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Oncolytics Biotech® Inc. Collaborators Present Multiple Myeloma Data at 57th American Society of Hematology Annual Meeting

-- Emerging Data Support Conducting Additional, Later Stage Studies in Multiple Myeloma --

CALGARY, Dec. 8, 2015 /PRNewswire/ - Oncolytics Biotech® Inc. ("Oncolytics") (TSX:ONC) (OTCQX:ONCYF) (FRA:ONY) today announced that Dr. D.W. Sborov and colleagues made a poster presentation at the 57th American Society of Hematology (ASH) Annual Meeting. The poster presentation, titled "REOLYSIN® Combined with Carfilzomib for Treatment of Relapsed Multiple Myeloma Patients," discloses updated findings from a pilot study (NCI-9603) in patients with relapsed or refractory multiple myeloma treated using the combination of carfilzomib and REOLYSIN®. The ASH Annual Meeting runs from December 5th to 8th in Orlando, FL.

Highlights of the data presented include:

- All seven patients treated at the full clinical dose had a clinical response. Patients treated at the full clinical dose (dose level 1) had a deeper and more prolonged response than those treated at dose level minus 1. Of the 12 total patients treated, 11 had a decrease in dominant monoclonal protein during treatment (used to measure clinical response), including all seven patients treated at the full clinical dose;
- The combination of carfilzomib and REOLYSIN® produced a significant (p=0.005) increase in caspase-3, a marker associated with apoptotic (programmed) cell death, but to a higher degree in those patients treated at dose level 1; and
- The treatment combination was associated with an increased infiltration of CD8+ T-cells and the significant (p=0.005) upregulation of PD-L1, suggesting that the addition of a PD-1 or PD-L1 inhibitor may further optimize the treatment regimen.

"These findings are compelling as we continue to see a strong clinical benefit rate in this difficult to treat cancer, and clear evidence of a dose response, with patients at the higher dosing level seeing improved outcomes. We plan on testing higher dosage levels to determine the extent of this improvement," said Dr. Matt Coffey, Chief Operating Officer of Oncolytics. "We recently announced a second study in multiple myeloma examining REOLYSIN® together with bortezomib, with the goal of identifying the best standard of care combination to advance into later stage clinical testing."

The investigators noted that this is the first time a REOLYSIN®-based combination has been tested in relapsed multiple myeloma patients. A previous single-agent study conducted by the collaborators in this patient population showed that REOLYSIN® was well tolerated. The collaborators and others were noted to have conducted preclinical investigations that demonstrated that the combination of REOLYSIN® and carfilzomib synergistically increased the killing of multiple myeloma cells. This provided the clinical rationale for this study.

"Based on these evolving data and input received from key opinion leaders, we believe multiple myeloma to be a compelling registration target," said Dr. Brad Thompson, President and CEO of Oncolytics. "We intend to discuss the design of a potential registration study with regulatory agencies."

NCI-9603 is a U.S. National Cancer Institute sponsored single-arm, open-label study of intravenously administered REOLYSIN® with dexamethasone and carfilzomib to patients with relapsed or refractory multiple myeloma. Patients receive treatment on days 1, 2, 8, 9, 15 and 16 of a 28-day cycle, to be repeated in the absence of disease progression or unacceptable toxicity. Approximately 12 patients will be enrolled in the study. The primary outcome measures include reovirus replication, safety, and tolerability. Secondary outcome measures include examining objective response, duration of response, clinical benefit, progression-free survival, and time to progression. Other outcome measures will include immunologic correlative markers.

A copy of the poster will be available on the Oncolytics website at: http://www.oncolyticsbiotech.com/for-investors/presentations.

About Multiple Myeloma
Multiple Myeloma is a cancer of the plasma cells and the second most common hematological malignancy. The American Cancer Society estimates there will be 26,850 new cases diagnosed in the United States and 11,240 deaths from the disease in 2015.

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 later-stage, randomized human trials in various indications 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 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements, including the Company's expectations related to the pilot single-arm clinical trial in multiple myeloma, future trials in this indication, and the Company's belief as to the potential of REOLYSIN® as a cancer therapeutic, 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 tolerability of REOLYSIN® outside a controlled test, the success and timely completion of clinical studies and trials, the Company's ability to successfully commercialize REOLYSIN®,

uncertainties related to the research, development and manufacturing of pharmaceuticals, changes in technology, general changes to the economic environment and uncertainties related to the regulatory process. 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 should consider statements that include the words "believes", "expects", "anticipates", "intends", "estimates", "plans", "projects", "should", or other expressions that are predictions of or indicate future events or trends, to be uncertain and forward-looking. 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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