

May 12, 2010



Oncolytics Biotech(R) Inc. Announces First Quarter 2010 Results

CALGARY, May 12 /PRNewswire-FirstCall/ - Oncolytics Biotech Inc. (TSX:ONC, NASDAQ:ONCY) ("Oncolytics" or the "Company") today announced its financial results and operational highlights for the quarter ended March 31, 2010.

"We have recently seen a range of preclinical and clinical results that both improved our understanding of REOLYSIN(R)'s mechanism of action and provided evidence of synergies with currently approved therapeutics in an expanded range of potential indications," said Dr. Brad Thompson, President and CEO of Oncolytics. "While much of this information will support future decisions with respect to our evolving clinical program, our near term focus will be on completing the final preparations to begin enrollment in our Phase III trial which we expect to begin in the second quarter."

Selected Highlights

Since January 1, 2010 the Company announced:

Clinical Trial Results

- A poster presentation, entitled "Reovirus replication in ovarian and peritoneal tumors after intravenous administration," covering correlative results from a Phase 1/2 study with reovirus, sponsored by the National Cancer Institute under its Clinical Trials Agreement with Oncolytics, in patients with ovarian, primary peritoneal and fallopian tube carcinoma, was presented at the 101st AACR Annual Meeting in Washington, DC. The authors reported that when REOLYSIN is administered intravenously, the reovirus can be demonstrated to localize and replicate in ovarian and peritoneal tumors;

Clinical Program

- Approval from the U.K. Medicines and Healthcare products Regulatory Agency (MHRA) to conduct a Phase 3 trial examining REOLYSIN in combination with paclitaxel and carboplatin in patients with platinum-refractory head and neck cancers. This is the same trial that the Company previously reached an agreement on with the U.S. Food and Drug Administration (FDA) under the Special Protocol Assessment (SPA) process;
- The Cancer Therapy & Research Center at the University of Texas Health Science Center (CTRC) had started patient enrolment in a U.S. Phase 2 clinical trial using intravenous administration of REOLYSIN in combination with carboplatin and paclitaxel in patients with squamous cell carcinoma of the lungs (SCC lung cancer);
- Completion of Phase I patient enrollment in a Phase I/II clinical trial to investigate the use of REOLYSIN for patients with recurrent malignant gliomas (REO 007);

Collaborative Program

- A paper entitled "Antiangiogenic cancer therapy combined with oncolytic virotherapy leads to regression of established tumors in mice," co-senior authored by Dr. Richard Vile of the Department of Immunology, Mayo Clinic, Rochester, Minnesota, USA, and Dr. Kevin Harrington of the Institute of Cancer Research, London, UK, was published in the online version of the Journal of Clinical Investigation;
- A poster presentation at the AACR Annual Meeting entitled "Molecular pathways associated with REOLYSIN and gemcitabine synergy in ras-mutated human HCT116 cells," covering work done to better understand the mechanisms associated with the cytotoxic synergies in this combined approach in colorectal cancer cell lines;
- A poster presentation at the AACR Annual Meeting entitled "The addition of REOLYSIN, an oncolytic reovirus, to irinotecan shows synergistic anticancer activity in colorectal cancer cell lines," covering research done in vitro into a novel therapeutic approach for treating patients with colorectal cancer tumors that harbor a mutation in the Kras oncogene that have failed first line therapy; and
- A poster presentation at the AACR Annual Meeting entitled "Reovirus successfully purges multiple myeloma ex vivo and does not affect human CD34+ cell engraftment in a murine transplantation model," covering the utility of reovirus in treating hematological malignancies.

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INTERIM CONSOLIDATED BALANCE SHEETS
(unaudited)

As at,	March 31, 2010 \$	December 31, 2009 \$

ASSETS		
Current		
Cash and cash equivalents	27,143,314	32,448,939
Short-term investments	1,679,937	1,679,937
Accounts receivable	33,013	64,787
Prepaid expenses	421,552	507,408
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	29,277,816	34,701,071
Property and equipment	197,082	208,320
Long term investment	684,000	684,000
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	30,158,898	35,593,391

LIABILITIES AND SHAREHOLDERS' EQUITY		
Current		
Accounts payable and accrued liabilities	2,932,622	4,226,933
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Shareholders' equity		
Share capital		

Authorized: unlimited number of common shares		
Issued: 61,549,969		
(December 31, 2009 - 61,549,969)	131,908,274	131,908,274
Warrants	2,073,441	4,511,441
Contributed surplus	16,173,772	13,734,743
Deficit	(122,929,211)	(118,788,000)
	27,226,276	31,366,458
	30,158,898	35,593,391

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INTERIM CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS
(unaudited)

	Three Month Period Ending March 31, 2010 \$	Three Month Period Ending March 31, 2009 \$	Cumulative from inception on April 2, 1998 to March 31, 2010 \$
Revenue			
Rights revenue	-	-	310,000
Expenses			
Research and development	2,839,313	2,812,655	88,977,604
Operating	949,424	986,764	29,568,956
Stock-based compensation	1,029	11,637	5,194,146
Foreign exchange loss	346,379	56,035	1,115,522
Amortization - intellectual property	-	90,375	3,615,000
Amortization - property and equipment	14,885	17,304	576,966
	4,151,030	3,974,770	129,048,194
Loss before the following	4,151,030	3,974,770	128,738,194
Interest income	(9,819)	(17,124)	(6,573,265)
Gain on sale of BCY LifeSciences Inc.	-	-	(299,403)
Loss on sale of Transition Therapeutics Inc.	-	-	2,156,685
Loss before income taxes	4,141,211	3,957,646	124,022,211
Income taxes	-	-	(1,093,000)

Net loss and comprehensive loss for the period	4,141,211	3,957,646	122,929,211
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Basic and diluted loss per share	(0.07)	(0.09)	
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Weighted average number of shares (basic and diluted)	61,549,969	43,849,637	
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Oncolytics Biotech Inc.

INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)

	Three Month Period Ending March 31, 2010 \$	Three Month Period Ending March 31, 2009 \$	Cumulative from inception on April 2, 1998 to March 31, 2010 \$
OPERATING ACTIVITIES			
Net loss for the period	(4,141,211)	(3,957,646)	(122,929,211)
Add/(deduct) non-cash items			
Amortization - intellectual property	-	90,375	3,615,000
Amortization - property and equipment	14,885	17,304	576,966
Stock-based compensation	1,029	11,637	5,194,146
Other non-cash items	363,895	-	1,858,232
Net change in non-cash working capital	(1,176,681)	(164,019)	2,478,057
Cash used in operating activities	(4,938,083)	(4,002,349)	(109,206,810)
INVESTING ACTIVITIES			
Purchase of property and equipment	(3,647)	(3,349)	(826,715)
Purchase of short-term investments	-	(8,966)	(51,096,801)
Redemption of short-term investments	-	3,930,000	48,998,380
Investment in BCY LifeSciences Inc.	-	-	464,602
Investment in Transition Therapeutics Inc.	-	-	2,532,343
Cash provided by (used in) investing activities	(3,647)	3,917,685	71,809

FINANCING ACTIVITIES			
Proceeds from exercise of warrants and stock options	-	21,250	30,511,278
Proceeds from private placements	-	-	38,137,385
Proceeds from acquisition of private company	-	-	1,800,120
Proceeds from public offerings	-	-	66,320,777
Cash provided by financing activities	-	21,250	136,769,560
Net increase (decrease) in cash and cash equivalents during the period	(4,941,730)	(63,414)	27,634,559
Impact of foreign exchange on cash and cash equivalents	(363,895)	-	(491,245)
Cash and cash equivalents, beginning of the period	32,448,939	7,429,895	-
Cash and cash equivalents, end of the period	27,143,314	7,366,481	27,143,314

To view the Company's First Quarter 2010 Consolidated Financial Statements, related Notes to Consolidated Financial Statements, and Management's Discussion and Analysis, please see the Company's quarterly filings which will be available on www.sedar.com and on www.oncolyticsbiotech.com.

About Oncolytics Biotech Inc.

Oncolytics is a Calgary-based biotechnology company focused on the development of oncolytic viruses as potential cancer therapeutics. Oncolytics' clinical program includes a variety of human trials including a Phase III trial in head and neck cancers using REOLYSIN, its proprietary formulation of the human reovirus. 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 2010 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.

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