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**FOR IMMEDIATE RELEASE**

**Oncolytics Biotech® Inc. Announces Second Quarter 2010 Results**

**CALGARY, AB, July 29, 2010** --- Oncolytics Biotech Inc. (TSX:ONC, NASDAQ:ONCY) (“Oncolytics” or the “Company”) today announced its financial results and operational highlights for the quarter ended June 30, 2010.

“We have recently passed a number of key milestones in our clinical program, most notably the opening of enrollment in our Phase 3 head and neck cancer study, the expansion of the study to other jurisdictions internationally, and the reporting of positive results from an earlier study with an emphasis on squamous cell carcinoma of the head and neck,” said Dr. Brad Thompson, President and CEO of Oncolytics. “While our Phase 3 study remains our primary focus, we have also successfully expanded our clinical program to include other indications as REOLYSIN® may be effective in treating a variety of cancers.”

**Selected Highlights**

Since April 1, 2010 the Company has announced:

**Clinical Trial Results**

- A poster presentation at the American Society of Clinical Oncology 2010 Annual Meeting, entitled "A Phase I/II study of oncolytic reovirus plus carboplatin/paclitaxel in patients with advanced solid cancers with emphasis on squamous cell carcinoma of the head and neck (SCCHN)," showing that of 19 head and neck cancer patients evaluable for response, eight (42%) had partial responses and six (32%) had stable disease; mean overall survival in 24 treated head and neck cancer patients was more than eight months;
- Publication of a paper entitled "Two-Stage Phase I Dose-Escalation Study of Intratumoural Reovirus Type 3 Dearing and Palliative Radiotherapy in Patients with Advanced Cancers," in the online version of the journal Clinical Cancer Research that showed that 100% of 14 evaluable patients were stable disease or better (7 partial responses, and 7 stable disease);
- A poster presentation at the American Association for Cancer Research's 101<sup>st</sup> Annual Meeting in Washington, DC entitled "Reovirus replication in ovarian and peritoneal tumors after intravenous administration," covering correlative results from a Phase 1/2 study with reovirus in patients with ovarian, primary peritoneal and fallopian tube carcinoma, sponsored by the National Cancer Institute under its Clinical Trials Agreement with Oncolytics;

**Clinical Program**

- Opening of enrollment in the Phase 3 trial examining REOLYSIN in combination with paclitaxel and carboplatin in patients with platinum-refractory head and neck cancers;
- Receipt of a No Objection Letter from Health Canada to conduct its Phase 3 trial examining REOLYSIN in combination with paclitaxel and carboplatin in patients with platinum-refractory head and neck cancers;

- Receipt of approval from the Belgian Federal Agency for Medicines and Health Products (FAMHP) to conduct its Phase 3 trial examining REOLYSIN in combination with paclitaxel and carboplatin in patients with platinum-refractory head and neck cancers;
- Start of enrollment in a U.S. Phase 2 clinical trial using intravenous administration of REOLYSIN in combination with gemcitabine (Gemzar<sup>®</sup>) in patients with advanced pancreatic cancer at the Cancer Therapy & Research Center at the University of Texas Health Science Center in San Antonio;
- Poster presentations at the ASCO 2010 Annual Meeting covering the structures of a "Phase II study of reovirus with paclitaxel (P) and carboplatin (C) in patients with metastatic non-small cell lung cancer (NSCLC) who have *Kras* or EGFR-activated tumors" and a "Phase I/II trial of reovirus serotype 3-Dearing strain in patients with recurrent ovarian cancer";
- The decision to initiate a U.S. Phase I study of REOLYSIN in combination with FOLFIRI (Folinic Acid (leucovorin) + Fluorouracil (5-FU) + Irinotecan) in patients with oxaliplatin refractory/intolerant *Kras* mutant colorectal cancer (REO 022);
- 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);

### **Preclinical 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;
- 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; and

### **Intellectual Property**

- Grant of the Company's 35th U.S. Patent, No. 7,731,951 entitled "Viruses for the Treatment of Cellular Proliferative Disorders." The patent claims cover methods for treating cell proliferative disorders by administering modified vaccinia virus to proliferating cells having an activated Ras-pathway.

**Oncolytics Biotech Inc.**  
**CONSOLIDATED BALANCE SHEETS**  
*(unaudited)*

As at,

	<b>June 30, 2010</b>	<b>December 31, 2009</b>
	\$	\$
<b>ASSETS</b>		
<b>Current</b>		
Cash and cash equivalents	23,205,961	32,448,939
Short-term investments	1,679,937	1,679,937
Accounts receivable	58,645	64,787
Prepaid expenses	718,418	507,408
	<b>25,662,961</b>	<b>34,701,071</b>
<b>Property and equipment</b>	222,312	208,320
<b>Long term investment</b>	684,000	684,000
	<b>26,569,273</b>	<b>35,593,391</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
<b>Current</b>		
Accounts payable and accrued liabilities	3,639,572	4,226,933
<b>Shareholders' equity</b>		
Share capital		
Authorized: unlimited number of common shares		
Issued: 61,569,969		
(December 31, 2009 – 61,549,969)		
	131,980,274	131,908,274
Warrants	2,073,441	4,511,441
Contributed surplus	16,157,171	13,734,743
Deficit	(127,281,185)	(118,788,000)
	<b>22,929,701</b>	<b>31,366,458</b>
	<b>26,569,273</b>	<b>35,593,391</b>

**Oncolytics Biotech Inc.**  
**CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS**  
*(unaudited)*

	Three Month Period Ending June 30, 2010 \$	Three Month Period Ending June 30, 2009 \$	Six Month Period Ending June 30, 2010 \$	Six Month Period Ending June 30, 2009 \$	Cumulative from inception on April 2, 1998 to June 30, 2010 \$
<b>Revenue</b>					
Rights revenue	—	—	—	—	310,000
	—	—	—	—	310,000
<b>Expenses</b>					
Research and development	3,561,168	3,239,210	6,400,481	6,051,865	92,538,772
Operating	1,133,319	980,721	2,082,743	1,967,485	30,702,275
Stock based compensation	1,399	8,544	2,428	20,181	5,195,545
Foreign exchange loss/(gain)	(349,229)	3,103	(2,850)	59,138	766,293
Amortization – intellectual property	—	90,375	—	180,750	3,615,000
Amortization – property and equipment	14,621	16,536	29,506	33,840	591,587
	<b>4,361,278</b>	4,338,489	<b>8,512,308</b>	8,313,259	133,409,472
<b>Loss before the following:</b>	<b>4,361,278</b>	4,338,489	<b>8,512,308</b>	8,313,259	133,099,472
<b>Interest income</b>	<b>(9,304)</b>	(3,732)	<b>(19,123)</b>	(20,856)	(6,582,569)
<b>Gain on sale of BCY LifeSciences Inc.</b>	—	—	—	—	(299,403)
<b>Loss on sale of Transition Therapeutics Inc.</b>	—	—	—	—	2,156,685
<b>Loss before income taxes</b>	<b>4,351,974</b>	4,334,757	<b>8,493,185</b>	8,292,403	128,374,185
<b>Future income tax recovery</b>	—	—	—	—	(1,093,000)
<b>Net loss and comprehensive loss for the period</b>	<b>4,351,974</b>	4,334,757	<b>8,493,185</b>	8,292,403	127,281,185
<b>Basic and diluted loss per share</b>	<b>0.07</b>	0.09	<b>0.14</b>	0.18	
<b>Weighted average number of shares (basic and diluted)</b>	<b>61,556,343</b>	47,449,182	<b>61,553,173</b>	45,659,353	

# Oncolytics Biotech Inc.

## CONSOLIDATED STATEMENTS OF CASH FLOWS (unaudited)

	Three Month Period Ending June 30, 2010 \$	Three Month Period Ending June 30, 2009 \$	Six Month Period Ending June 30, 2010 \$	Six Month Period Ending June 30, 2009 \$	Cumulative from inception on April 2, 1998 to June 30, 2010 \$
<b>OPERATING ACTIVITIES</b>					
Net loss for the period	(4,351,974)	(4,334,757)	(8,493,185)	(8,292,403)	(127,281,185)
Deduct non-cash items					
Amortization – intellectual property	—	90,375	—	180,750	3,615,000
Amortization – property and equipment	14,621	16,536	29,506	33,840	591,587
Stock based compensation	1,399	8,544	2,428	20,181	5,195,545
Other non-cash items	(415,280)	—	(46,483)	—	1,447,854
Net changes in non-cash working capital	384,452	(1,414,201)	(792,229)	(1,578,220)	2,862,509
	<b>(4,366,782)</b>	<b>(5,633,503)</b>	<b>(9,299,963)</b>	<b>(9,635,852)</b>	<b>(113,568,690)</b>
<b>INVESTING ACTIVITIES</b>					
Capital assets	(39,851)	—	(43,498)	(3,349)	(866,566)
Purchase of short-term investments	—	—	—	—	(51,096,801)
Redemption of short-term investments	—	1,925,600	—	5,846,634	48,998,380
Investment in BCY LifeSciences Inc.	—	—	—	—	464,602
Investment in Transition Therapeutics Inc.	—	—	—	—	2,532,343
	<b>(39,851)</b>	<b>1,925,600</b>	<b>(43,498)</b>	<b>5,843,285</b>	<b>31,958</b>
<b>FINANCING ACTIVITIES</b>					
Proceeds from exercise of warrants and stock options	54,000	351,835	54,000	373,085	30,565,278
Proceeds from acquisition of private company	—	1,800,120	—	1,800,120	1,800,120
Proceeds from private placements	—	—	—	—	38,137,385
Proceeds from public offerings	—	6,172,819	—	6,172,819	66,320,777
	<b>54,000</b>	<b>8,324,774</b>	<b>54,000</b>	<b>8,346,024</b>	<b>136,823,560</b>
<b>(Decrease) increase in cash and cash equivalents during the period</b>	<b>(4,352,633)</b>	<b>4,616,871</b>	<b>(9,289,461)</b>	<b>4,553,457</b>	<b>23,286,828</b>
<b>Impact of foreign exchange on cash and cash equivalents</b>	<b>415,280</b>	<b>—</b>	<b>46,483</b>	<b>—</b>	<b>(80,867)</b>
<b>Cash and cash equivalents, beginning of the period</b>	<b>27,143,314</b>	<b>7,366,481</b>	<b>32,448,939</b>	<b>7,429,895</b>	<b>—</b>
<b>Cash and cash equivalents, end of the period</b>	<b>23,205,961</b>	<b>11,983,352</b>	<b>23,205,961</b>	<b>11,983,352</b>	<b>23,205,961</b>

**To view the Company's Second 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](http://www.sedar.com) and on [www.oncolyticsbiotech.com](http://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](http://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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