ONCOLYTICS BIOTECH INC
Form 20-F
March 22, 2013

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

FORM 20-F

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

OR

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

For fiscal year ended December 31, 2012

OR

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

For the transition period from ____ to ____

OR

o	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	Name of each exchange on which registered
Common Shares, no par value	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: 76,710,285 common shares as at December 31, 2012

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

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 o No ý

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 ý No o

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 o
No o

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 o Accelerated filer x Non-accelerated filer o

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
o	x	o

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 o Item 18 o

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 o No ý

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				
	2012	2011	2010	2009	2008
Average for the period	0.9996	0.9893	1.0299	1.1420	1.0660

For the Month of	February 2013	January 2013	December 2012	November 2012	October 2012	September 2012
High for the period	1.0048	1.0188	1.0178	1.0095	1.0272	1.0371
Low for the period	0.9705	0.9900	1.0028	0.9943	0.9986	1.0082

Exchange rates are based on the Bank of Canada nominal noon exchange rates. The nominal noon exchange rate on March 21, 2013 as reported by the Bank of Canada for the conversion of United States dollars into Canadian dollars was US$1.00 = Cdn$1.0241. 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 three years ended December 31, 2012 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.

	2012	2011	2010
	$	$	$
Revenues	—	—	—
Net loss[1], [3], [4]	(36,373,521)	(29,044,701)	(24,659,061)

Net comprehensive loss	(36,313,135)	(29,005,542)	(24,815,721)
Basic and diluted loss per share[2]	(0.48)	(0.41)	(0.39)
Total assets[2]	22,078,090	36,024,617	44,432,442
Shareholders' equity[2]	14,786,780	29,520,379	36,394,960
Cash dividends declared per share[5]	Nil	Nil	Nil
Weighted average number of common shares outstanding	76,102,062	70,911,526	62,475,403

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Notes:

1) Included in net loss and net loss per share for the year ended December 31, 2012 is stock based compensation expense of $730,751 (2011 - $1,805,503; 2010 - $3,251,041).

2) We issued 5,458,950 common shares for net cash proceeds of $20,848,785 in 2012 (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, 2012 is change in fair value of warrant liability of $nil (2011 change in fair value of warrant liability gain 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, 2012 is a write down of asset available for sale of 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 shares of our 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;
- 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, 2012, we had an accumulated deficit of $207.8 million and we incurred net losses of $36.4 million, $29.0 million and $24.7 millionfor the years ended December 31, 2012, 2011, and 2010, respectively. We anticipate that we will continue to incur significant losses during 2013 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, 2012, we had cash and cash equivalents (including short-term investments) of $21.3 million and working capital of approximately $14.4 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 (“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, 2011, 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.

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 2012, 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, 2012:

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	United States	Ongoing

		EGFR-activated tumours		
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	Intravenous administration monotherapy (sponsored by University of Leeds)	Translational metastatic colorectal	United Kingdom	Complete
NCI Trial	Intravenous administration monotherapy (NCI)	Phase II melanoma	United States	Complete

Trial number	Delivery Method	Trial Program and Cancer Indication	Location	Status
NCI Trial	Intravenous and intraperitoneal administration monotherapy (NCI)	Phase I/II ovarian	United States	Complete
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 360 issued patents including 49 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 2011 from the American Cancer Society, 1.66 million Americans are expected to be diagnosed with cancer in the year, and 580,450 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. In the developed world alone, it is estimate by the World Health Organziation 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 2013 that the National Institute of Health estimated the 2008 cost for cancer treatment were $201.5 billion. Of this figure, $77.4 billion can be attributed to direct patient costs.

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, 2012, we had two wholly-owned subsidiaries; Oncolytics Biotech (Barbados) Inc. ("OBB"), a Barbados company, and Valens Pharma Ltd. As well, 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 2013 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 2012 Management Discussion and Analysis in Exhibit 15.1, which is incorporated herrein by reference.

B. Liquidity and Capital Resources

Please see our 2012 Management Discussion and Analysis in Exhibit 15.1, which is incorporated herrein 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 $31,402,625, $23,386,685, and $13,882,565 for 2012, 2011 and 2010, 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 2012 Management Discussion and Analysis for our comparative discussion on our expenditures between 2010 - 2012 and our expectations for 2013.

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, 2012, 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, 2012:

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]	324,243	91,332	192,316	40,595	—
Purchase obligations	8,552,656	8,552,656	—	—	—
Other long term obligations	Nil	—	—	—	—
Total contractual obligations	9,026,899	8,643,988	192,316	40,595	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 2012 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	Principal Occupation

	Position with the Company		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

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of the Company Since
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
William A. Cochrane, OC, M.D.[5] Calgary, Alberta	Director	President of W.A. Cochrane & Associates, Inc. (a consulting company) since 1989 and from April 2003 to December 2010, Chairman of Resverlogix Corp. (a public biopharmaceutical company) and is a Director of Immunovaccine Inc. Dr. Cochrane was formerly Chairman of QSV Biologics Ltd. (biologics contract manufacturer) from 2003 to 2009 and was a director of Sernova Corp. from 2005 to 2008, and a former chairman of University Technologies International Inc. (UTI) at the University of Calgary.	October 31, 2002
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, Clinical and Regulatory Affairs	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 38 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	N/A

		Medicine of the University of Pennsylvania in Philadelphia. 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.	
Robert B. Schultz, F.C.A. [(1), (4)] Toronto, Ontario	Lead Director		June 30, 2000

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of the Company Since
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
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] 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 of Export Development Canada and Canada West Foundation and serves as a director of other public and private companies. He is the Chancellor of the University of Calgary.	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] Lund, 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
			N/A

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.

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of the Company Since
Alan J Tuchman, MD, MBA (FAAN), New York, NY	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

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 Corporate Governance and Nominating Committee. Mr. Lievonen is the Chair of the Corporate Governance and Nominating Committee.
4) As Lead Director, Mr. Schultz is an ex-officio member of the Compensation and Nominating Committees.
5) On December 31, 2012, Dr. Cochrane retired from the Company's Board of Directors.

As at March 22, 2013, the directors and senior officers as a group beneficially owned, directly or indirectly, 1,216,151 of our common shares, representing 1.43% 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 except for Dr. William Cochrane who was a director of QSV Biologics (“QSV”) a private company. QSV was a private contract manufacturing company that started in 2004. Its customers were other biotechnology companies in Canada and the

USA. In 2008, as a result of the economic recession, these biotechnology companies were unable to raise capital and consequently were forced to discontinue clinical trials resulting in a loss of customers for QSV. QSV sought financing from private investors and governments but was unsuccessful. Consequently, QSV went bankrupt and had to terminate its employees and close the company in August 2009. Dr. Cochrane was a director from 2004 and chairman from 2006 to 2009.

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 2012 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 ($)
Dr. W. Cochrane[(2)]	42,500	N/A	25,200	None	N/A	None	67,700
Mr. J. Dinning	46,750	N/A	29,400	None	N/A	None	76,150
Dr. E. Levy	46,000	N/A	25,200	None	N/A	None	71,200
Mr. M. Lievonen	57,250	N/A	29,400	None	N/A	None	86,650
Mr. R. Schultz	69,750	N/A	50,400	None	N/A	None	120,150
Mr. F. Stewart	58,000	N/A	37,800	None	N/A	None	95,800
Mr. G. van Amersfoort	42,500	N/A	25,200	None	N/A	None	67,700

Note:

(1) Option based awards include grants from December 2012. The options granted on December 17, 2012 have an estimated grant date fair value of $0.84 per option using the following respective grant date assumptions: expected life of option, 2 years; volatility 57.94%; risk free interest rate 1.16%; dividend yield 0%.

(2) Effective December 31, 2012, Dr. Cochrane retired from the Company's Board of Directors.

Officers

Summary Compensation Table

The following table sets forth information concerning the total compensation paid to our officers in 2012.

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	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
	2010	444,996	N/A	709,500	150,163	N/A	N/A	50,712	1,355,371
Kirk J. Look Chief Financial Officer	2012	38,654	N/A	175,248	—	N/A	N/A	5,893	219,795
Dr. Matt C. Coffey	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
	2010	326,224	N/A	379,500	88,080	N/A	N/A	42,913	836,717
Mary Ann Dillahunty[2]	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
	2010	153,665	N/A	82,500	19,467	N/A	N/A	19,066	274,698
Dr. George Gill[2]	2012	310,200	N/A	33,588	—	N/A	N/A	26,211	369,999
Senior Vice President, Clinical and Regulatory Affairs	2011	305,100	N/A	53,900	30,510	N/A	N/A	25,171	414,681
	2010	100,349	N/A	82,500	32,378	N/A	N/A	—	215,227
Alan Tuchman[2], [5] Chief Medical Officer, Senior VP Clinical & Medical Development	2012	35,538	N/A	46,341	—	N/A	N/A	2,932	84,811
Douglas A. Ball[6]	2012	264,669	N/A	—	—	—	—	149,426	414,095
Chief Financial	2011	283,800	N/A	219,620	57,500	N/A	N/A	45,864	606,784
	2010	257,567	N/A	643,500	46,362	N/A	N/A	36,649	984,078
Dr. Gerard T. Kennealey[2], [7]	2012	271,176	N/A	—	—	N/A	N/A	220,717	491,893
	2011	52,111	N/A	431,000	—	N/A	N/A	4,299	487,410
Senior Vice President, Clinical	2010	—	N/A	—	—	N/A	N/A	—	—

Development &
Chief Medical
Officer

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 2012 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.

(6) On November 9, 2012, the Company terminated the employment agreement with Mr. Ball. Under the terms of Mr. Ball's employment contract a severance payment was required totaling $342,229. In 2012, a partial payment of $104,621 is included in "All Other Compensation" with the remainder paid in 2013.

(7) On September 27 2012, the Company terminated the employment agreement with Dr. Kennealey. Included in "All Other Compensation" is a severance payment of $197,931.

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	2013	530,000
Kirk J. Look Chief Financial Officer	2013	280,000
Dr. Matt C. Coffey Chief Operating Officer	2013	365,000
Mary Ann Dillahunty [(1)] VP Intellectual Property	2013	162,640
Dr. George Gill, MD [(1)] Senior Vice President, Clinical and Regulatory Affairs	2013	312,061
Alan J Tuchman, MD, MBA (FAAN) [(1)] Senior Vice President, Medical and Clinical Affairs & Chief Medical Officer	2013	140,840

Note 1: U.S. Employees are paid in U.S. Dollars and 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, 2013 without cause or due to a change of control of the Company.

Name	Termination without Cause [1] Severance ($)	Change of Control [2] Severance ($)
Dr. Bradley G. Thompson Chief Executive Officer	1,195,090	1,792,635
Kirk J. Look, C.A. Chief Financial Officer	326,920	653,840
Dr. Matt C. Coffey Chief Operating Officer	418,932.5	837,866
Mary Ann Dillahunty,[3] J.D. M.B.A., VP Intellectual Property	181,925	363,850
Dr. George Gill, MD[3] Senior Vice President, Clinical and Regulatory Affairs	312,061	624,122
Alan J Tuchman, MD, MBA (FAAN) [3] Senior Vice President, Medical and Clinical Affairs & Chief Medical Officer	35,210	—

Notes:

(1) As at December 31, 2012, all options granted to Officers had fully vested except for 150,000 options granted to Mr. Look. These options vest annually over three years. 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.

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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 2013 Annual General Meeting of the Shareholders
Matthew C. Coffey Ph.D. Calgary, Alberta	Chief Operating Officer	May 11, 2011	Date of 2013 Annual General Meeting of the Shareholders
William A. Cochrane, OC, M.D.(5) Calgary, Alberta	Director	October 31, 2002	December 31, 2012
Robert B. Schultz, F.C.A. (1), (4) Toronto, Ontario	Lead Director	June 30, 2000	Date of 2013 Annual General Meeting of the Shareholders
Fred A. Stewart, Q.C.(1) Calgary, Alberta	Director	August 27, 1999	Date of 2013 Annual General Meeting of the Shareholders
J. Mark Lievonen, F.C.A.(1),(3) Markham, Ontario	Director	April 5, 2004	Date of 2013 Annual General Meeting of the Shareholders
Jim Dinning(2) Calgary, Alberta	Director	March 24, 2004	Date of 2013 Annual General Meeting of the Shareholders
Ger van Amersfoort,(2) Netherlands	Director	June 15, 2006	Date of 2013 Annual General Meeting of the Shareholders
Ed Levy, Ph.D, (2), (3) Lund, BC	Director	May 17, 2006	Date of 2013 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 Corporate Governance and Nominating Committee. Mr. Lievonen is the Chair of the Corporate Governance and Nominating Committee.
4) As Lead Director, Mr. Schultz is an “ex officio” member of the Corporate Governance and Compensation Committees.
5) Effective December 31, 2012, Dr. Cochrane retired from the Company's Board of Directors.

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 2012 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 corporate governance and nominating 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 $362,750 in directors’ fees was paid to the Board of Directors during the fiscal year ended December 31, 2012. During the fiscal year ended December 31, 2012, there were 265,000 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 three outside directors: Mr. Dinning, Mr. van Amersfoort 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 2012, the following guidelines were employed by the Board in granting bonuses and stock option grants to the Corporation's executive and senior officers. For 2013, similar guidelines are expected to be applied.

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.

Compensation Committee Mandate

This Mandate was reviewed, amended and approved by the Company’s board of directors on March 14, 2012.

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

The Committee shall consist of a minimum of two (2) directors, at least half of whom shall be resident Canadians.

(a) The Board shall appoint the members of the Committee and may seek the advice and assistance of the Corporate Governance and Nominating 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

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(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 14, 2012.

Audit Committee

The Corporation has formed an Audit Committee in accordance with Section 3(a)(58)(A) of the U.S. Securities and Exchange Commission of 1934, as amended, consisting of three independent directors pursuant to the Rule 5605(a)(2) of the NASDAQ Capital Market and Rule 10A-3 of the United States Securities Exchange Act of 1934, as amended: 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 Company’s board of directors on March 13, 2013.

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 Corporate Governance and Nominating 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 abovementioned 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).

. 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
(e) 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

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
(a) 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.

Notice of each meeting of the Audit Committee shall be given to each member of the Audit Committee and to the
(b) 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.

A quorum for the transaction of business at a meeting of the Audit Committee shall consist of a majority of the
(d) 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.

A member or members of the Audit Committee may participate in a meeting of the Audit Committee by means of
(e) 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.

In the absence of the Chair of the Audit Committee, the members of the Audit Committee shall choose one of the
(f) 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.

A member of the Board, senior management of the Corporation and other parties may attend meetings of the Audit
(g) 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 13, 2013.

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	2012	2011	2010
Research and development	14	17	13
Operating	9	8	4
Total	23	25	17

Geographic location	2012	2011	2010
Canada	16	18	15
United States of America	4	5	2
Other	3	2	—
Total	23	25	17

E. Share Ownership

The following table sets out the share ownership and options held of our directors and officers as of March 22, 2013.

	Common Shares	Percentage of Ownership[1]	Options[2]	Exercise Price	Expiry Date	Percentage of Outstanding [3]
Officers						
Bradley Thompson	662,900	**	59,000	3.33	August 5, 2013	
			80,000	4.50	December 11, 2013	
			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	
			1,431,160			2.30 %
Matthew Coffey	288,550	**	10,000	2.00	December 13, 2012[4]	
			53,500	3.33	August 5, 2013	
			40,000	4.50	December 11, 2013	
			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	

			749,833			1.14	%
Kirk Look	26,400	**	45,000	1.65	April 4, 2013		
			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		
			398,700			**	
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		
			231,667			**	
George Gill	32,000	**	17,000	3.33	August 5, 2013		
			40,000	4.50	December 11, 2013		
			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		
			208,667			**	
Alan Tuchman	100	**	7,500	3.33	August 5, 2013		
			2,500	4.50	December 11, 2013		