March 9, 2018

Oncolytics Biotech(R) Inc. Announces 2017 Year-End Results

CALGARY, AB and SAN DIEGO, CA -- (Marketwired) -- 03/09/18 -- Oncolytics Biotech® Inc. (TSX: ONC)(OTCQX: ONCYF), currently developing REOLYSIN® (pelareorep), an intravenously delivered immuno-oncolytic virus creating an inflamed phenotype, today announced its financial results and operational highlights for the year ended December 31, 2017. All dollar amounts are expressed in Canadian currency unless otherwise noted.

"We view 2017 as a pivotal year for Oncolytics and one that positions us for a productive year ahead," said Dr. Matt Coffey, President and CEO of Oncolytics Biotech. "Our IND 213 study in metastatic breast cancer, or mBC, generated compelling results and marked the first time that an oncolytic virus has demonstrated a statistically significant median overall survival advantage in a randomized clinical study. We received supportive regulatory feedback on our proposed registrational study design for pelareorep in HR-positive, HER2-negative breast cancer, the major genetic subgroup of mBC, from both the United States Food and Drug Administration and the European Medicines Agency. Looking forward, we are excited to initiate a phase 3 mBC registrational study later this year and also expand our development with highly focused phase 2 studies designed to further establish pelareorep as an immunotherapy and deliver near term clinical data. We plan to initiate three cost-effective, partner-sponsored phase 2 studies. These would include a basket study to generate efficacy data on pelareorep in combination with high profile checkpoint inhibitors in patients having specific genetic mutations across cancer types, and part two a trial using pelareorep in combination with pembrolizumab (KEYTRUDA®) in patients with relapsed metastatic adenocarcinoma of the pancreas. We are also planning to initiate a window of opportunity study using pelareorep and the standard of care in a neoadjuvant setting for treatment naïve mBC patients, potentially broadening pelareorep's treatment applicability to include first line treatment."

Selected Highlights

Since January 1, 2017, selected highlights announced by the Company include:

Clinical Updates

- Presented findings from IND 213, an open-label, randomized, phase 2 study of intravenously-administered pelareorep given in combination with paclitaxel versus paclitaxel alone in patients with advanced or metastatic breast cancer (mBC) at the American Association for Cancer Research meeting in April 2017. Results showed a statistically significant improvement in median overall survival (OS) from 10.4 months in the control arm to 17.4 months in the test arm.
- Presented additional clinical data from IND 213 at the European Society for Medical Oncology (ESMO) 2017 Congress that demonstrated a doubling of overall survival benefit for patients with HR double-positive, HER2-negative mBC when treated with pelareorep/paclitaxel combination treatment versus paclitaxel alone.
- Announced a favorable End-of-Phase 2 meeting with the FDA for pelareorep in combination

with paclitaxel, for the treatment of hormone receptor positive, HER2 receptor negative (HR+/HER2-) mBC patients. The agency's guidance proposed a single, 400 patient registration study to support a future Biologics License Application submission in the U.S. -- Subsequently, increased to 450 patients to ensure the completion of the study with the planned evaluable population
- Received a Final Advice Letter from the EMA suggesting that a single phase 3 study may be acceptable to form the basis of a Marketing Authorization Application (MAA) in Europe.
- Announced the launch of MUK eleven, a phase 1b trial studying pelareorep in combination with Celgene's Imnovid® (pomalidomide) and Revlimid® (lenalidomide), as a rescue treatment in relapsing myeloma patients. Oncolytics treated the first patient in this trial in September 2017.
- Presented the largest ever safety database for an oncolytic virus at the ESMO 2017 Congress that demonstrated pelareorep is safe and well tolerated when administered in combination with paclitaxel plus/minus carboplatin.
- Announced that the FDA granted Fast Track designation for pelareorep for the treatment of mBC, based on the data from IND 213. However, our request for breakthrough therapy designation (BTD) in mBC was not approved at this time based on certain data requirements. The FDA provided guidance that the Company may re-apply for BTD once additional supportive information is available.

Corporate Updates

- Entered into a USD $86.6 million regional licensing agreement with Adlai Nortye for pelareorep covering China, Hong Kong, Macau, Singapore, South Korea and Taiwan. Under the terms of the agreement, Oncolytics is eligible to receive upfront, licensing fee and milestone payments of USD $21.2 million to support our phase 3 registration study and is eligible to receive up to an additional USD $65.4 million upon achievement of clinical, regulatory and commercialization milestones.
- Received shareholder approval for the consolidation of the Company's common shares, which enables Oncolytics to meet requirements for listing on the NASDAQ Capital Market.
- Closed an underwritten public share offering of 16,445,000 units at a purchase price of $0.70 for gross proceeds of approximately $11.5 million ($10.6 million net).
- Established a Scientific Advisory Board focused on pelareorep's registration study in mBC.
- Appointed Oncolytics co-founder and long-serving senior executive Matt Coffey PhD, MBA, as President and CEO.
- Appointed Andrew de Guttadauro as President of its US subsidiary, Oncolytics Biotech (U.S.) Inc. and Head of Global Business Development.

Anticipated Milestones

- Initiate a phase 3 registration study of pelareorep in combination with paclitaxel, for the treatment HR+/HER2- mBC patients in Q3 2018.
- Initiate a phase 2 partner-sponsored window of opportunity study of pelareorep in combination with standard of care therapy in the neoadjuvant setting in mBC in H2 2018.
- Initiate a phase 2 partner-sponsored basket study to generate important biomarker and efficacy data of pelareorep in combination with checkpoint inhibitors in H2 2018.
- Initiate part two of a phase 2 North-West University/Merck sponsored trial of pelareorep in combination with pembrolizumab (KEYTRUDA®) in patients with relapsed metastatic adenocarcinoma of the pancreas.
- Re-list on the NASDAQ in 2Q 2018.

2017 Year-End Financial Results

- At December 31, 2017, the Company reported $11.8 million in cash, cash equivalents and short-term investments.

ONCOLYTICS BIOTECH INC.
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As at December 31,	***2017*** ***$***	***2016*** ***$***
Assets		
Current assets		
Cash and cash equivalents	***11,836,119***	12,034,282
Short-term investments	***-***	2,088,800
Contract receivable	***4,767,100***	-
Other receivables	***37,726***	54,406
Prepaid expenses	***1,176,063***	260,841
Total current assets	***17,817,008***	14,438,329
Non-current assets		
Property and equipment	***333,441***	319,955
Total non-current assets	***333,441***	319,955
Total assets	***18,150,449***	14,758,284
Liabilities And Shareholders' Equity		
Current Liabilities		
Accounts payable and accrued liabilities	***3,684,023***	4,068,664
Contract liability	***1,545,645***	-
Total current liabilities	***5,229,668***	4,068,664
Non-current liabilities		
Contract liability	***4,636,935***	-
Total non-current liabilities	***4,636,935***	-
Total liabilities	***9,866,603***	4,068,664
Shareholders' equity		
Share capital Authorized: unlimited Issued: December 31, 2017 - 141,805,722 December 31, 2016 - 121,258,222	***271,710,138***	262,321,825
Warrants	***3,617,900***	-
Contributed surplus	***27,028,238***	26,643,044
Accumulated other comprehensive income	***373,730***	554,060
Accumulated deficit	***(294,446,160)***	(278,829,309)
Total shareholders' equity	***8,283,846***	10,689,620
Total liabilities and equity	***18,150,449***	14,758,284

ONCOLYTICS BIOTECH INC.
CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS

For the years ending December 31,	***2017*** ***$***	***2016*** ***$***	***2015*** ***$***

Expenses			
Research and development	***9,392,623***	9,770,007	8,601,864
Operating	***6,212,831***	5,524,500	5,315,837
Loss before the following	***(15,605,454)***	(15,294,507)	(13,917,701)
Interest	***130,101***	163,902	197,859
Loss before income taxes	***(15,475,353)***	(15,130,605)	(13,719,842)
Income tax expense	***(141,498)***	(9,374)	(3,153)
Net loss	***(15,616,851)***	(15,139,979)	(13,722,995)
Other comprehensive (loss) income items that may be reclassified to net loss			
Translation adjustment	***(180,330)***	(206,918)	480,935
Net comprehensive loss	***(15,797,181)***	(15,346,897)	(13,242,060)
Basic and diluted loss per common share	***(0.12)***	(0.13)	(0.12)
Weighted average number of shares (basic and diluted)	***132,395,752***	119,880,200	112,613,845

ONCOLYTICS BIOTECH INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

	Share Capital	***Warrants***	***Contributed Surplus***	***Accumulated Other Comprehensive Income***	***Accumulated Deficit***	***Total***
	$	***$***	***$***	***$***	***$***	***$***
As at December 31, 2014	237,657,056	-	25,848,429	280,043	(249,966,335)	13,819,193
Net loss and other comprehensive income	-	-	-	480,935	(13,722,995)	(13,242,060)
Issued pursuant to Share Purchase Agreement	4,371,687	-	-	-	-	4,371,687
Issued pursuant to "At the Market" Agreement	20,049,693	-	-	-	-	20,049,693
Share based compensation	-	-	429,537	-	-	429,537
Share issue costs	(753,744)	-	-	-	-	(753,744)
As at December 31, 2015	261,324,692	-	26,277,966	760,978	(263,689,330)	24,674,306
Net loss and other						

comprehensive loss	-	-	-	(206,918)	(15,139,979)	(15,346,897)
Issued pursuant to incentive share award plan	41,000	-	(41,000)	-	-	-
Issue pursuant to "At the Market" Agreement	1,456,296	-	-	-	-	1,456,296
Share based compensation	-	-	406,078	-	-	406,078
Share issue costs	(500,163)	-	-	-	-	(500,163)
As at December 31, 2016	262,321,825	-	26,643,044	554,060	(278,829,309)	10,689,620
Net loss and other comprehensive loss	-	-	-	(180,330)	(15,616,851)	(15,797,181)
Issued pursuant to stock option plan	536,949	-	(193,509)	-	-	343,440
Issued pursuant to "At the Market" Agreement	2,348,821	-	-	-	-	2,348,821
Issued pursuant to public offering	7,893,600	3,617,900	-	-	-	11,511,500
Share based compensation	-	-	578,703	-	-	578,703
Share issue costs	(1,391,057)	-	-	-	-	(1,391,057)
As at December 31, 2017	***271,710,138***	***3,617,900***	***27,028,238***	***373,730***	***(294,446,160)***	***8,283,846***

ONCOLYTICS BIOTECH INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ending December 31,	***2017*** ***$***	***2016*** ***$***	***2015*** ***$***
Operating Activities			
Net loss for the year	***(15,616,851)***	(15,139,979)	(13,722,995)
Amortization - property and equipment	***90,768***	162,233	180,411

Share based compensation	***578,703***	406,078	429,537
Unrealized foreign exchange gain	***(124,793)***	(139,810)	(816,319)
Net change in non-cash working capital	***180,855***	2,233,865	(1,105,464)
Cash used in operating activities	***(14,891,318)***	(12,477,613)	(15,034,830)
Investing Activities			
Acquisition of property and equipment	***(105,765)***	(23,527)	(108,268)
Redemption (purchase) of short-term investments	***2,088,800***	(27,823)	(29,292)
Cash provided by (used in) investing activities	***1,983,035***	(51,350)	(137,560)
Financing Activities			
Proceeds from Share Purchase Agreement	***-***	-	4,305,396
Proceeds from "At the Market" equity distribution agreement	***2,103,166***	956,133	19,362,240
Proceeds from public offering	***10,366,098***	-	-
Proceeds from exercise of stock options	***343,440***	-	-
Cash provided by financing activities	***12,812,704***	956,133	23,667,636
(Decrease) increase in cash	***(95,579)***	(11,572,830)	8,495,246
Cash and cash equivalents, beginning of year	***12,034,282***	24,016,275	14,152,825
Impact of foreign exchange on cash and cash equivalents	***(102,584)***	(409,163)	1,368,204
Cash and cash equivalents, end of year	***11,836,119***	12,034,282	24,016,275

To view the Company's Fiscal 2017 year end Consolidated Financial Statements, related Notes to the Consolidated Financial Statements, and Management's Discussion and Analysis, please see the Company's annual filings, which will be available under the Company's profile at www.sedar.com and on Oncolytics' investor relations website at https://ir.oncolyticsbiotech.com/reports.

About Oncolytics Biotech Inc.

Oncolytics is a biotechnology company developing REOLYSIN, also known as pelareorep, an intravenously delivered immuno-oncolytic virus. The compound induces selective tumor lysis and promotes an inflamed tumor phenotype - turning "cold" tumors "hot" - through innate and adaptive immune responses to treat a variety of cancers. Oncolytics' clinical development program emphasizes three pillars: chemotherapy combinations to trigger selective tumor lysis; immuno-therapy combinations to produce adaptive immune responses; and immune modulator (IMiD) combinations to facilitate innate immune responses. Oncolytics is currently planning its first registration study in metastatic breast cancer, as well as studies in combination with checkpoint inhibitors and targeted and IMiD therapies in solid and hematological malignancies. For further information, please visit: www.oncolyticsbiotech.com.

This press release contains forward-looking statements, within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended and forward-looking information under applicable Canadian securities laws (such forward-looking statements and forward-looking information are collectively referred to herein as "forward-looking statements"). Forward-looking statements, including the Company's belief as to the potential and mode of action of REOLYSIN, also known as pelareorep, as a cancer therapeutic; and other statements related to anticipated developments in the Company's business and technologies involve known and unknown risks and uncertainties, which could cause the Company's actual results to differ materially from those in the forward-

looking statements. Such risks and uncertainties include, among others, the availability of funds and resources to pursue research and development projects, the efficacy of pelareorep as a cancer treatment, the success and timely completion of clinical studies and trials, the Company's ability to successfully commercialize pelareorep, uncertainties related to the research and development of pharmaceuticals, uncertainties related to the regulatory process and general changes to the economic environment. Investors should consult the Company's quarterly and annual filings with the Canadian and U.S. securities commissions for additional information on risks and uncertainties relating to the forward-looking statements. Investors are cautioned against placing undue reliance on forward-looking statements. The Company does not undertake to update these forward-looking statements, except as required by applicable laws.

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