BIOTECH INC.

Per: */s/ Kirk Look*

Per: */s/ Matt Coffey*

/s/ Sinead Boyle

Witness

/s/ Brad Thompson

BRADLEY G. THOMPSON

AMENDING AGREEMENT

THIS AMENDING AGREEMENT made effective as of the 12 day of March, 2014.

BETWEEN:

ONCOLYTICS BIOTECH INC.,
("ONCOLYTICS")

- and -

KIRK LOOK,
(the "Employee")

WHEREAS the Employee is an officer of Oncolytics whose terms of employment are set forth in the Executive Employment Agreement ("Employment Agreement") dated effective January 1, 2013;

AND WHEREAS Oncolytics and the Employee wish to amend the Employment Agreement;

NOW THEREFORE in consideration of the mutual covenants contained in this Amending Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, it is agreed as follows:

1 Interpretation

This Amending Agreement is supplemental to and shall form one agreement with the Employment Agreement, and the Employment Agreement and this Amending Agreement shall be read together and have effect so far as practicable as though all the provisions thereof and hereof were contained in one instrument. In this Amending Agreement, including the recitals hereto, unless there is something within the subject matter or context inconsistent therewith, expressions herein, unless otherwise defined herein, have the same meanings as the corresponding expressions defined in the Employment Agreement.

2 Amendment to the Employment Agreement

The Employment Agreement is amended to add the following as a new Section 3.1:

"Section 3.1 - Sale Transaction Bonus"

(1) Upon the completion of any Sale Transaction (as defined below) which is publicly announced during the term of this Agreement in which the Transaction Price (as defined below) is greater than \$CDN7.50 per share, the Employee shall be entitled to receive a cash payment ("Sale Transaction Bonus") in an amount calculated as the sum of:

- (a) for a Transaction Price of \$7.51 to \$10.00, the Transaction Price minus \$7.50, multiplied by 0.0020;
- (b) plus for a Transaction Price of \$10.01 to \$15.00, the Transaction Price minus \$10.00, multiplied by 0.0030;
- (c) plus for a Transaction Price of \$15.01 to \$20.00, the Transaction Price minus \$15.00, multiplied by 0.0040;
- (d) plus for a Transaction Price of \$20.01 and higher, the Transaction Price minus \$20.00, multiplied by 0.0060

multiplied by the Outstanding Share Amount.

(2) For the purposes of Section 3.1(1), the following defined terms shall have the meanings indicated:

- (a) "Outstanding Share Amount" means (a) in respect of a transaction referred to in (i) of the definition of Sale Transaction, the number of common shares of Oncolytics sold by shareholders of Oncolytics pursuant to such transaction; and (b) in respect of a transaction referred to in (ii) and (iii) of the definition of Sale Transaction, the aggregate number of issued and outstanding common shares of Oncolytics as at the date of completion of such transaction;
- (b) "Sale Transaction" means:
 - (i) the sale by holders of common shares of Oncolytics of not less than fifty percent (50%) of the outstanding common shares of Oncolytics for cash or securities of another entity, provided Oncolytics has entered into an agreement with such entity or its affiliate to support the completion of such transaction;
 - (ii) a merger, amalgamation, arrangement or other similar transaction involving Oncolytics where the holders of common shares receive cash or securities of another entity; or
 - (iii) the sale of all or substantially all of Oncolytics's assets followed by a liquidating distribution to the holders of common shares of cash or securities of another entity,

provided, however, that notwithstanding the foregoing, a Sale Transaction shall be deemed not to have occurred merely by reason of an acquisition of Oncolytics's securities by, or any consolidation, merger or exchange of securities with, any entity that, immediately prior to such acquisition, consolidation, merger or exchange of securities was an affiliate of Oncolytics (within the meaning of the *Securities Act* (Alberta), and for greater certainty

a Sale Transaction shall be deemed not to include an internal re-organization of Oncolytics; and

- (c) "Transaction Price" means, in respect of a transaction referred to in (i) or (ii) of the definition of Sale Transaction, the amount per common share received by shareholders of Oncolytics pursuant to such transaction which, in the case of a transaction in which securities of another entity form part of the consideration for paid for the common shares of Oncolytics pursuant to such transaction, the amount deemed to be received by shareholders per common share in respect of each such security shall be the "fair market value" of the security, as determined by the Board; and (b) in respect of a transaction referred to in (iii) of the definition of Sale Transaction, the gross proceeds received by Oncolytics pursuant to such transaction, divided by the Outstanding Share Amount.

3 Confirmation

The parties hereto hereby acknowledge and confirm that, except as specifically amended by the provisions of this Amending Agreement, all of the terms and conditions contained in the Employment Agreement are and shall remain in full force and effect, unamended, in accordance with the provisions thereof.

4 Miscellaneous

- (a) This Agreement shall be governed by and construed in accordance with the laws in force in the Province of Alberta. The parties hereby submit to the jurisdiction of the Courts of Alberta.
- (b) The parties shall with reasonable diligence take all action, do all things, attend or cause their representatives to attend all meetings and execute all further documents, agreements and assurances as may be required from time to time in order to carry out the terms and conditions of this Agreement in accordance with their true intent.

IN WITNESS WHEREOF the parties hereto have executed this Amending Agreement as of the date and year first above written.

ONCOLYTICS BIOTECH INC.

Per: */s/ Brad Thompson*

Per: */s/ Matt Coffey*

/s/ Sinead Boyle

Witness

/s/ Kirk Look

KIRK LOOK

AMENDING AGREEMENT

THIS AMENDING AGREEMENT made effective as of the 12 day of March, 2014.

BETWEEN:

ONCOLYTICS BIOTECH INC.,
("ONCOLYTICS")

- and -

MATTHEW C. COFFEY,
(the "Employee")

WHEREAS the Employee is an officer of Oncolytics whose terms of employment are set forth in the Executive Employment Agreement ("Employment Agreement") dated effective January 1, 2013;

AND WHEREAS Oncolytics and the Employee wish to amend the Employment Agreement;

NOW THEREFORE in consideration of the mutual covenants contained in this Amending Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, it is agreed as follows:

1 Interpretation

This Amending Agreement is supplemental to and shall form one agreement with the Employment Agreement, and the Employment Agreement and this Amending Agreement shall be read together and have effect so far as practicable as though all the provisions thereof and hereof were contained in one instrument. In this Amending Agreement, including the recitals hereto, unless there is something within the subject matter or context inconsistent therewith, expressions herein, unless otherwise defined herein, have the same meanings as the corresponding expressions defined in the Employment Agreement.

2 Amendment to the Employment Agreement

The Employment Agreement is amended to add the following as a new Section 3.1:

"Section 3.1 - Sale Transaction Bonus"

(1) Upon the completion of any Sale Transaction (as defined below) which is publicly announced during the term of this Agreement in which the Transaction Price (as defined below) is greater than \$CDN7.50 per share, the Employee shall be entitled to receive a cash payment ("Sale Transaction Bonus") in an amount calculated as the sum of:

- (a) for a Transaction Price of \$7.51 to \$10.00, the Transaction Price minus \$7.50, multiplied by 0.0035;
- (b) plus for a Transaction Price of \$10.01 to \$15.00, the Transaction Price minus \$10.00, multiplied by 0.00525;
- (c) plus for a Transaction Price of \$15.01 to \$20.00, the Transaction Price minus \$15.00, multiplied by 0.007;
- (d) plus for a Transaction Price of \$20.01 and higher, the Transaction Price minus \$20.00, multiplied by 0.00875

multiplied by the Outstanding Share Amount.

(2) For the purposes of Section 3.1(1), the following defined terms shall have the meanings indicated:

- (a) "Outstanding Share Amount" means (a) in respect of a transaction referred to in (i) of the definition of Sale Transaction, the number of common shares of Oncolytics sold by shareholders of Oncolytics pursuant to such transaction; and (b) in respect of a transaction referred to in (ii) and (iii) of the definition of Sale Transaction, the aggregate number of issued and outstanding common shares of Oncolytics as at the date of completion of such transaction;
- (b) "Sale Transaction" means:
 - (i) the sale by holders of common shares of Oncolytics of not less than fifty percent (50%) of the outstanding common shares of Oncolytics for cash or securities of another entity, provided Oncolytics has entered into an agreement with such entity or its affiliate to support the completion of such transaction;
 - (ii) a merger, amalgamation, arrangement or other similar transaction involving Oncolytics where the holders of common shares receive cash or securities of another entity; or
 - (iii) the sale of all or substantially all of Oncolytics's assets followed by a liquidating distribution to the holders of common shares of cash or securities of another entity,

provided, however, that notwithstanding the foregoing, a Sale Transaction shall be deemed not to have occurred merely by reason of an acquisition of Oncolytics's securities by, or any consolidation, merger or exchange of securities with, any entity that, immediately prior to such acquisition, consolidation, merger or exchange of securities was an affiliate of Oncolytics (within the meaning of the *Securities Act* (Alberta), and for greater certainty

a Sale Transaction shall be deemed not to include an internal re-organization of Oncolytics; and

- (c) "Transaction Price" means, in respect of a transaction referred to in (i) or (ii) of the definition of Sale Transaction, the amount per common share received by shareholders of Oncolytics pursuant to such transaction which, in the case of a transaction in which securities of another entity form part of the consideration for paid for the common shares of Oncolytics pursuant to such transaction, the amount deemed to be received by shareholders per common share in respect of each such security shall be the "fair market value" of the security, as determined by the Board; and (b) in respect of a transaction referred to in (iii) of the definition of Sale Transaction, the gross proceeds received by Oncolytics pursuant to such transaction, divided by the Outstanding Share Amount.

3 Confirmation

The parties hereto hereby acknowledge and confirm that, except as specifically amended by the provisions of this Amending Agreement, all of the terms and conditions contained in the Employment Agreement are and shall remain in full force and effect, unamended, in accordance with the provisions thereof.

4 Miscellaneous

- (a) This Agreement shall be governed by and construed in accordance with the laws in force in the Province of Alberta. The parties hereby submit to the jurisdiction of the Courts of Alberta.
- (b) The parties shall with reasonable diligence take all action, do all things, attend or cause their representatives to attend all meetings and execute all further documents, agreements and assurances as may be required from time to time in order to carry out the terms and conditions of this Agreement in accordance with their true intent.

IN WITNESS WHEREOF the parties hereto have executed this Amending Agreement as of the date and year first above written.

ONCOLYTICS BIOTECH INC.

Per: /s/ Matt Coffey

Per: /s/ Kirk Look

/s/ Sinead Boyle

Witness

/s/ Matthew Coffey

MATTHEW C. COFFEY

LIST OF SUBSIDIARIES

Name	Jurisdiction
Oncolytics Biotech (Barbados) Inc.	Barbados
Oncolytics Biotech (US) Inc.	Delaware
Oncolytics Biotech (U.K.) Inc.	England and Wales
Valens Pharma Ltd.	Alberta

CERTIFICATION

I, Brad Thompson, certify that:

1. I have reviewed this annual report on Form 20-F of Oncolytics Biotech Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 19, 2014

/s/ Brad Thompson

Brad Thompson, PhD
Chief Executive Officer
Principal Executive Officer

CERTIFICATION

I, Kirk Look, certify that:

1. I have reviewed this annual report on Form 20-F of Oncolytics Biotech Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 19, 2014

/s/ Kirk Look
Kirk Look, CA
Chief Financial Officer
Principal Accounting and Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of Oncolytics Biotech Inc. (the “Company”) on Form 20-F for the fiscal year ended December 31, 2013 as filed with the Securities and Exchange Commission on the date here of (the “Report”), I, Brad Thompson, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Brad Thompson

Brad Thompson, PhD
Chief Executive Officer
Principal Executive Officer
March 19, 2014

A signed original of this written statement required by Section 906 has been provided to Oncolytics Biotech Inc. and will be retained by Oncolytics Biotech Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of Oncolytics Biotech Inc. (the “Company”) on Form 20-F for the fiscal year ended December 31, 2013 as filed with the Securities and Exchange Commission on the date here of (the “Report”), I, Kirk Look, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Kirk Look

Kirk Look, CA
Chief Financial Officer
Principal Accounting and Financial Officer
March 19, 2014

A signed original of this written statement required by Section 906 has been provided to Oncolytics Biotech Inc. and will be retained by Oncolytics Biotech Inc. and furnished to the Securities and Exchange Commission or its staff upon request.



MANAGEMENT DISCUSSION & ANALYSIS

2013

ONCOLYTICS BIOTECH INC.
MANAGEMENT DISCUSSION & ANALYSIS
2013

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March 12, 2014

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

BASIS OF PRESENTATION

Our Management Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") should be read in conjunction with our 2013 audited consolidated financial statements and notes thereto, which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). This MD&A along with our consolidated financial statements for the year ended December 31, 2013, were authorized for issue in accordance with a resolution of the Board of Directors (the "Board") on March 12, 2014.

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 2014 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 2013

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 each year is to advance REOLYSIN through the various steps and stages of development required for potential 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 clinical trial program is made up of randomized and non-randomized clinical trials that are sponsored by Oncolytics and by third parties. We began 2013 with a clinical program consisting of 16 clinical trials which included seven randomized trials. Of these 16 clinical trials, we fund four and third parties sponsor the other 12 clinical trials. During 2013, we completed enrollment in our U.S. phase II non-small cell lung cancer clinical trial, announced top-line data from stage 1 of our randomized head and neck clinical trial and announced additional clinical trial results from our phase II squamous cell lung cancer, our U.S. Phase II metastatic melanoma trial, and our U.S. Phase II non-small cell lung cancer trials. We exited 2013 with a clinical trial program consisting of 15 clinical trials which includes seven randomized clinical trials. Of these 15 clinical trials, we fund three clinical trials and third parties sponsor the other 12.

Clinical Trial - Stage 1 of our Randomized Phase III Head and Neck Trial

In November 2013, we announced positive top-line data for the endpoints from Stage 1 of our double blinded, randomized clinical study examining REOLYSIN in combination with carboplatin and paclitaxel in patients with second-line platinum-refractory, taxane-naïve head and neck cancers. Summary clinical trial results included:

Efficacy

- An analysis was performed on an intent-to-treat basis of the 118 patients with loco-regional head and neck cancer, with or without metastases. Patients in the control arm were treated with carboplatin and paclitaxel, while patients in the test arm were treated with carboplatin, paclitaxel and REOLYSIN;
- The analysis showed a median progression free survival (PFS) of 94 days (13.4 weeks) in the test arm (n=62), versus 50 days (7.1 weeks) in the control arm (n=56). The test arm maintained a PFS benefit over the control arm through five cycles of therapy; and
- Eighty-eight loco-regional patients did not receive additional therapy following discontinuation of study treatment. An analysis of these patients showed a median overall survival (OS) of 150 days (21.4 weeks) in the test arm (n=50), versus 115 days (16.4 weeks) in the control arm (n=38).

Safety

- REOLYSIN was safe and well-tolerated by patients;
- The side effects experienced by patients in the test arm of the study were consistent with expectations based on outcomes of earlier clinical studies using REOLYSIN. Patients on the test arm of the study experienced a higher incidence of flu-like symptoms consistent with treatment with a virus, most commonly mild fever, chills, nausea and diarrhea, on both a per-patient and a per-cycle basis; and
- Fewer patients required dose reductions of paclitaxel due to neuropathy or neurotoxicity on the test arm than the control arm (zero in the test arm versus six in the control arm; p=0.028).

Based on these data, we intend to discuss the design and execution of a randomized, follow-on Phase III registration study in patients with loco-regional head and neck cancer with regulators in multiple jurisdictions.

Clinical Trial - Other Results

U.S. Phase II Squamous Cell Carcinoma Clinical Trial

In 2013, we met the primary overall statistical endpoint and announced final tumour response data in our U.S. Phase II single arm clinical trial in patients with squamous cell carcinoma of the lung ("SCCLC") using intravenous administration of REOLYSIN in combination with carboplatin and paclitaxel in patients with metastatic stage IIIB, or stage IV, or recurrent SCCLC who are chemotherapy naïve for their metastatic or recurrent cancer.

Our analysis examined the percent best overall tumour responses between pre-treatment and up to six treatment cycles. Of 25 evaluable patients who had more than one cycle of therapy, 23 (92%) exhibited overall tumour shrinkage (mean shrinkage was 32.7%). Of the 25 evaluable patients, 10 (40%) had partial responses (PRs), while a further 14 (56%) showed stable disease (SD) and one (4%), had progressive disease (PD), for a disease control rate of 96% (complete response (CR) + PR + SD). In addition, 31.8% of patients with sufficient follow up had a PFS greater than six months.

The study is a two-stage design with a primary overall endpoint of objective tumor response rate. During the first stage, we saw a sufficient number of responses to proceed with enrollment in the second stage. A total of up to 36 patients were to be studied in the second stage with the primary endpoint being met if nine or more patients in both stages combined had a partial response

("PR") or better, effectively yielding a true response rate of 35% or more. This endpoint was met after 21 evaluable patients with a total of 25 patients enrolled in this clinical study.

U.S. Phase I Metastatic Colorectal Cancer Clinical Study

In 2013, we presented a poster covering positive preliminary results from a Phase I study examining the intravenous administration of REOLYSIN in combination with FOLFIRI in patients with metastatic colorectal cancer at the ASCO Gastrointestinal Cancers Symposium in San Francisco, CA, which took place from January 2013.

The poster presentation, titled: "A Multicenter Phase I Study of Intravenous Administration of REOLYSIN in combination with Irinotecan/Fluorouracil/Leucovorin (FOLFIRI) in Patients (pts) with Oxaliplatin-Refractory/Intolerant KRAS-Mutant Metastatic Colorectal Cancer (mCRC)," was authored by Ocean et al. Twenty-one patients were enrolled in the study, including nine that were FOLFIRI-naïve. Of the 18 patients evaluable for response there was one partial response and nine had stable disease. The combined overall progression free survival (PFS) of FOLFIRI-naïve and FOLFIRI-failed patients was 7.4 months. The authors concluded that the combination of REOLYSIN and FOLFIRI was safe and well tolerated and resulted in disease control in the majority of evaluable patients, including patients that had previously progressed on Irinotecan.

The trial was a 21-patient, single arm dose escalation study designed to determine a maximum tolerated dose and dose-limiting toxicities for the combination of REOLYSIN and FOLFIRI. Recently, in 2014, we modified the protocol to include FOLFIRI in combination with Avastin®. Eligible patients included 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 the last dose of an oxaliplatin regimen in the metastatic setting, or be intolerant to oxaliplatin.

U.S. Phase II Metastatic Melanoma Trial - First Stage

In 2013, we announced preliminary results from our U.S. Phase II clinical trial in patients with metastatic melanoma using intravenous administration of REOLYSIN in combination with carboplatin and paclitaxel. Eligible patients included those with metastatic malignant melanoma who have failed one or more prior therapies or those not considered a candidate for standard first line therapy. The primary objective of this U.S. Phase II trial was to assess the antitumour effect of the treatment regimen in the study population in terms of objective response rates. The secondary objectives were to assess progression-free survival and overall survival for the treatment regimen; the disease control rate (complete response (CR) plus partial response (PR) plus stable disease (SD)) and duration, and to assess the safety and tolerability of the treatment regimen in the study population.

The study was a two stage design. Up to 18 evaluable patients with metastatic melanoma were to be treated in the first stage. If three or more patients demonstrated a PR or better, the study could then proceed to the second stage, with up to 43 patients being treated in the entire study. The stage 1 endpoint was met after 14 evaluable patients were enrolled. Three of 14 patients exhibited a PR, and an additional seven patients had SD for a disease control rate of 71.5%.

With the emergence of genotyping and increasingly targeted therapies, there is a growing expectation that the standard of care for the treatment of melanoma will change. We believe that the changing standard of care for the treatment of melanoma may include agents targeting B-Raf and PD-1. Consequently, we are now conducting research to evaluate REOLYSIN in combination with other emerging treatments for a number of patient sub-populations. We intend to continue with a follow on clinical study in melanoma once this research is concluded and on this basis, the second stage of this clinical trial will not proceed at this time.

U.S. Phase II Non-Small Cell Lung Cancer Trial

In 2013, we completed enrollment in our U.S. Phase II study examining the use of REOLYSIN in combination with carboplatin and paclitaxel in patients with stage IV non-small cell lung cancer ("NSCLC") with Kras or EGFR-activated tumors and a poster presentation was made at the International Association for the Study of Lung Cancer conference.

The poster contained updated efficacy data along with new efficacy data that correlated a number of molecular abnormalities with best response, progression free survival (PFS) and one-year survival. Current data in these patients demonstrates that 20 of 36 evaluable patients (56%) survived a year or more. There were 13 patients with only EGFR mutations or amplifications, of whom nine (69.2%) survived a year or longer. Four of four (100%) patients with BRAF and EGFR amplification survived a year or longer.

The chart below summarizes key findings for the 36 evaluable patients with respect to molecular abnormalities:

Molecular Abnormality	Patients		Progression Free	Surviving One Year
	#	Best Response	at Six Months	#
BRAF mutation, EGFR amplification	4	2 PR, 1 SD, 1 PD	2	4
EGFR amplification	10	5 PR, 5 SD	4	7
EGFR mutation, EGFR amplification	3	1 PR, 1 SD, 1 PD	1	2
KRAS	12	3 PR, 8 SD	6	4
KRAS, EGFR amplification	7	6 SD, 1 PD	1	3
		11 PR, 11 SD		
Total	36	(30% response rate)	14 (38%)	20 (56%)

Partial response (PR), stable disease (SD), progressive disease (PD)

Clinical Trial - Biomarker Studies

In addition to the biomarker data reported in connection with our U.S. Phase 2 NSCLC trial, we also advanced the remainder of our biomarker research program in 2013. Our four randomized Phase II clinical studies sponsored by the NCIC also include full biomarker examinations. As well, we are adding additional biomarker studies including a retrospective examination of our NCI sponsored randomized phase II pancreatic cancer. Our objective with these biomarker studies is to determine if there are predictive biomarkers that will allow us to better target REOLYSIN as a cancer therapy in a number of indications.

Clinical Trial - Third Party Clinical Trials

We began 2013 with 12 third party sponsored clinical trials ("Third Party Trials"). Third Party Trials have allowed us to expand our clinical program to include additional cancer indications (pancreatic, ovarian, colorectal, prostate, breast, lung cancers in various stages and histologies and multiple myeloma). Our Third Party Trials require that we supply enough REOLYSIN for the enrollment requirements of each trial, sufficient intellectual capital to support the principal investigators and in some cases cost sharing of patient enrollment activities. The institutions involved provide the rest of the required activities to operate the clinical trial. These activities include patient screening and enrollment, treatment, monitoring and overall clinical trial management and reporting. The result is a larger clinical program investigating more cancer indications at a significantly reduced financial cost to Oncolytics. Our Third Party Trials are sponsored by the U.S. National Cancer Institute ("NCI"), the National Cancer Institute of Canada Clinical Trials Group ("NCIC"), the Cancer Therapy & Research Center at The University of Texas Health Center in San Antonio ("CTRC"), and the University of Leeds ("Leeds").

Manufacturing and Process Development

In 2013, we completed two 100-litre current Good Manufacturing Practices ("cGMP") production runs as part of our commercial supply agreement with SAFC, a Division of Sigma-Aldrich Corporation. Under the terms of this agreement, SAFC will continue to supply product for our clinical requirements, perform process validation of the product, and supply commercial material upon approval of the product. We also filled and labeled sufficient product from these two 100-litre production runs in order to supply our clinical trial program. As well, throughout 2013, 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 US Food and Drug Administration, for product approval.

Intellectual Property

At the end of 2013, we had been issued over 369 patents including 53 U.S. and 18 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

U.S. Underwritten Public Offering

On February 25, 2013, we closed a U.S. underwritten public offering whereby we issued 8,000,000 common shares at an issue price of U.S.\$4.00 per common share for gross proceeds of U.S.\$32,000,000.

Options

Throughout 2013, we received cash proceeds of \$0.2 million with respect to the exercise of 93,533 stock options.

Financial Impact

We estimated that our cash requirements for 2013 to fund our operations would be approximately between \$23.0 million and \$25.0 million. Our cash usage for the year was \$24,440,533 for operating activities and \$254,834 for the acquisition of property and equipment. Our net loss for the year was \$23,532,647.

Cash Resources

We exited 2013 with cash, cash equivalents and short-term investments totaling \$27,221,972 (see "*Liquidity and Capital Resources*").

REOLYSIN Development For 2014

Our planned development activity for REOLYSIN in 2014 is made up of clinical, manufacturing, and intellectual property programs. Our 2014 clinical program includes the anticipated release of clinical data from our randomized U.S. Phase II pancreatic cancer trial and our randomized U.S. Phase II ovarian cancer trial. As well, we expect to complete patient enrollment in at least two of our randomized Phase II studies sponsored by the NCIC with possible clinical data read outs towards the end of 2014. We expect to use our clinical data to assist in the determination of our regulatory path and the next steps for our clinical program.

Our 2014 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 2014. Finally, our intellectual property program includes filings for additional patents along with monitoring activities required to protect our patent portfolio.

We currently estimate the cash requirements to fund our operations for 2014 will be approximately \$19 million, but will depend on our ultimate clinical program. (see "*Liquidity and Capital Resources*").

Our Accounting Policies

In preparing our financial statements we use International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. IFRS requires that we make certain estimates, judgments and assumptions that we believe are reasonable based upon the information available in selecting our accounting policies. Our selection of accounting policies, along with our estimates and assumptions affect the reported amounts of our assets and liabilities at the date of the financial statements and the reported amounts of expenses during the periods presented.

Critical Accounting Policies

In preparing our financial statements, we are required to make certain estimates, judgments and assumptions that we believe are reasonable based upon the information available. These estimates and assumptions affect the reported amounts of assets at the date of the financial statements and the reported amounts of expenses during the periods presented. Significant estimates are used for, but not limited to, the treatment of our research and development expenditures, the assessment of realizable value of long-lived assets, the amortization period of intellectual property and the calculation of stock based compensation (see Note 4 "*Significant Judgments, Estimates and Assumptions*") of our audited consolidated financial statements.

The significant accounting policies which we believe are the most critical to aid in fully understanding and evaluating our reported financial results include the following:

Research and Development

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 of our activities have been expensed.

We account for our research and development activity in conjunction with the IAS 38 "*Intangible Assets*" of IFRS. IAS 38 makes a distinction between the research phase of a project and the development phase of an internal project and requires that all costs incurred during the research phase are to be expensed. However, an intangible asset arising from the development phase of an internal project shall be recognized if, and only if, we can demonstrate all of the following:

1. The technical feasibility of completing the intangible asset so that it will be available for use or sale.
2. Our intention to complete the intangible asset and use or sell it.
3. Our ability to use or sell the intangible asset.
4. How the intangible asset will generate probable future economic benefits. Among other things, that we can demonstrate the existence of a market for our product that results from the use of the intangible asset or of the intangible asset itself.
5. The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset.
6. The ability to measure reliably the expenditure attributable to the intangible asset during its development.

We believe that we do not meet all of the above criteria and for this reason, our research and development costs are expensed and not capitalized.

We will monitor our progress against these criteria and will capitalize our development costs once we can conclude we meet the above criteria.

Future Accounting Changes

Accounting Standards and Interpretations Issued but Not Yet Effective

Financial Instruments

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 IASB removed the January 1, 2015 mandatory effective date from IFRS 9. The IASB will decide on a new effective date when the entire IFRS 9 project is closer to completion. Entities may still early-adopt the finalized and issued provisions of IFRS 9. We do not anticipate that there will be a material impact on our financial position or results of operations.

Offsetting Financial Assets and Liabilities

In December 2011, the IASB issued amendments to IAS 32 *Financial Instruments: Presentation*. The amendments are intended to clarify certain aspects of the existing guidance on offsetting financial assets and financial liabilities due to the diversity in application of the requirements on offsetting. The IASB also amended IFRS 7 to require disclosures about all recognized financial instruments that are set off in accordance with IAS 32. The amendments also require disclosure of information about recognized financial instruments subject to enforceable master netting arrangements and similar agreements even if they are not set off under IAS 32.

The amendments to IAS 32 are effective for annual periods beginning on or after Jan. 1, 2014. We are currently assessing the impact of adopting the IAS 32 amendments on our consolidated financial statements. The new offsetting disclosures are required for annual or interim periods beginning on or after Jan. 1, 2013, and are expected to be included in our March 31, 2013 interim reporting period. The amendments need to be provided retrospectively to all comparative periods.

Significant Estimates

Share Based Payments

As required by IFRS, share based payments are to be recorded at their fair value at the date of grant. We have chosen to use the Black Scholes Option Pricing Model (“Black Scholes” or the “Model”) to calculate the fair value of our stock options and warrants. Though there are other models available to calculate the option values (for example, the binomial model), Black Scholes is currently widely used and accepted by other publicly traded companies. Therefore, we have concluded that Black Scholes is the appropriate option pricing model to use for our stock options at this time.

Black Scholes uses inputs in its calculation of fair value that require us to make certain estimates and assumptions. For 2013, we used the following weighted average assumptions for the calculation of the fair value of the stock options granted during the year:

	2013
Risk-free interest rate	1.08%
Expected hold period to exercise	2.89 years
Volatility in the price of the Company's shares	62.62%
Rate of forfeiture	2.5%
Dividend yield	Nil
Weighted average fair value of options	\$0.85

A change in these estimates and assumptions will impact the value calculated by the model. For instance, the volatility in the price of our shares is based on the quoted trading price. We assume that weekly trading prices best reflect our trading price volatility. However, an entity can choose between daily, weekly, or monthly trading prices in the volatility calculation.

The Model also uses an expected hold period to exercise in its calculation of fair value. When we are estimating the expected hold period to exercise we take into consideration past history, the current trading price, the volatility of our common shares and the progress in our clinical program. Our conclusions resulted in an expected hold period for the stock options issued in 2013 to be 2.89 years and we believe this is an appropriate estimate. However, our options have a 10-year life and given the fluctuations in our stock price the expected hold period could be different.

Consequently, in complying with IFRS and selecting what we believe are the most appropriate assumptions under the circumstances, we have recorded non-cash share based payment expense for the year of \$424,384. However, given the above discussion, this expense could have been different and still be in accordance with IFRS.

Warrant Values

Since inception, we have raised cash through the issue of units and the exercise of warrants and options. Each issued unit has consisted of one common share and a portion of one common share purchase warrant with each whole warrant exercisable at a specified price for one additional common share for up to 60 months from the issue date. IFRS requires that when recording the issued units, a value should be ascribed to each component of the units based on the component's fair value. The fair value of our common shares is established based on trading on stock exchanges in Canada and the U.S. However, as the warrants do not trade on an exchange, the Black Scholes Option Pricing Model has been used to determine the fair value of the warrants. In the event that the total calculated value of each individual component is greater than the price paid for the unit, the value of each component is reduced on a relative basis until the total is equal to the unit's issue price.

For reasons discussed above under “Share Based Payments”, the model can produce a range of calculated values for our warrants.

Selected Annual Information

	2013	2012	2011
	\$	\$	\$
Revenue	—	—	—
Consolidated net loss ⁽¹⁾	(23,532,647)	(36,373,521)	(29,044,701)
Basic and diluted loss per share ^{(1), (2)}	(0.28)	(0.48)	(0.41)
Total assets ⁽²⁾	28,222,027	22,078,090	36,024,617
Cash dividends declared per share ⁽³⁾	Nil	Nil	Nil

Notes:

- (1) Included in consolidated net loss and loss per common share for 2013, 2012, and 2011 are share based payment expenses of \$424,384, \$730,751, and \$1,805,503, respectively.
- (2) We issued 8,093,533 common shares for net cash proceeds of \$30.4 million in 2013 (2012 - 5,458,950 common shares for net cash proceeds of \$20.8 million; 2011 - 3,293,033 common shares for net cash proceeds of \$14.8 million).
- (3) We have not declared or paid any dividends since incorporation.

Results of Operations

Net loss for the year was \$23,532,647 compared to \$36,373,521 and \$29,044,701 for the years ending December 31, 2012 and December 31, 2011, respectively.

Research and Development Expenses (“R&D”)

	2013	2012	2011
	\$	\$	\$
Clinical trial expenses	7,852,322	19,813,849	10,286,487
Manufacturing and related process development expenses	4,745,479	5,834,894	6,171,474
Intellectual property expenditures	1,247,854	841,133	937,847
Research collaboration expenses	436,302	248,970	234,426
Other R&D expenses	4,220,126	4,379,894	4,327,271
Scientific research and development repayment (refund)	(82,494)	(78,549)	119,758
Foreign exchange loss	(56,497)	(43,695)	171,955
Share based payments	142,972	406,129	1,137,467
Research and development expenses	18,506,064	31,402,625	23,386,685

Clinical Trial Program

Clinical trial expenses include those costs associated with our global clinical trial program that includes costs associated with those clinical trials we sponsor along with costs associated with our Third Party trials. Included in clinical trial expenses are direct patient enrollment costs, contract research organization (“CRO”) expenses, clinical trial site selection and initiation costs, data management expenses and other costs associated with our clinical trial program.

	2013	2012	2011
	\$	\$	\$
Direct patient expenses	7,852,322	19,430,751	3,945,126
Phase III start up expenses	—	383,098	6,341,361
Clinical trial expenses	7,852,322	19,813,849	10,286,487

During 2013, our clinical trial expenses decreased to \$7,852,322 compared to \$19,813,849 and \$10,286,487 for the years ended December 31, 2012 and December 31, 2011, respectively.

In 2013, we incurred direct patient costs primarily associated with our 12 Third Party Trials which include the six randomized clinical studies that are sponsored by the NCIC and the NCI. As well, throughout 2013, we were incurring direct patient costs associated with the re-treatment of patients enrolled in our global randomized Phase III head and neck clinical trial. The clinical trial program activities associated with stage 1 of our global randomized Phase III head and neck trial declined as a result of the completion of stage 1 enrollment in 2012 and the related pause in enrollment.

In 2012, we incurred direct patient costs primarily associated with the enrollment in our global randomized Phase III head and neck trial along with the other clinical trials that we are sponsoring. At the peak of enrollment, we were enrolling patients in over 80 clinical sites in 14 countries. Also, during the first part of 2012, we incurred Phase III start up costs as we increased the number of enrolling clinical centres throughout the first half of 2012. In addition, we incurred related support costs associated with our Third Party Trials which included the four randomized clinical studies that are part of the clinical research agreement with the NCIC.

During 2011, we focused primarily on expanding the number of jurisdictions and clinical sites that were approved to enroll patients in our global randomized Phase III head and neck cancer clinical trial. We began 2011 authorized to enroll patients in three jurisdictions and exited 2011 authorized to enroll patients in 12 jurisdictions. Our associated Phase III start up expenses include regulatory filing fees, site investigation and site initiation costs which are required prior to commencing enrollment in the various jurisdictions and related clinical sites. We also incurred direct patient expenses in the clinical trials we sponsored along with related support costs associated with our Third Party Trials.

As our clinical program includes 12 Third Party Sponsored Trials and three Company sponsored trials, we expect our clinical trial expenses to continue to decrease in 2014 compared to 2013 until we determine our regulatory path and the next steps in our clinical program. We do expect to incur support costs associated with our Third Party Trials, but these costs are expected to be less than the typical costs associated with directly funding similar clinical trials. We also expect to incur regulatory consulting activities and associated costs in order to support our decisions with respect to our regulatory path and the next steps for our clinical program. Finally, we expect to complete enrollment in the three clinical trials that we are currently sponsoring incurring related direct patient expenses.

Manufacturing & Related Process Development (“M&P”)

M&P expenses include product manufacturing and process development activities. Product manufacturing expenses include third party direct manufacturing costs, quality control testing, fill, label and packaging costs. Process development expenses include costs associated with studies that examine components of our manufacturing process looking for improvements and costs associated with the creation of our process validation master plan and related conformity testing.

	2013	2012	2011
	\$	\$	\$
Product manufacturing expenses	3,485,493	4,670,186	4,411,388
Process development expenses	1,259,986	1,164,708	1,760,086
Manufacturing and related process development expenses	4,745,479	5,834,894	6,171,474

Our M&P expenses for 2013 were \$4,745,479 compared to \$5,834,894 and \$6,171,474 for the years ending December 31, 2012 and December 31, 2011.

During 2013, we completed two 100-litre cGMP production runs along with the related testing activities. We also incurred packaging and shipping activities required to supply our clinical program with previously filled product. In 2012, in addition to completing two 100-litre cGMP production runs and related testing, we incurred costs associated with vial, fill, and packaging activities along with shipping activities required to supply our clinical trial program. During 2011, we completed the bulk production and related testing, vial, fill and packaging activities for one 100-litre cGMP production run and completed the bulk production of a second 100-litre cGMP production run.

Our process development expenses for 2013 were \$1,259,986 compared to \$1,164,708 and \$1,760,086 for the years ending December 31, 2012 and December 31, 2011, respectively. In 2013 and 2012, our process development activities focused on our process validation master plan. These activities included optimization, validation and stability studies. In 2011, we were focused on creating the process validation master plan we anticipated would be required for product registration and also incurred costs associated with optimization and validation studies in support of this plan.

We expect our M&P expenses for 2014 to remain consistent with 2013. We expect to continue to produce 100-litre cGMP production runs including fill and finish activities in 2014. We also expect to continue to perform conformity testing related to our process validation master plan.

Intellectual Property Expenses

Intellectual property expenses include legal and filing fees associated with our patent portfolio.

	2013	2012	2011
	\$	\$	\$
Intellectual property expenses	1,247,854	841,133	937,847

Our intellectual property expenses for 2013 were \$1,247,854 compared to \$841,133 and \$937,847 for the years ending December 31, 2012 and December 31, 2011, respectively. The change in intellectual property expenditures reflects the timing of filing costs associated with our expanded patent base. At the end of 2013, we had been issued over 369 patents including 53 U.S. and 18 Canadian patents, as well as issuances in other jurisdictions. We expect that our intellectual property expenses will remain consistent in 2014 compared to 2013.

Research Collaborations

Research collaborations are intended to expand our intellectual property related to reovirus and identify potential licensing opportunities arising from our technology base.

	2013	2012	2011
	\$	\$	\$
Research collaborations	436,302	248,970	234,426

During 2013, our research collaboration expenses were \$436,302 compared to \$248,970 and \$234,426 for the years ending December 31, 2012 and December 31, 2011, respectively. Our research collaborations in 2013 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. During 2012 and 2011, we were focused primarily 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.

We expect that our research collaborations in 2014 will remain consistent with 2013. We expect to complete our ongoing collaborative program carried over from 2013 and will continue to be selective in the types of new collaborations we enter into in 2014.

Other Research and Development Expenses

Other research and development expenses include compensation expenses for employees (excluding stock based compensation), consultant fees, travel and other miscellaneous R&D expenses.

	2013	2012	2011
	\$	\$	\$
R&D consulting fees	362,263	404,622	284,618
R&D salaries and benefits	3,425,122	3,394,770	3,563,958
Other R&D expenses	432,741	580,502	478,695
Other research and development expenses	4,220,126	4,379,894	4,327,271

In 2013, our Other Research and Development expenses were \$4,220,126 compared to \$4,379,894 and \$4,327,271 for the years ending December 31, 2012 and December 31, 2011, respectively. During 2013, our Other Research and Development activities declined as a result of the completion of enrollment in stage 1 of our global randomized Phase III head and neck trial and related pause in enrollment. As well, with the shift to Third Party Trials, our current clinical program requires less support.

In 2012 and 2011, we were supporting stage 1 of our global randomized Phase III head and neck trial that was actively enrolling in over 80 clinical sites in 14 countries up to September 2012. This resulted in an increased number of employees and consultants compared to 2013. We also incurred severance costs associated with changes made with the Chief Medical Officer in 2012 and 2011 that did not occur in 2013. Finally, cash bonus compensation was paid to officers and employees in 2013 and 2011, but not in 2012.

We expect that our Other R&D expenses in 2014 will remain consistent compared to 2013.

Scientific Research and Development Repayment (Refund)

	2013	2012	2011
	\$	\$	\$
Scientific research and development repayment (refund)	(82,494)	(78,549)	119,758

In 2013 and 2012, we received Alberta and Quebec scientific research and development refunds totaling \$82,494 and \$78,549, respectively. In 2011, we were required to repay a portion of the Alberta and Quebec scientific research and development refunds received from prior year claims.

Foreign Exchange (Gain) Loss

	2013	2012	2011
	\$	\$	\$
Foreign exchange (gain) loss	(56,497)	(43,695)	171,955

For the year ending December 31, 2013, our foreign exchange gain was \$56,497 compared to \$43,695 for the year ending December 31, 2012 and a foreign exchange loss of \$171,955 for the year ending December 31, 2011. The foreign exchange gains and losses incurred are primarily a result of the fluctuations in the U.S. dollar, Euro and Pound Sterling exchange rates.

Share Based Payments

	2013	2012	2011
	\$	\$	\$
Share based payments	142,972	406,129	1,137,467

Non-cash share based payments for the year ending December 31, 2013, was \$142,972 compared to \$406,129 and \$1,137,467 for the years ending December 31, 2012 and December 31, 2011, respectively. We incurred stock based compensation associated with the grant of stock options to employees and officers associated with our research and development activities.

Operating Expenses

	2013	2012	2011
	\$	\$	\$
Public company related expenses	2,567,056	2,716,982	3,057,842
Office expenses	2,412,569	2,134,546	1,516,114
Amortization of property and equipment	131,623	109,275	92,590
Stock based compensation	281,412	324,622	668,036
Operating expenses	5,392,660	5,285,425	5,334,582

Public company related expenses include costs associated with investor relations and business development activities, legal and accounting fees, corporate insurance, director fees and transfer agent and other fees relating to our U.S. and Canadian stock listings. In 2013, 2012, and 2011 our public company related expenses have remained relatively consistent.

Office expenses include compensation costs (excluding stock based compensation), office rent, and other office related costs. In 2013, we incurred office expenses of \$2,412,569 compared to \$2,134,546 and \$1,516,114 for the years ending December 31, 2012 and December 31, 2011, respectively. In 2013, our office expenses increased compared to 2012 and 2011 in an effort to support our investor relations activity along with an increase in salaries associated with the change in our general counsel and cash bonus compensation paid to officers and employees.

We expect our operating expenses in 2014 to remain consistent with 2013.

Asset Available for Sale

	2013	2012	2011
	\$	\$	\$
Write down of asset available for sale	—	—	(735,681)

During 2011, despite our efforts to sell our investment in British Canadian Biosciences Corp. ("BCBC"), we were unsuccessful in completing a sale under market conditions prevailing at that time. As a result, we wrote down our investment in BCBC to \$nil recognizing a write down of \$735,681.

Change in Warrant Liability

	2013	2012	2011
	\$	\$	\$
Change in fair value of warrant liability	—	—	36,000

During 2011, our warrants with an exercise price denominated in the US dollar were either exercised or expired. The warrants that expired unexercised reduced our consolidated net loss for 2011 by \$36,000.

Summary of Quarterly Results

	2013				2012			
	Dec.	Sept.	June	March	Dec.	Sept.	June	March
Revenue	—	—	—	—	—	—	—	—
Net loss ⁽²⁾	5,792	6,114	5,020	6,607	8,492	9,244	10,179	8,459
Basic and diluted loss per common share ⁽²⁾	\$ 0.07	\$ 0.07	\$ 0.06	\$ 0.08	\$ 0.11	\$ 0.12	\$ 0.13	\$ 0.11
Total assets ⁽³⁾	28,222	32,549	39,267	44,272	22,078	29,086	36,561	47,372
Total cash ^{(1), (3)}	27,222	31,474	38,155	43,521	21,293	27,977	35,772	46,591
Total long-term debt	—	—	—	—	—	—	—	—
Cash dividends declared ⁽⁴⁾	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 December 2013 and January 2012 are quarterly stock based compensation expenses (recovery) of \$233,028, (\$59,497), \$129,997, \$120,856, \$780,240, (\$121,685), \$58,343, and \$13,853, respectively.

(3) We issued 8,093,533 common shares for net cash proceeds of \$30.4 million in 2013 (2012 - 5,458,950 common shares for net cash proceeds of \$20,848,785).

(4) We have not declared or paid any dividends since incorporation.

Fourth Quarter

Statement of loss for the three month period ended December 31, 2013 and 2012:

	2013	2012
For the three month periods ending December 31,	\$	\$
Expenses		
Research and development	4,582,741	6,729,424
Operating	1,285,010	1,800,057
Loss before the following	(5,867,751)	(8,529,481)
Interest	80,679	57,494
Loss before income taxes	(5,787,072)	(8,471,987)
Income taxes	(5,408)	(20,302)
Net loss	(5,792,480)	(8,492,289)
Other comprehensive gain (loss) - translation adjustment	62,687	25,907
Net comprehensive loss	(5,729,793)	(8,466,382)
Basic and diluted loss per common share	(0.07)	(0.11)
Weighted average number of shares (basic and diluted)	84,771,535	76,693,233

Fourth Quarter Review of Operations

For the three month period ended December 31, 2013 our net loss was \$5,792,480 compared to \$8,492,289 for the three month period ended December 31, 2012.

Research and Development Expenses ("R&D")

	2013	2012
	\$	\$
Clinical trial expenses	583,496	4,548,871
Manufacturing and related process development expenses	1,920,022	762,954
Intellectual property expenses	372,357	95,179
Research collaboration expenses	166,409	36,204
Other R&D expenses	1,545,019	822,995
Scientific research and development repayment (refund)	(82,494)	(15,108)
Foreign exchange loss	(57,365)	12,466
Share based payments	135,297	465,863
Research and development expenses	4,582,741	6,729,424

Clinical Trial Expenses

	2013	2012
	\$	\$
Direct clinical trial expenses	583,496	4,548,871
Clinical trial expenses	583,496	4,548,871

During the fourth quarter of 2013, our clinical trial expenses were \$583,496 compared to \$4,548,871 for the fourth quarter of 2012. In the fourth quarter of 2013, we incurred direct clinical trial expenses primarily associated with the enrollment in our four randomized NCIC clinical trials. In fourth quarter of 2012, we incurred direct clinical trial expenses associated with the retreatment of patients previously enrolled in stage 1 of our global randomized Phase III head and neck trial along with enrollment activity in the other clinical trials that we are sponsoring. As well, we incurred costs associated with the monitoring, collection and analysis of the clinical data from our Phase III head and neck trial.

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

	2013	2012
	\$	\$
Product manufacturing expenses	1,551,941	542,917
Process development expenses	368,081	220,037
Manufacturing and related process development expenses	1,920,022	762,954

During the fourth quarter of 2013, our M&P expenses were \$1,920,022 compared to \$762,954 for the fourth quarter of 2012. During the fourth quarter of 2013, we completed the bulk production of our second 100-litre cGMP production run for 2013. During the fourth quarter of 2012, we incurred costs associated with testing and storage of the bulk product manufactured earlier in 2012.

Our process development activity for the fourth quarters of 2013 and 2012 focused on our process validation master plan and included validation studies of our upstream and downstream processes.

Intellectual Property Expenses

	2013	2012
	\$	\$
Intellectual property expenses	372,357	95,179

Our intellectual property expenses for the fourth quarter of 2013 were \$372,357 compared to \$95,179 for the fourth quarter of 2012. The change in intellectual property expenditures reflects the timing of filing costs associated with our expanded patent base. At the end of the fourth quarter of 2013, we had been issued over 369 patents including 53 U.S. and 18 Canadian patents, as well as issuances in other jurisdictions.

Research Collaboration Expenses

	2013	2012
	\$	\$
Research collaboration expenses	166,409	36,204

Our research collaboration expenses were \$166,409 in the fourth quarter of 2013 compared to \$36,204 for the fourth quarter of 2012. During the fourth quarters of 2013 and 2012, our research collaboration activities continued 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.

Other Research and Development Expenses

	2013	2012
	\$	\$
R&D consulting fees	59,965	174,319
R&D salaries and benefits	1,333,207	661,042
Other R&D expenses	151,847	(12,366)
Other research and development expenses	1,545,019	822,995

Our other research and development expenses were \$1,545,019 in the fourth quarter of 2013 compared to \$822,995 in the fourth quarter of 2012. In the fourth quarter of 2013, our salaries and benefits costs included cash bonus compensation for officers and employees that was not paid in 2012.

Share Based Payments

	2013	2012
	\$	\$
Stock based compensation	135,297	465,863

During the fourth quarters of 2013 and 2012, we incurred share based payment expense associated with the grant of stock options to employees and officers associated with our research and development activities.

Operating Expenses

	2013	2012
	\$	\$
Public company related expenses	466,276	641,699
Office expenses	680,731	818,699
Amortization of property and equipment	40,272	25,282
Stock based compensation	97,731	314,377
Operating expenses	1,285,010	1,800,057

Our operating expenses in the fourth quarter of 2013 were \$1,285,010 compared to \$1,800,057 for the fourth quarter of 2012. In the fourth quarter of 2013 our investor and public relations and our legal fees decreased compared to the fourth quarter of 2012.

Office expenses include compensation costs (excluding share based payments), office rent, and other office related costs. During the fourth quarter of 2012, our office expenses included costs associated with the change to our Chief Financial Officer role that were not incurred in 2013.

Liquidity and Capital Resources

2013 Financing Activities

During 2013, we received cash inflow from financing activities of \$30.4 million:

U.S. Underwritten Public Offering

In 2013, we closed a U.S. underwritten public offering whereby we issued 8,000,000 common shares at an issue price of U.S.\$4.00 per common share for gross proceeds of U.S.\$32,000,000.

Options

Throughout 2013, we received cash proceeds of \$0.2 million with respect to the exercise of 93,533 stock options.

2012 Financing Activities

In 2012, we received cash inflow from financing activities of \$20.8 million:

Public Offering - Bought Deal

On February 8, 2012, we closed a bought deal financing whereby we issued 5,065,750 common shares at an issue price of \$4.20 per common share for gross proceeds of \$21,276,150. In connection with this bought deal financing, we issued 303,945 compensation options to the underwriters with an exercise price of \$4.20 per option expiring on February 8, 2014.

Options

Throughout 2012, we received cash proceeds of \$1.1 million with respect to the exercise of 393,200 stock options.

Liquidity

As at December 31, 2013 and 2012, we had cash and cash equivalents, short-term investments and working capital positions as follows:

	2013	2012
	\$	\$
Cash and cash equivalents	25,220,328	19,323,541
Short-term investments	2,001,644	1,969,228
Working capital position	21,680,907	14,377,532

The decrease in our cash and cash equivalent and short term investment positions reflects the cash usage from our operating activities of \$24.4 million along with the cash provided by our financing activities of \$30.4 million for the year ending December 31, 2013.

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.

As a result of our financing activities in 2013, we raised approximately \$30.4 million to be used to support our clinical trial, manufacturing, intellectual property and collaboration programs. On February 27, 2014, we closed a Common Share Purchase Agreement (the "Purchase Agreement") with Lincoln Park Capital Fund, LLC ("LPC") whereby LPC purchased 600,962 common shares for U.S.\$1.0 million and makes available additional periodic purchases by LPC of up to U.S.\$25.0 million over a 30-month term. The purchase price of the shares will be based on prevailing market prices of our common shares immediately preceding the notice of a sale without any fixed discount. We control the timing and amount of any future investment and LPC is obligated to make such purchases, if and when we present LPC with a valid purchase notice. The agreement does not impose any upper price limit restrictions, negative covenants or restrictions on future financing activities and we can terminate the agreement at any time at our sole discretion without any monetary cost or penalty.

We anticipate that the expected cash usage from our operations in 2014 will be approximately \$19 million.

Despite the anticipated change in our cash requirements compared to 2013, 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 the LPC Purchase Agreement to fund our presently planned operations into 2016. Factors that will affect our anticipated cash usage in 2014 and 2015, 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.

During 2013, we were able to raise funds through a U.S. underwritten public offering and the exercise of existing stock options. In 2012, we were able to raise funds through a bought deal financing and the exercise of existing stock options and in 2011 we were also able to raise funds through the exercise of existing stock purchase warrants. 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.

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 on July 3, 2012 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 renewed base shelf raising U.S.\$32.0 million in 2013. As well, subsequent to the end of 2013, the existence of our base shelf prospectus allowed us to enter into a common share purchase agreement with Lincoln Park Capital Fund, LLC ("LPC") that will provide an initial investment in Oncolytics of US\$1.0 million and make available additional periodic investments of up to US\$25.0 million over a 30-month term. Our renewed base shelf expires on August 3, 2014.

Contractual Obligations

We have the following contractual obligations as at December 31, 2013:

Contractual Obligations	Payments Due by Period				
	Total \$	Less than 1 year \$	2 -3 years \$	4 - 5 years \$	More than 5 years \$
Alberta Heritage Foundation ⁽¹⁾	150,000	—	—	—	150,000
Capital lease obligations	Nil	—	—	—	—
Operating lease ⁽²⁾	232,911	94,888	138,023	—	—
Purchase obligations	6,024,890	6,024,890	—	—	—
Other long term obligations	Nil	—	—	—	—
Total contractual obligations	6,407,801	6,119,778	138,023	—	150,000

Note:

- (1) Our Alberta Heritage Foundation obligation requires repayments upon the realization of sales (see notes to our audited 2013 consolidated financial statements).
- (2) Our operating lease is comprised of our office lease and excludes our portion of operating costs.

We expect to fund our capital expenditure requirements and commitments with existing working capital.

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 guarantee investment certificates. As of December 31, 2013, we had \$2.0 million invested under this policy, currently earning interest at an effective rate of 1.50%.

Off-Balance Sheet Arrangements

As at December 31, 2013, we had not entered into any off-balance sheet arrangements.

Transactions with Related Parties

In 2013, 2012 and 2011, we did not enter into any related party transactions.

Financial Instruments and Other Instruments

Our financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable and accounts payable. As at December 31, 2013, 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. 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 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 2013 by approximately \$145,337. 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 2013 by approximately \$71,380. The impact of a \$0.10 increase in the value of the Euro against the Canadian dollar would have increased our net loss in 2013 by approximately \$220,726.

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 December 31, 2013 are as follows:

	U.S. dollars	British pounds	Euro
	\$	£	€
Cash and cash equivalents	1,721,819	107,027	79,325
Accounts payable	(6,358,709)	(72,393)	(44,237)
	(4,636,890)	34,634	35,088

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.

Risk Factors Affecting Future Performance

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 this reliance and these relationships will continue as required.

In addition to developmental and operational considerations, market prices for securities of biotechnology companies generally are volatile, and may or may not move in a manner consistent with the progress we have made or are making.

Our product REOLYSIN is in the research and development stage and will require further development and testing before they can be marketed commercially.

Prospects for companies in the biotechnology industry generally may be regarded as uncertain given the nature of the industry and, accordingly, investments in biotechnology companies should be regarded as speculative. We are currently in the research and development stage on one product, REOLYSIN, for human application, the riskiest stage for a company in the biotechnology industry. It is not possible to predict, based upon studies in animals, or early studies in humans, whether REOLYSIN will prove to be safe and effective in humans. REOLYSIN will require additional research and development, including extensive clinical testing, before we will be able to obtain the approval of the United States Food and Drug Administration (the "FDA") or from similar regulatory authorities in other countries to market REOLYSIN commercially. There can be no assurance that the research and development programs conducted by us will result in REOLYSIN or any other products becoming commercially viable products, and in the event that any product or products result from the research and development program, it is unlikely they will be commercially available for a number of years.

To achieve profitable operations, we, alone or with others, must successfully develop, introduce and market our products. To obtain regulatory approvals for products being developed for human use, and to achieve commercial success, human clinical trials must demonstrate that the product is safe for human use and that the product shows efficacy. Unsatisfactory results obtained from a particular study relating to a program may cause us to abandon our commitment to that program or the product being tested. No assurances can be provided that any current or future animal or human test, if undertaken, will yield favorable results. If we are unable to establish that REOLYSIN is a safe, effective treatment for cancer, we may be required to abandon further development of the product and develop a new business strategy.

There are inherent risks in pharmaceutical research and development.

Pharmaceutical research and development is highly speculative and involves a high and significant degree of risk. The marketability of any product developed by us will be affected by numerous factors beyond our control, including:

- the discovery of unexpected toxicities or lack of sufficient efficacy of products which make them unattractive or unsuitable for human use;
- preliminary results as seen in animal and/or limited human testing may not be substantiated in larger controlled clinical trials;
- manufacturing costs or other factors may make manufacturing of products impractical and non-competitive;
- proprietary rights of third parties or competing products or technologies may preclude commercialization;
- requisite regulatory approvals for the commercial distribution of products may not be obtained;
- and
- other factors may become apparent during the course of research, up-scaling or manufacturing which may result in the discontinuation of research and other critical projects.

Our product under development has never been manufactured on a commercial scale, and there can be no assurance that such products can be manufactured at a cost or in a quantity to render such products commercially viable. Production and utilization of our products may require the development of new manufacturing technologies and expertise. The impact on our business in the event that new manufacturing technologies and expertise are required to be developed is uncertain. There can be no assurance that we will successfully meet any of these technological challenges, or others that may arise in the course of development.

Pharmaceutical products are subject to intense regulatory approval processes.

The regulatory process for pharmaceuticals, which includes preclinical studies and clinical trials of each compound to establish its safety and efficacy, takes many years and requires the expenditure of substantial resources. Moreover, if regulatory approval of a drug is granted, such approval may entail limitations on the indicated uses for which it may be marketed. Failure to comply with applicable regulatory requirements can, among other things, result in suspension of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution. Further, government policy may change, and additional government regulations may be established that could prevent or delay regulatory approvals for our products. In addition, a marketed drug and its manufacturer are subject to continual review. Later discovery of previously unknown problems with the product or manufacturer may result in restrictions on such product or manufacturer, including withdrawal of the product from the market.

The FDA in the United States and other relevant regulatory authorities may deny approval of a new drug application ("NDA") or its equivalent in the relevant jurisdiction if required regulatory criteria are not satisfied, or may require additional testing. Product approvals may be withdrawn if compliance with regulatory standards are not maintained or if problems occur after the product reaches the market. The FDA may require further testing and surveillance programs to monitor the pharmaceutical product that

has been commercialized. Non-compliance with applicable requirements can result in fines and other judicially imposed sanctions, including product withdrawals, product seizures, injunction actions and criminal prosecutions.

In addition to our own pharmaceuticals, we may supply active pharmaceutical ingredients and advanced pharmaceutical intermediates for use in or with our customers' other drug products. The final drug products in which the pharmaceutical ingredients and advanced pharmaceutical intermediates are used, however, are subject to regulation for safety and efficacy by the FDA and other jurisdictions, as the case may be. Such products must be approved by such agencies before they can be commercially marketed. The process of obtaining regulatory clearance for marketing is uncertain, costly and time consuming. We cannot predict how long the necessary regulatory approvals will take or whether our customers will ever obtain such approval for their products. To the extent that our customers do not obtain the necessary regulatory approvals for marketing new products, our product sales could be adversely affected.

The FDA and other governmental regulators have increased requirements for drug purity and have increased environmental burdens upon the pharmaceutical industry. Because pharmaceutical drug manufacturing is a highly regulated industry, requiring significant documentation and validation of manufacturing processes and quality control assurance prior to approval of the facility to manufacture a specific drug, there can be considerable transition time between the initiation of a contract to manufacture a product and the actual initiation of manufacture of that product. Any lag time in the initiation of a contract to manufacture product and the actual initiation of manufacture could cause us to lose profits or incur liabilities.

The pharmaceutical regulatory regime in Europe and other countries is, by and large, generally similar to that of Canada and the United States. We could face similar risks in these other jurisdictions, as the risks described above.

Our operations and products may be subject to other government manufacturing and testing regulations.

Securing regulatory approval for the marketing of therapeutics by the FDA in the United States and similar regulatory agencies in other countries is a long and expensive process, which can delay or prevent product development and marketing. Approval to market products may be for limited applications or may not be received at all.

The products anticipated to be manufactured by us will have to comply with the FDA's cGMP and other FDA and local government guidelines and regulations, including other international regulatory requirements and guidelines. Additionally, certain of our customers may require the manufacturing facilities contracted by us to adhere to additional manufacturing standards, even if not required by the FDA. Compliance with cGMP regulations requires manufacturers to expend time, money and effort in production, and to maintain precise records and quality control to ensure that the product meets applicable specifications and other requirements. The FDA and other regulatory bodies periodically inspect drug-manufacturing facilities to ensure compliance with applicable cGMP requirements. If the manufacturing facilities contracted by us fail to comply with the cGMP requirements, the facilities may become subject to possible FDA or other regulatory action and manufacturing at the facility could consequently be suspended. We may not be able to contract suitable alternative or back-up manufacturing facilities on terms acceptable to us or at all.

The FDA or other regulatory agencies may also require the submission of any lot of a particular product for inspection. If the lot product fails to meet the FDA requirements, then the FDA could take any of the following actions: (i) restrict the release of the product; (ii) suspend manufacturing of the specific lot of the product; (iii) order a recall of the lot of the product; or (iv) order a seizure of the lot of the product.

We are subject to regulation by governments in many jurisdictions and, if we do not comply with healthcare, drug, manufacturing and environmental regulations, among others, our existing and future operations may be curtailed, and we could be subject to liability.

In addition to the regulatory approval process, we may be subject to regulations under local, provincial, state, federal and foreign law, including requirements regarding occupational health, safety, laboratory practices, environmental protection and hazardous substance control, and may be subject to other present and future local, provincial, state, federal and foreign regulations.

Our products may fail or cause harm, subjecting us to product liability claims, which are uninsured.

The sale and use of our products entail risk of product liability. We currently do not have any product liability insurance. There can be no assurance that we will be able to obtain appropriate levels of product liability insurance prior to any sale of our pharmaceutical products. An inability to obtain insurance on economically feasible terms or to otherwise protect against potential product liability claims could inhibit or prevent the commercialization of products developed by us. The obligation to pay any product liability claim or a recall of a product could have a material adverse effect on our business, financial condition and future prospects.

Our technologies may become obsolete.

The pharmaceutical industry is characterized by rapidly changing markets, technology, emerging industry standards and frequent introduction of new products. The introduction of new products embodying new technologies, including new manufacturing processes, and the emergence of new industry standards may render our products obsolete, less competitive or less marketable. The process of developing our products is extremely complex and requires significant continuing development efforts and third party commitments. Our failure to develop new technologies and products and the obsolescence of existing technologies could adversely affect our business.

We may be unable to anticipate changes in our potential customer requirements that could make our existing technology obsolete. Our success will depend, in part, on our ability to continue to enhance our existing technologies, develop new technology that addresses the increasing sophistication and varied needs of the market, and respond to technological advances and emerging industry standards and practices on a timely and cost-effective basis. The development of our proprietary technology entails significant technical and business risks. We may not be successful in using our new technologies or exploiting the respective niche markets effectively or adapting our businesses to evolving customer or medical requirements or preferences or emerging industry standards.

We have no operating revenues and a history of losses.

To date, we have not generated sufficient revenues to offset our research and development costs and accordingly have not generated positive cash flow or made an operating profit. As of December 31, 2013, we had an accumulated deficit of \$231.3 million and we incurred net losses of \$23.5 million, \$36.4 million and \$29.0 million, for the years ended December 31, 2013, 2012 and 2011, respectively. We anticipate that we will continue to incur significant losses during 2014 and in the foreseeable future. We do not expect to reach profitability at least until after successful and profitable commercialization of one or more of our products. Even if one or more of our products are profitably commercialized, the initial losses incurred by us may never be recovered.

We may need additional financing in the future to fund the research and development of our products and to meet our ongoing capital requirements.

We anticipate that we may need additional financing in the future to fund research and development and to meet our ongoing capital requirements. The amount of future capital requirements will depend on many factors, including continued scientific progress in our drug discovery and development programs, progress in our pre-clinical and clinical evaluation of drug candidates, time and expense associated with filing, prosecuting and enforcing our patent claims and costs associated with obtaining regulatory approvals. In order to meet such capital requirements, we will consider contract fees, collaborative research and development arrangements, and additional public or private financings (including the incurrence of debt and the issuance of additional equity securities) to fund all or a part of particular programs as well as potential partnering or licensing opportunities. There can be no assurance that additional funding will be available or, if available, that it will be available on acceptable terms. If adequate funds are not available on terms favorable to us, we may have to reduce substantially or eliminate expenditures for research and development, testing, production and marketing of our proposed product, or obtain funds through arrangements with corporate partners that require us to relinquish rights to certain of our technologies or product. There can be no assurance that we will be able to raise additional capital if our current capital resources are exhausted.

The cost of director and officer liability insurance may continue to increase substantially or may not be available to us and may affect our ability to retain quality directors and officers.

We carry liability insurance on behalf of our directors and officers. Given a number of large director and officer liability insurance claims in the U.S. equity markets, director and officer liability insurance had until recently become increasingly more expensive with increased restrictions. Consequently, there is no assurance that we will continue to be offered this insurance or be able to obtain adequate coverage. The inability to acquire the appropriate insurance coverage will limit our ability to attract and maintain directors and officers as required to conduct our business.

We incur some of our expenses in foreign currencies and therefore are exposed to foreign currency exchange rate fluctuations.

We incur some of our manufacturing, clinical, collaborative and consulting expenses in foreign currencies, primarily the U.S. dollar, the Pound Sterling and the Euro. We are therefore exposed to foreign currency rate fluctuations. Also, as we expand to other foreign jurisdictions there may be an increase in our foreign exchange exposure.

We earn interest income on our excess cash reserves and are exposed to changes in interest rates.

We invest our excess cash reserves in investment vehicles that provide a rate of return with little risk to principle. As interest rates change the amount of interest income we earn will be directly impacted.

Other MD&A Requirements

We have 84,803,818 common shares outstanding at December 31, 2013. If all of our warrants (303,945) and options (5,918,678) were exercised we would have 91,026,441 common shares outstanding.

Our 2013 Annual Information Form on Form 20-F will be available on www.sedar.com.

Disclosure Controls and Procedures

Evaluation of Disclosure Controls and Procedures:

Our chief executive and financial officers reviewed and evaluated our disclosure controls and procedures. Based on that evaluation, they have concluded that our disclosure controls and procedures are effective in providing them with timely material information relating to the Company.

Management's Annual Report on Internal Control Over Financial Reporting:

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, and has designed such internal control over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of financial statements for external purposes in accordance with International Financial Reporting Standards.

Management, including the Chief Executive Officer and Chief Financial Officer, does not expect that our internal controls and procedures over financial reporting will prevent all error and all fraud. A control system can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving our stated goals under all potential future conditions. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has evaluated the design and operation of our internal control over financial reporting as of December 31, 2013, and has concluded that such internal control over financial reporting is effective as of December 31, 2013. There are no material weaknesses that have been identified by management in this regard. This assessment was based on criteria for effective internal control over financial reporting described in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 Framework).

Changes in Internal Controls over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the last fiscal year that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent the use of our reports dated March 12, 2014 with respect to the consolidated financial statements of Oncolytics Biotech Inc. (“Oncolytics”) as at December 31, 2013 and 2012 and for each of the years in the three year period ended December 31, 2013, and the effectiveness of internal control over financial reporting of Oncolytics as of December 31, 2013, included in the Annual Report on Form 20-F of Oncolytics for the year ended December 31, 2013, as filed with the United States Securities Exchange Commission (“SEC”).

We also consent to the incorporation by reference in the Registration Statement on Form F-10 (No. 333-182260) and in the Registration Statement on Form S-8 (No. 333-171625) of our reports dated March 12, 2014 with respect to the consolidated financial statements of Oncolytics as at December 31, 2013 and 2012 and for each of the years in the three year period ended December 31, 2013, and the effectiveness of internal control over financial reporting of Oncolytics as of December 31, 2013, included in the Annual Report on Form 20-F of Oncolytics for the year ended December 31, 2013, as filed with the SEC.

Calgary, Canada
March 19, 2014

Ernst + Young LLP

Chartered Accountants