

September 17, 2018



Oncolytics Biotech® Announces Investigator Sponsored Multiple Myeloma Study Combining REOLYSIN® and Nivolumab (Opdivo®) with Standard of Care

CALGARY, Alberta and SAN DIEGO, Sept. 17, 2018 (GLOBE NEWSWIRE) -- Oncolytics Biotech® Inc. (TSX: ONC) (NASDAQ: ONCY), currently developing REOLYSIN® (pelareorep), an intravenously delivered immuno-oncolytic virus turning cold tumors hot, today announced a second study in multiple myeloma. This study will combine pelareorep and nivolumab (Opdivo®) with standard of care for patients with relapsed/refractory multiple myeloma. Pomalyst®, an immunomodulatory drug, may be added to the treatment regimen once the safety of the initial combination is demonstrated. The study will be facilitated by Craig C. Hofmeister, MD, MPH at Emory University and Douglas Sborov MD, MS at the University of Utah.

"This study expands on our strategy of investigating the importance of systemic pelareorep administration followed by checkpoint blockade in selected indications. This investigation with nivolumab represents our third checkpoint inhibitor study entering the clinic after our recently announced window of opportunity study with Tecentriq® in breast cancer and our previously announced combinations with Keytruda® in multiple myeloma and pancreatic cancer," said Dr. Matt Coffey, President & CEO of Oncolytics Biotech. "The data from this study will add to a growing critical mass of immunological and clinical data being developed by combining pelareorep with checkpoint inhibitors. Importantly, it will not only help us demonstrate the specific role of pelareorep in promoting an inflamed phenotype, it should also help us understand how the virus may promote responses to checkpoint blockade in cold tumors, thus potentially expanding the commercial potential of these immunotherapies."

The objectives of this study will be to evaluate safety in relapsed or refractory myeloma patients and measure the development of a pro-inflammatory phenotype in the tumor microenvironment. Oncolytics will provide pelareorep, while Emory University has secured supply of Opdivo from the manufacturer, as well as per-patient funding. Final study design and other details will be announced upon enrollment of the first patient, expected before the end of 2018.

"Pelareorep, for the treatment of multiple myeloma, has demonstrated safety and the ability to turn cold tumors hot by inducing expression of the checkpoint protein PD-L1 on the surface of myeloma cells," said Dr. Hofmeister. "We plan to capitalize on this inflamed phenotype by infusing pelareorep and the PD-1 checkpoint inhibitor, nivolumab, together."

About REOLYSIN (pelareorep)

REOLYSIN, also known as pelareorep, is a non-pathogenic, proprietary isolate of the unmodified reovirus: a first-in-class intravenously delivered immuno-oncolytic virus for the treatment of solid tumors and hematological malignancies. The compound induces selective tumor lysis and promotes an inflamed tumor phenotype through innate and adaptive immune responses to treat a variety of cancers.

About Oncolytics Biotech Inc.

Oncolytics is a biotechnology company developing 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 and immuno-therapy and immune modulator (IMiD) combinations to produce innate and adaptive immune responses. Oncolytics is currently conducting and planning additional studies in combination with checkpoint inhibitors and targeted and IMiD therapies in solid and hematological malignancies, as it prepares for a phase 3 registration study in metastatic breast cancer. 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; the collaboration between Merck and USC using pelareorep, including the timing, enrollment and potential benefits to the Company thereof; 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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Source: Oncolytics Biotech, Inc.