ONCOLYTICS BIOTECH INC
Form SUPPL
October 20, 2014

AMENDED AND RESTATED PROSPECTUS SUPPLEMENT

(To Short Form Base Shelf Prospectus dated August 1, 2014)

No securities regulatory authority has expressed an opinion about these securities and it is an offence to claim otherwise. *This amended and restated prospectus supplement, together with the accompanying short form base shelf prospectus dated August 1, 2014 to which it relates, as amended or supplemented, and each document deemed to be incorporated by reference into this amended and restated prospectus supplement and the short form base shelf prospectus, constitutes a public offering of these securities only in those jurisdictions where they may be lawfully offered for sale and therein only by persons permitted to sell such securities. See "Plan of Distribution".*

Information has been incorporated by reference in this amended and restated prospectus supplement and the accompanying short form base shelf prospectus from documents filed with the Alberta Securities Commission. *Copies of the documents incorporated by reference in this amended and restated prospectus supplement and the short form base shelf prospectus may be obtained on request without charge from the Corporate Secretary of Oncolytics Biotech Inc. at 210, 1167 Kensington Crescent N.W., Calgary, Alberta T2N 1X7 and are also available electronically at www.sedar.com.*

New Issue October 20, 2014

US$ 3,900,000

Common Shares

We have entered into a purchase agreement dated February 27, 2014 (the "**Purchase Agreement**"), as amended August 8, 2014 and October 20, 2014, with Lincoln Park Capital Fund, LLC ("**Lincoln Park**"), relating to our common shares. In accordance with the terms of the Purchase Agreement, we may offer and sell our common shares to Lincoln Park up to an aggregate offering amount of US$26,000,000, subject to an aggregate maximum of US$3,900,000 under this prospectus supplement.

The common shares offered to Lincoln Park include, subject to an aggregate maximum amount of US$**[•]** under this prospectus supplement:

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- up to US$19,870,365 of our common shares that may be sold from time to time, at our sole discretion, to Lincoln Park over the 30 month period which commenced on February 27, 2014 in accordance with the Purchase Agreement;

- 146,397 common shares to be issued to Lincoln Park as initial commitment shares (the "**Initial Commitment Shares**") as consideration for agreeing to certain amendments to the Purchase Agreement on October 20, 2014, valued at US$0.4451 per common share for a total aggregate value of US$65,160 issued under this prospectus supplement; and

- up to 292,793 additional common shares, valued at US$0.4451 per common share, that we may issue to Lincoln Park on a pro rata basis as additional commitment shares (the "**Additional Commitment Shares**"), upon each purchase by Lincoln Park under the Purchase Agreement for a total of up to US$26,000,000 aggregate value of common shares purchased.

This prospectus supplement and the accompanying prospectus also cover the resale of these common shares by Lincoln Park to the public.

Our common shares are listed on the Nasdaq Capital Market ("**NASDAQ**") under the symbol "ONCY" and on the Toronto Stock Exchange ("**TSX**") under the symbol "ONC". On October 17, 2014, the last reported sale price of our common shares was US$0.4451 per common share on NASDAQ and C$0.49 per common share on the TSX. None of our common shares issued pursuant to the Purchase Agreement will be offered for sale or sold by us or Lincoln Park on the TSX or to purchasers in Canada.

Lincoln Park will not engage in any transactions that stabilize the price of our common shares. No underwriter or dealer involved in the distribution, no affiliate of such an underwriter or dealer and no person or company acting jointly or in concert with such an underwriter or dealer has over-allotted, or will over-allot, securities in connection with the distribution or effect any other transactions that are intended to stabilize or maintain the market price of the securities.

Investing in our common shares is speculative and bears certain risks. See "Risk Factors" beginning on page S-12 of this prospectus supplement and on page 10 of the accompanying prospectus and the risk factors discussed or referred to in our Annual Information Form and Annual MD&A which are incorporated by reference into this prospectus supplement and the accompanying prospectus.

This offering is made by a Canadian issuer that is permitted under a multi-jurisdictional disclosure system adopted by the United States and Canada to prepare this prospectus supplement and the accompanying prospectus in accordance with Canadian disclosure requirements. Prospective investors should be aware that such requirements are different from those applicable to issuers in the United States. Financial statements incorporated herein by reference have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), and may not be comparable to financial statements of United States companies.

Prospective investors should be aware that the acquisition, holding or disposition of the common shares may have tax consequences both in the United States and in Canada. Such consequences for investors who are resident in, or citizens of, the United States may not be described fully herein. Prospective investors should read the tax discussion contained in this prospectus supplement under the heading "Certain US Federal Income Tax Considerations" and should consult their own tax advisor with respect to their own particular circumstances.

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The enforcement by investors of civil liabilities under the US federal securities laws may be affected adversely by the fact that we are governed by the laws of Canada, that some or all of our officers and directors are residents of Canada, and that a substantial portion of our assets and the assets of said persons are located outside the United States.

NEITHER THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION (THE "SEC") NOR ANY STATE SECURITIES REGULATOR HAS APPROVED OR DISAPPROVED OF THE SECURITIES OFFERED HEREBY OR DETERMINED IF THIS PROSPECTUS SUPPLEMENT OR THE ACCOMPANYING PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENCE.

The date of this prospectus supplement is October 20, 2014

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IMPORTANT NOTICE ABOUT INFORMATION IN THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference herein and therein. The second part is the accompanying prospectus, which provides more general information. If the description of the common shares varies between this prospectus supplement and the accompanying prospectus, investors should rely on the information in this prospectus supplement. Before you invest, you should carefully read this prospectus supplement, the accompanying prospectus, all information incorporated by reference herein and therein, as well as the additional information described under "Where You Can Find Additional Information" on page S-26 of this prospectus supplement. These documents contain information you should consider when making your investment decision. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference therein filed prior to the date of this prospectus supplement, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference therein.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and Lincoln Park has not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are offering to sell, and seeking offers to buy, our common shares only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the offering of the common shares in certain jurisdictions may be restricted by law. You should assume that the information contained in this prospectus supplement and the accompanying prospectus, as well as information we have previously filed with the United States Securities and Exchange Commission (the "**SEC**") and with the securities regulatory authority in each of the provinces and territories of Canada, except Québec, that is incorporated by reference herein and in the accompanying prospectus, is accurate only as of its respective date. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Certain statistical information and other data relating to the pharmaceutical and biotechnology industry included in this prospectus supplement and the prospectus are derived from recognized industry reports published by industry analysts, industry associations and/or independent consulting and data compilation organizations. Market data and industry forecasts used throughout this prospectus supplement and the prospectus were obtained from various publicly available sources. Although the Corporation believes that these independent sources are generally reliable, the accuracy and completeness of the information from such sources is not guaranteed and has not been independently verified.

This prospectus supplement is deemed to be incorporated by reference into the prospectus solely for the purposes of this offering. Other documents are also incorporated or deemed to be incorporated by reference into this prospectus supplement and into the prospectus. See “Documents Incorporated by Reference.”

In this prospectus supplement, “**Oncolytics**,” the “**Corporation**,” “**we**,” “**us**,” and “**our**” refer to Oncolytics Biotech Inc. and it subsidiaries.

FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus contain certain information that may constitute "forward-looking information" and "forward-looking statements" ("**forward-looking information**") within the meaning of applicable Canadian securities laws and the United States Private Securities Litigation Reform Act of 1995, respectively. Forward-looking information typically contains statements with words such as "anticipate", "believe", "expect", "plan", "estimate", "intend", "may" or similar words suggesting future outcomes. Forward-looking information in thi prospectus supplement includes, but is not limited to, statements with respect to: clinical trial study timing, product development timing, our ability to attract and retain business partners, future levels of government funding, competition from other biotechnology companies, our ability to obtain the capital required for research, product development, operations and marketing and the intended uses for the proceeds of this offering. This forward-looking information is subject to various risks and uncertainties, including those discussed below, that could cause actual results and experience to differ materially from the anticipated results or other expectations expressed. Our statements of "belief", "estimates", "expectations" and other similar statements are based primarily upon our results derived to date from our research and development program with animals and early stage human results and upon which we believe 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 results, whether a new therapeutic will be proved to be safe and effective in humans.

There can be no assurance that the particular results expected by us will occur. Forward-looking information is provided for the purpose of assisting you in understanding our current views of future outcomes, and may not be appropriate for other purposes. Readers are cautioned not to place undue reliance on this forward-looking information, which is provided as of the date of this prospectus unless otherwise stated.

Some of the assumptions, risks and factors which could cause future outcomes to differ materially from those set forth in the forward-looking information contained herein include, but are not limited to: (i) the assumption that we will be able to obtain sufficient and suitable financing to support operations, clinical trials and commercialization of products, (ii) the risk that we may not be able to capitalize on partnering and acquisition opportunities, (iii) the assumption that we will obtain favourable clinical trial results in the expected timeframe, (iv) the assumption that we will be able to adequately protect proprietary information and technology from competitors, (v) the risks relating to the uncertainties of the regulatory approval process, (vi) the impact of competitive products and pricing and the assumption that we will be able to compete in the targeted markets, and (vii) the risk that we may be unable to retain key personnel or maintain third party relationships, including relationships with key collaborators.

By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections or other forward-looking statements will not occur.

See “Risk Factors” beginning on page S-12 in this prospectus supplement and on page 10 of the accompanying prospectus and the risk factors discussed or referred to in our Annual Information Form and Annual MD&A which are incorporated by reference into this prospectus supplement and the accompanying prospectus.

Except as required by law, we undertake no obligation to publicly update any forward-looking information, whether as a result of new information, future events or otherwise.

PRESENTATION OF FINANCIAL INFORMATION

Unless otherwise indicated, all financial information included and incorporated by reference in this prospectus supplement is prepared in accordance with IFRS. Since January 1, 2011, we have prepared our financial statements in accordance with IFRS. Prior to the adoption of IFRS, we followed Canadian Generally Accepted Accounting Principles ("**Canadian GAAP**"). While IFRS has many similarities to Canadian GAAP, some of our accounting policies have changed as a result of our transition to IFRS. Our financial statements incorporated by reference in this prospectus supplement and the prospectus and in the documents incorporated by reference herein and therein may not be comparable to financial statements prepared in accordance with United States generally accepted accounting principles.

CURRENCY AND EXCHANGE RATE INFORMATION

In this prospectus supplement, unless otherwise specified or the context otherwise requires, all dollar amounts are expressed in United States dollars. All references to "US$" and "$" are to the lawful currency of the United States and all references to "C$" are to the lawful currency of Canada. In this prospectus supplement, where applicable, and unless otherwise indicated, amounts are converted from United States dollars to Canadian dollars and vice versa by applying the noon rate of exchange of the Bank of Canada on October 17, 2014. The following table sets forth: (i) the rates of exchange for Canadian dollars, expressed in U.S. dollars, in effect at the end of the periods indicated; (ii) the average rates of exchange in effect during such periods; (iii) the high rates of exchange in effect during such periods; and (iv) the low rates of exchange in effect during such periods, such rates, in each case, based on the noon rates of exchange for conversion of one Canadian dollar to U.S. dollars as reported by the Bank of Canada.

	Years Ended December 31			Nine Months ended September 30,
	2011	2012	2013	2014
Low	$0.9430	$0.9710	$0.9839	$ 0.8888
High	$1.0583	$1.0418	$1.0697	$ 0.9422
Average[(1)]	$1.0110	$0.9996	$1.0299	$ 0.9139
End	$0.9833	$1.0051	$0.9402	$ 0.8913

Note:

(1) The average of the inverse of the noon buying rate on the last day of each month during the applicable period.

On October 17, 2014, the inverse of the noon exchange rate quoted by the Bank of Canada for Canadian dollars was C$1.00 = $0.8890.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement or the prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in the common shares. For a more complete understanding of the Corporation and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus supplement and the prospectus, including the information incorporated by reference in this prospectus supplement and the prospectus, and the information included in any free writing prospectus that the Corporation has authorized for use in connection with this offering, including the information under the heading "Risk Factors" in this prospectus supplement on page S-12. All capitalized terms used in this summary refer to those definitions contained elsewhere in this prospectus supplement and/or the prospectus, as applicable.

Oncolytics Biotech Inc.

Our Business

We focus on the discovery and development of oncolytic viruses for the treatment of cancers that have not been successfully treated with conventional therapeutics. Recent scientific advances in oncology, virology, and molecular biology have created opportunities for new approaches to the treatment of cancer. The product candidate we are presently developing may represent a novel treatment for Ras-mediated cancers. This product candidate can be used as an alternative to existing cytotoxic or cytostatic therapies or as an adjuvant therapy to conventional chemotherapy, radiation therapy, or surgical resections. It could also potentially be used to treat certain cellular proliferative disorders for which no current therapy exists.

Our technologies are based primarily on discoveries made in the Department of Microbiology and Infectious Diseases at the University of Calgary in the 1990s. Oncolytics was formed in 1998 to explore the natural oncolytic capability of the reovirus, a virus that preferentially replicates in cells with an activated Ras pathway.

Our lead product candidate, REOLYSIN® may represent a novel treatment for certain tumour types and some cellular proliferative disorders. This lead product is a virus that is able to replicate specifically in, and hence kill, certain tumour cells both in tissue culture as well as in a number of animal models without damaging normal cells.

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 thirty per cent 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 REOLYSIN 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, Protein Kinase R ("**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.

We have been issued over 360 patents including 47 U.S. and 14 Canadian patents as well as issuances in other jurisdictions. We have an extensive patent portfolio covering the oncolytic reovirus that we use in our clinical trial program including a composition of matter patent that expires in 2028. Our patent portfolio also includes methods for treating proliferative disorders using modified adenovirus, herpes simplex virus, parapoxvirus and vaccinia virus.

Corporate Information

Oncolytics Biotech Inc. was incorporated pursuant to the provisions of the *Business Corporations Act* (Alberta) on April 2, 1998 as 779738 Alberta Ltd. On April 8, 1998, we amended our articles and changed our name to Oncolytics Biotech Inc. On July 29, 1999, we further amended our articles by removing the private company restrictions and subdividing our 2,222,222 common shares issued and outstanding into 6,750,000 common shares. On February 9, 2007, we further amended our articles to permit our shareholder meetings to be held at any place in Alberta or at any other location as determined by our directors.

Our head office and principal place of business is located at 210, 1167 Kensington Crescent N.W., Calgary, Alberta T2N 1X7. Our registered office is located at 3700, 400 – 3rd Avenue S.W., Calgary, Alberta, T2P 4H2.

We have two direct wholly-owned subsidiaries: Oncolytics Biotech (Barbados) Inc., which is incorporated pursuant to the laws of Barbados and Valens Pharma Ltd., which is incorporated pursuant to the laws of the Province of Alberta; and two indirect wholly-owned subsidiaries: Oncolytics Biotech (U.S.), Inc., which is incorporated pursuant to the laws of Delaware, and Oncolytics Biotech (U.K.) Ltd., which is incorporated pursuant to the laws of England and Wales, both of which are wholly-owned direct subsidiaries of Oncolytics Biotech (Barbados) Inc.

THE OFFERING

Issuer:	Oncolytics Biotech Inc.
Offering:	The common shares offered to Lincoln Park include, subject to an aggregate maximum of US$3,900,000 under this prospectus supplement: · up to US$19,870,365. of our common shares that may be sold from time to time, at our sole discretion, to Lincoln Park over the 30 month period which commenced on February 27, 2014 in accordance with the Purchase Agreement; · 146,397 Initial Commitment Shares to be issued to Lincoln Park as consideration for agreeing to certain amendments to the Purchase Agreement on October 20, 2014, valued at US$0.4451 per common share for a total aggregate value of US$65,160 issued under this prospectus supplement; and · up to 292,793 common shares that we may issue to Lincoln Park on a pro rata basis, as Additional Commitment Shares, upon each purchase by Lincoln Park under the Purchase Agreement up to a total of US$26,000,000 of common shares purchased.
Common shares outstanding before this offering[(1)]	89,566,597 common shares
Common shares outstanding immediately after this offering[(1)]	134,209,071 common shares after issuance of up to 44,642,474 common shares, assuming a sales price of US$0.4451 per common share for the remaining US$19,870,365 that may be sold from time to time, which was the closing price on NASDAQ on October 17, 2014, including up to 292,793 Additional Commitment Shares to be issued to Lincoln Park as a fee for its commitment to purchase our common shares and 146,397 Initial Commitment Shares to be issued to Lincoln Park as consideration for agreeing to certain amendments to the Purchase Agreement on October 20, 2014, subject to an aggregate maximum of US$3,900,000 under this prospectus supplement. Actual number of common shares issued and outstanding will vary depending on the actual sales prices and aggregate dollar amount sold under this offering.
Use of Proceeds:	We intend to use the net proceeds from this offering, if any, for general corporate purposes. See “Use of Proceeds”.

Listing Symbols:	Our common shares are listed on the NASDAQ under the symbol “ONCY” and on the TSX under the symbol “ONC”.
Risk Factors:	You should carefully read and consider the information set forth in “Risk Factors” beginning on page S-12 of this prospectus supplement and page 10 of the prospectus before investing in our common shares. For more information on tax considerations related to our PFIC status, see “Certain U.S. Federal Income Tax Considerations – Passive Foreign Investment Company Rules”.
Tax Considerations	Purchasing our common shares may have tax consequences in the United States. This prospectus supplement and the accompanying prospectus may not describe these consequences fully for all investors. Investors should read the tax discussion in this prospectus supplement and consult their tax advisor. See “Certain U.S. Federal Income Tax Considerations.” Potential investors that are United States taxpayers should be aware that we may be considered a “passive foreign investment company” (“**PFIC**”).

Note: (1) On a non-diluted basis.

RECENT DEVELOPMENTS

Purchase Agreement with Lincoln Park

The Corporation and Lincoln Park have entered into a Purchase Agreement dated February 27, 2014, as amended August 8, 2014 and October 20, 2014, which provides that, upon the terms and subject to the conditions and limitations set forth therein, we have the right to sell to Lincoln Park up to US$26,000,000 worth of our common shares at our discretion as described below, subject to an aggregate maximum of US$3,900,000 under this prospectus supplement.

Under the Purchase Agreement, the Corporation has, to date, issued 4,400,962 common shares, 292,793 Initial Commitment Shares as consideration for entering into the Purchase Agreement on February 27, 2014 and 69,024 Additional Commitment Shares for aggregate gross proceeds to the Corporation of US$6,129,635. The Corporation has agreed to issue and additional 146,397 Initial Commitment Shares to Lincoln Park as consideration for agreeing to certain amendments to the Purchase Agreement on October 20, 2014.

We are filing this prospectus supplement with regard to the offering of up to US$3,900,000 worth of our common shares, which consists of (i) a portion of common shares with an aggregate offering price of up to US$19,870,365 which we may sell from time to time, in our sole discretion, to Lincoln Park over the 30 month period which commenced on February 27, 2014, subject to the conditions and limitations in the Purchase Agreement, and (ii) a portion of up to an additional 292,793 common shares that we may issue to Lincoln Park on a pro rata basis, as Additional Commitment Shares, upon each purchase by Lincoln Park under the Purchase Agreement up to a total of US$26,000,000 worth of our common shares purchased.

Under the Purchase Agreement, on any business day and as often as every other business day over the 30-month term of the Purchase Agreement, we have the right, in our sole discretion, subject to the conditions and limitations in the Purchase Agreement, to direct Lincoln Park to purchase up to 150,000 common shares (each a "**Regular Purchase**"). Such amount of the Regular Purchase may be increased to up to 200,000 common shares, provided that the closing sale price of the common shares is not below US$2.00 on the applicable purchase date, and up to 300,000 common shares, provided that the closing sale price of the common shares is not below US$3.50 on the applicable purchase date; however, Lincoln Park's obligation under each Regular Purchase shall not exceed $1,000,000, which may be increased upon the mutual agreement of us and Lincoln Park. The purchase price for common shares to be purchased by Lincoln Park in a Regular Purchase will be the lower of (i) the lowest sale price on the purchase date, as reported by NASDAQ, and (ii) the arithmetic average of the three lowest closing sale prices for our common shares during the 12 consecutive business days prior to the purchase date.

We can also accelerate the amount of our common shares to be purchased under certain circumstances in an amount up to the lesser of (i) 200% of the number of common shares purchased pursuant to the applicable Regular Purchase and (ii) 30% of the trading volume on such accelerated purchase date, if the closing sale price of our common shares equals or exceeds US$1.50 on such purchase date, as reported by NASDAQ (each an "**Accelerated Purchase**"). The purchase price for the common shares in an Accelerated Purchase is the lower of (i) the closing sale price for our common shares on the date of sale, and (ii) 95% of the volume weighted average price of our common shares on NASDAQ on the date of sale.

There is no upper or lower limit on the price per share that Lincoln Park must pay for our common shares under the Purchase Agreement.

There are no trading volume requirements or restrictions under the Purchase Agreement, but there are limitations on the number of common shares we can direct Lincoln Park to purchase, as described herein. We will control the timing and amount of any sales of our common shares to Lincoln Park. We may at any time, in our sole discretion terminate the Purchase Agreement without fee, penalty or cost, upon one business days' notice. We may issue up to 292,793 Additional Commitment Shares as an additional commitment fee on a pro rata basis as Lincoln Park purchases up to US$26,000,000 worth of our common shares in our discretion under the Purchase Agreement. By way of example only, if we elect, at our sole discretion, to require Lincoln Park to purchase US$100,000 worth of our common shares, then we would issue approximately 2,252 Additional Commitment Shares as a pro rata additional commitment fee, which is the product of US$100,000, the amount we have elected to sell, divided by US$13,000,000, the total amount we can sell to Lincoln Park under the Purchase Agreement, multiplied by 292,793, the maximum number of Additional Commitment Shares under the Purchase Agreement. The Additional Commitment Shares will only be issued pursuant to this formula if, as and when we elect to sell our common shares to Lincoln Park. Lincoln Park may not assign or transfer its rights or obligations under the Purchase Agreement.

The Purchase Agreement limits our sales of common shares to Lincoln Park to 16,952,283 common shares, or 19.99% of our total outstanding common shares as of the date that the Purchase Agreement was originally entered into (the "**Exchange Cap**"), unless and until we have obtained shareholder approval of the transactions contemplated by the Purchase Agreement under applicable NASDAQ rules, provided that such limitation shall not apply to the extent that the average price of all sales of common shares to Lincoln Park under the Purchase Agreement exceed a "base price" of $0.0781, such that the sales to Lincoln Park are considered to be at least "at market" under applicable NASDAQ rules. None of our common shares issued pursuant to the Purchase Agreement will be offered for sale or sold by us or Lincoln Park on the TSX.

The Purchase Agreement also prohibits us from directing Lincoln Park to purchase any common shares if those common shares, when aggregated with all of our other common shares then beneficially owned by Lincoln Park and its affiliates, would result in Lincoln Park and its affiliates having beneficial ownership, at any single point in time, of more than 9.99% of our then total outstanding common shares (approximately 8,947,000 shares as of the date of this prospectus supplement), as calculated pursuant to Section 13(d) of the Exchange Act, and Rule 13d-3 thereunder.

The number of common shares ultimately offered for sale by the Corporation under this prospectus supplement is dependent upon the number of common shares purchased by Lincoln Park under the Purchase Agreement. The following table sets forth the amount of proceeds we would receive from Lincoln Park from the sale of shares that are registered in this offering at varying purchase prices (without accounting for certain fees and expenses), assuming the sale by us of common shares at the average prices set forth in the table and the issuance by the Corporation of the related Additional Commitment Shares, in the aggregate amount of the US$3,900,000 in common shares qualified by this prospectus supplement:

Assumed Average Purchase Price for Additional Purchase Shares	**Number of Registered Shares to be Issued if Full Purchase**	**Percentage of Outstanding Shares After Giving Effect to the Issuance to Lincoln Park**	**Proceeds from the Sale of Shares to Lincoln Park Under the Purchase Agreement**
US$0.25	15,687,838	14.90 %	US$3,900,000
US$0.4551	8,849,914	8.99 %	US$3,900,000
US$1.50	2,687,838	2.91 %	US$3,900,000
US$2.00	2,037,838	2.22 %	US$3,900,000
US$3.50	1,202,124	1.32 %	US$3,900,000

Events of default under the Purchase Agreement include the following:

- the effectiveness of the registration statement, of which this prospectus supplement and accompanying prospectus are a part, lapses for any reason (including, without limitation, the issuance of a stop order), or this prospectus supplement and accompanying prospectus or the Canadian prospectus supplement and accompanying prospectus related to the offering hereby are unavailable for sale by us to Lincoln Park of our common shares offered hereby and thereby, respectively, and such lapse or unavailability continues for a period of 10 consecutive business days or for more than an aggregate of 30 business days in any 365-day period;

- suspension by our principal market of our common shares from trading for a period of one business day;

- the de-listing of our common shares from The NASDAQ Capital Market, provided our common shares are not immediately thereafter trading on the New York Stock Exchange, The NASDAQ Global Market, The NASDAQ Global Select Market, the NYSE MKT, the NYSE Arca, the OTC Bulletin Board or OTC Markets (or nationally recognized successor to any of the foregoing);

- the transfer agent's failure for three business days to issue to Lincoln Park our common shares after the applicable payment therefor;

- any breach of the representations or warranties or covenants contained in the Purchase Agreement or any related agreements which has had or which could have a material adverse effect on us, subject to a cure period of five business days;

- any participation or threatened participation in insolvency or bankruptcy proceedings by or against us;

- if at any time we are not eligible to transfer our common shares electronically; or

- if at any time the Exchange Cap is reached (to the extent the Exchange Cap is applicable) and we have not obtained shareholder approval of the transactions contemplated by the Purchase Agreement under applicable NASDAQ rules.

Lincoln Park does not have the right to terminate the Purchase Agreement upon any of the events of default set forth above. During an event of default, all of which are outside the control of Lincoln Park, our common shares cannot be sold by us or purchased by Lincoln Park under the terms of the Purchase Agreement.

This offering will terminate on the date that all common shares offered by this prospectus supplement have been sold or, if earlier, the expiration or termination of the Purchase Agreement. We have the right to terminate the Purchase

Agreement at any time, at no cost to us. In the event of bankruptcy proceedings by or against us, the Purchase Agreement will automatically terminate without action of any party.

U.S. Randomized Phase 2 Pancreatic Cancer Study

On September 16, 2014, we announced overall and KRAS-mutated patient data from our two-arm randomized phase 2 study of carboplatin, paclitaxel plus REOLYSIN® (test arm) versus carboplatin and paclitaxel alone (control arm) in the first line treatment of patients with recurrent or metastatic pancreatic cancer (NCI-8601). The trial was sponsored by the U.S. National Cancer Institute (NCI) through a clinical trials agreement between the Cancer Therapy Evaluation Program, Division of Cancer Treatment and Diagnosis and Oncolytics. We provided clinical supplies of REOLYSIN® for the study and paid for the immune and genetic testing of the patients.

The overall objectives of the study were to determine the progression free survival of the overall patient population and the patient population according to KRAS mutation status.

Overall patient population

The study enrolled 73 patients; 37 were in the control arm, 36 were in the test arm. The median progression free survival for the control arm was 5.16 months (95% confidence interval (CI) = 2.267 to 6.176) versus 5.26 months for the test arm (95% CI = 3.187 to 6.307) (see Figure 1).

Figure 1 - Kaplan-Meier plot of the Progression Free Survival (PFS) of the control arm versus the test arm of the overall patient population.

KRAS mutated patient population

As part of the study design, patients were screened for KRAS status at codon 12. Of the 60 patients where KRAS status could be determined (mutant vs wild type), 44 (73%) had mutations in the KRAS gene (n = 23 in the control arm, n = 21 in the test arm). Median progression free survival in the test arm was 5.72 months (95% CI = 3.187 to 6.767) versus 4.11 months in the control arm (95% CI = 1.938 to 6.176) (see Figure 2). This translates into a 1.61 month (39%) improvement in median progression free survival in the test arm versus the control arm. Three patients on the test arm and one on the control arm had not progressed as of the time of analysis.

Figure 2 - Kaplan-Meier plot of the Progression Free Survival (PFS) of the control arm versus the test arm of the KRAS mutated patient population

Crossover patient population

Patients on the control arm who progressed on carboplatin and paclitaxel had the option of adding REOLYSIN® to their regimen. At the time of the analysis, 16 patients crossed over to the test arm regime. The best responses after crossover were one partial response (PR), six stable disease (SD), seven progressive disease (PD), and two not evaluable, giving a disease control rate (complete response (CR) + PR + SD) of 50% in the carboplatin and paclitaxel failed group.

The study was an open-label, multi-institution, two-arm phase 2 randomized study of patients with metastatic pancreatic cancer. Patients were randomized to receive either carboplatin, paclitaxel plus REOLYSIN® (test arm) or carboplatin and paclitaxel alone (control arm). Patients in both arms received treatment every three weeks (21-day cycles) and standard intravenous doses of paclitaxel and carboplatin on day one only. In the test arm, patients also received intravenous REOLYSIN® at a dose of 3x1010 TCID50 on days one through five. Tumor response assessment was done by computed tomography (CT) scan and conducted every eight weeks. Patients who progressed on carboplatin and paclitaxel (control arm) had REOLYSIN® added. If patients experienced significant toxicity related to carboplatin and/or paclitaxel, they could continue with single agent REOLYSIN®.

The primary endpoint of the trial is to assess improvement in progression-free survival with REOLYSIN®, carboplatin and paclitaxel relative to carboplatin and paclitaxel alone in patients with metastatic pancreatic cancer. The primary endpoint is progression free survival in both arms. Secondary endpoints include safety, overall response rate, overall survival, immune factors and to prospectively establish and validate the relationship between Ras mutations in tumor samples and response to REOLYSIN®.

RISK FACTORS

Prospective purchasers of common shares should consider carefully the risk factors set out herein and contained in and incorporated by reference in the accompanying base shelf prospectus. Discussions of certain risks affecting the Corporation in connection with its business are set forth under “Risk Factors” in the accompanying prospectus and in our Annual Information Form, our Annual MD&A and our other disclosure documents filed with the various securities regulatory authorities which are incorporated by reference in this prospectus supplement and the accompanying prospectus.

Volatility of Market Price of common shares

The market price of the common shares may be volatile. The volatility may affect the ability of holders of common shares to sell the common shares at an advantageous price. Market price fluctuations in the common shares may be due to the Corporation's operating results failing to meet the expectations of securities analysts or investors in any quarter, downward revision in securities analysts' estimates, governmental regulatory action, adverse change in general market conditions or economic trends, acquisitions, dispositions or other material public announcements by the Corporation or its competitors, along with a variety of additional factors, including, without limitation, those set forth under “Forward-Looking Statements” in this prospectus supplement. In addition, the market price for securities in the stock markets, including NASDAQ and the TSX, recently experienced significant price and trading fluctuations. These fluctuations have resulted in volatility in the market prices of securities that often has been unrelated or disproportionate to changes in operating performance. These broad market fluctuations may adversely affect the market price of the common shares.

The Corporation will have broad discretion over the use of the net proceeds from this offering and the Corporation May Not Use These Proceeds in a Manner Desired by the Corporation's Shareholders

Management will have broad discretion with respect to the use of the net proceeds, if any, from this offering and investors will be relying on the judgment of management regarding the application of these proceeds. Management could spend most of the net proceeds from this offering in ways that the Corporation's shareholders may not desire or that do not yield a favorable return. You will not have the opportunity, as part of your investment in the common shares, to influence the manner in which the net proceeds of this offering are used. At the date of this prospectus supplement, the Corporation intend to use the net proceeds from this offering as described under the heading “Use of Proceeds”. However, the Corporation's needs may change as the business and the industry the Corporation addresses evolve. As a result, the proceeds to be received in this offering may be used in a manner significantly different from the Corporation's current expectations.

The Corporation Does Not Currently Intend to Pay any Cash Dividends on its common shares in the Foreseeable Future; Therefore, the Corporation's Shareholders May Not be Able to Receive a Return on their common shares Until They Sell Them

The Corporation has never paid or declared any cash dividends on its common shares. The Corporation does not anticipate paying any cash dividends on its common shares in the foreseeable future because, among other reasons, the Corporation currently intends to retain any future earnings to finance its business. The future payment of dividends will be dependent on factors such as cash on hand and achieving profitability, the financial requirements to fund growth, the Corporation's general financial condition and other factors the board of directors of the Corporation may consider appropriate in the circumstances. Until the Corporation pays dividends, which it may never do, its shareholders will not be able to receive a return on their common shares unless they sell them.

We Expect to be Treated as a “Passive Foreign Investment Company” for the Current Taxable Year and for the Foreseeable Future

Generally, a foreign corporation will be a passive foreign investment company (“**PFIC**”) if, for any tax year, (a) 75% or more of its gross income for such tax year is passive income or (b) 50% or more of the value of its assets either produce passive income or are held for the production of passive income, based on the quarterly average of the fair market value of such assets. Based on current business plans and financial projections, we expect that we will be a PFIC for the current taxable year and for the foreseeable future. If we are treated as PFIC for any taxable year, a U.S. investor may be subject to materially adverse tax treatment with respect to their common shares. For a more detailed discussion of the tax consequences of PFIC classification for a U.S. investor, see “Certain U.S. Federal Income Tax Considerations.”

DOCUMENTS INCORPORATED BY REFERENCE

This prospectus supplement is deemed to be incorporated by reference into the prospectus solely for the purposes of this offering.

We are incorporating by reference in this prospectus supplement certain information contained in documents filed by us with certain securities regulatory authorities in Canada and the SEC. This means that we are disclosing important information to you by referring you to those documents. The information incorporated by reference is deemed to be part of this prospectus supplement, except for any information superseded by information contained directly in this prospectus supplement or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein.

You may obtain copies of the documents incorporated by reference in this prospectus supplement on request without charge from our Corporate Secretary at 210, 1167 Kensington Crescent N.W., Calgary, Alberta T2N 1X7 Telephone: (403) 670-7377, as well as through the sources described below under “Where You Can Find Additional Information”.

The following documents are specifically incorporated by reference in and form an integral part of the prospectus and this prospectus supplement:

(a) our annual information form, which is comprised of our Annual Report on Form 20-F dated March 19, 2014, for the year ended December 31, 2013 (the “**Annual Information Form**”);

(b) our management information circular dated May 9, 2014, relating to the annual general meeting of shareholders held on June 18, 2014;

(c) our audited consolidated financial statements, together with the notes thereto, as at December 31, 2013 and 2012, which comprise the consolidated statements of financial position as at December 31, 2013 and 2012, and the consolidated statements of loss and comprehensive loss, changes in equity, and cash flows for the years ended December 31, 2013 and 2012, together with the auditor’s report thereon;

(d) our management's discussion and analysis of financial condition and results of operations dated March 12, 2014, for the year ended December 31, 2013 (the “**Annual MD&A**”);

(e)

our management's discussion and analysis of financial condition and results of operations dated August 6, 2014, for the six month period ended June 30, 2014