March 10, 2017

Oncolytics Biotech® Inc. Announces 2016 Year-End Results

CALGARY, March 10, 2017 /PRNewswire/ - Oncolytics Biotech® Inc. (TSX: ONC) (OTCQX: ONCYF) (Oncolytics or the Company) today announced its financial results and operational highlights for the year ended December 31, 2016.

"It was a year of change for Oncolytics, highlighted by additional clinical data that saw our understanding of REOLYSIN®'s mechanism of action evolve and grow," said Dr. Matt Coffey, President and CEO of Oncolytics. "Through this process, and with the help of our expanding senior team, we thoughtfully and deliberately put in place a plan that initially contemplates combinations with chemotherapy for late-stage clinical development, but will expand to include targeted immunotherapies over the longer term as we look to leverage the role of the immune system in patient treatment. In the coming months we will specifically define our first registration pathway. In the year ahead we expect data readouts from as many as five sponsored, randomized Phase 2 studies, including one in advanced or metastatic breast cancer."

Selected Highlights

Since January 1, 2016, selected highlights announced by the Company include:

Clinical Results

- An abstract submitted to the American Association of Cancer Research Annual Meeting by Canadian Cancer Trials Group ("CCTG") at Queen's University in Kingston, Ontario covering results from IND 213, an open-label, randomized, non-blinded Phase 2 study to assess the therapeutic combination of intravenously-administered REOLYSIN given in combination with paclitaxel versus paclitaxel alone in patients with advanced or metastatic breast cancer;
- A poster presentation by Dr. Kevin Kelly at the 58th American Society of Hematology Annual Meeting on the Phase 1b Study of REOLYSIN with Bortezomib and Dexamethasone in Patients with Relapsed/Refractory Multiple Myeloma, with preliminary data suggesting evidence of activity and that the treatment combination was well tolerated;
- Additional data from a randomized, CCTG-sponsored Phase 2 clinical study of REOLYSIN in non-small cell lung cancer (IND 211), which showed: a statistically significant improvement (p=0.0201) in progression free survival (PFS) for female patients with adenocarcinoma in the test arm versus the control arm, a strong trend to improved overall survival (OS) for female patients with adenocarcinoma in the test arm versus the control arm;
- Preliminary data from a randomized, CCTG-sponsored Phase 2 clinical study of REOLYSIN in advanced or metastatic colorectal cancer (IND 210), following an

abstract for the 2016 American Society of Clinical Oncology annual meeting, which showed a statistically significant improvement in objective response rates in female patients (female patients in the test arm had an overall response rate (ORR) of 63.2% (n=19) versus 23.8% (n=21) in the control arm (p=0.0054)), and a trend to improvement in median OS in female patients (female patients in the test arm had median OS of 19.3 months (n=19) versus 14.5 months (n=21) in the control arm);
- Updated results from a randomized Phase 2 clinical trial of its lead product, REOLYSIN, in combination with carboplatin and paclitaxel in patients with pancreatic cancer (NCI-8601), where an intent-to-treat analysis of overall survival on patients with confirmed treatment regimes, as assessed by the percentage of patients surviving for two years, showed a doubling of patients surviving two years; 20% on the test arm versus 9% on the control arm;
- Treatment of the first patients in a Phase 1b study of pembrolizumab (KEYTRUDA®) in combination with REOLYSIN and chemotherapy in patients with advanced pancreatic adenocarcinoma, the Company's first trial examining REOLYSIN in combination with a checkpoint inhibitor;

Corporate

- The appointment of Oncolytics co-founder and long-serving senior executive Matt Coffey PhD, MBA, as President and CEO;
- The appointment of Andres Gutierrez, MD, PhD, with more than 25 years of senior clinical development expertise designing and implementing both early- and late-stage oncology clinical studies, to the role of Chief Medical Officer;
- Formation of a Science and Technology Committee charged with supporting REOLYSIN's further development in the context of the broader oncology space with an ultimate focus on reaching a commercial endpoint; and

Financial

- At December 31, 2016, the Company reported $14.1 million in cash, cash equivalents and short-term investments. At March 9, 2017, the Company had approximately $11.3 million in cash, cash equivalents and short-term investments.

ONCOLYTICS BIOTECH INC.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

	2016	**2015**
As at December 31,	**$**	**$**

Assets		
Current assets		
Cash and cash equivalents	**12,034,282**	24,016,275
Short-term investments	**2,088,800**	2,060,977
Accounts receivable	**54,406**	340,059
Prepaid expenses	**260,841**	506,669
Total current assets	**14,438,329**	26,923,980
Non-current assets		
Property and equipment	**319,955**	459,818
Total non-current assets	**319,955**	459,818
Total assets	**14,758,284**	27,383,798
Liabilities And Shareholders' Equity		
Current Liabilities		
Accounts payable and accrued liabilities	**4,068,664**	2,709,492
Total current liabilities	**4,068,664**	2,709,492
Shareholders' equity		
Share capital		
Authorized: unlimited Issued: December 31, 2016 – 121,258,222 December 31, 2015 – 118,151,622	**262,321,825**	261,324,692
Contributed surplus	**26,643,044**	26,277,966
Accumulated other comprehensive income	**554,060**	760,978
Accumulated deficit	**(278,829,309)**	(263,689,330)
Total shareholders' equity	**10,689,620**	24,674,306
Total liabilities and equity	**14,758,284**	27,383,798

ONCOLYTICS BIOTECH INC.

CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS

	2016	**2015**	**2014**
For the years ending December 31,	**$**	**$**	**$**
Expenses			
Research and development	**9,770,007**	8,601,864	13,824,252
Operating	**5,524,500**	5,315,837	4,998,694
Loss before the following	**(15,294,507)**	(13,917,701)	(18,822,946)
Interest	**163,902**	197,859	210,390
Loss before income taxes	**(15,130,605)**	(13,719,842)	(18,612,556)
Income tax recovery (expense)	**(9,374)**	(3,153)	(6,779)
Net loss	**(15,139,979)**	(13,722,995)	(18,619,335)
Other comprehensive income items that may be reclassified to net loss			
Translation adjustment	**(206,918)**	480,935	200,345
Net comprehensive loss	**(15,346,897)**	(13,242,060)	(18,418,990)
Basic and diluted loss per common share	**(0.13)**	(0.12)	(0.21)
Weighted average number of shares (basic and diluted)	**119,880,200**	112,613,845	87,869,149

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, 2013	228,612,564	376,892	24,491,212	79,698	(231,347,000)	22,213,366
Net loss and other comprehensive income	—	—	—	200,345	(18,619,335)	(18,418,990)
Issued, pursuant to Share Purchase Agreement	8,861,652	—	—	—	—	8,861,652
Issued, pursuant to "At the Market" Agreement	1,468,668	—	—	—	—	1,468,668
Expired warrants	—	(376,892)	376,892	—	—	—
Share based compensation	—	—	980,325	—	—	980,325
Share issue costs	(1,285,828)	—	—	—	—	(1,285,828)
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 income	—	—	—	(206,918)	(15,139,979)	(15,346,897)
Issued, pursuant to incentive share award plan	41,000	—	(41,000)	—	—	—
Issued, 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**

ONCOLYTICS BIOTECH INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	2016	**2015**	**2014**
For the years ending December 31,	**$**	**$**	**$**
Operating Activities			
Net loss for the year	**(15,139,979)**	(13,722,995)	(18,619,335)
Amortization - property and equipment	**162,233**	180,411	163,501
Share based compensation	**406,078**	429,537	980,325
Unrealized foreign exchange (gain) loss	**(139,810)**	(816,319)	242,542
Net change in non-cash working capital	**2,233,865**	(1,105,464)	(2,443,988)
Cash used in operating activities	**(12,477,613)**	(15,034,830)	(19,676,955)
Investing Activities			
Acquisition of property and equipment	**(23,527)**	(108,268)	(152,750)
Redemption (purchase) of short-term investments	**(27,823)**	(29,292)	(30,041)
Cash used in investing activities	**(51,350)**	(137,560)	(182,791)
Financing Activities			
Proceeds from Share Purchase Agreement	**—**	4,305,396	7,830,409
Proceeds from "At the Market" equity distribution agreement	**956,133**	19,362,240	1,214,083
Cash provided by financing activities	**956,133**	23,667,636	9,044,492
(Decrease) increase in cash	**(11,572,830)**	8,495,246	(10,815,254)
Cash and cash equivalents, beginning of year	**24,016,275**	14,152,825	25,220,328
Impact of foreign exchange on cash and cash equivalents	**(409,163)**	1,368,204	(252,249)
Cash and cash equivalents, end of year	**12,034,282**	24,016,275	14,152,825

To view the Company's Fiscal 2016 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' website at http://www.oncolyticsbiotech.com/investor-centre/financials/.

About Oncolytics Biotech Inc.
Oncolytics is a biotechnology company developing REOLYSIN, an immuno-oncology viral-agent, as a potential treatment for a variety of tumor types. The compound induces selective tumor lysis and promotes an inflamed tumor phenotype through innate and adaptive immune responses to potentially 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. For further information about Oncolytics, 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. Forward-looking statements, including the Company's belief as to the potential of REOLYSIN® as a cancer therapeutic; the Company's expectations as to the success of its research and development programs in 2017 and beyond, the Company's planned operations, the value of the additional patents and intellectual property; the Company's expectations related to the applications of the patented technology; the Company's expectations as to adequacy of its existing capital resources; the design, timing, success of planned clinical trial programs; 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 REOLYSIN as a cancer treatment, the success and timely completion of clinical studies and trials, the Company's ability to successfully commercialize REOLYSIN, 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.

SOURCE Oncolytics Biotech Inc.