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Oncolytics Biotech® Establishes New At-The-Market Facility

CALGARY, Alberta and SAN DIEGO, Oct. 24, 2018 (GLOBE NEWSWIRE) -- Oncolytics Biotech® Inc. (NASDAQ: ONCY) (TSX: ONC), currently developing pelareorep, an intravenously delivered immuno-oncolytic virus that turns cold tumors hot, today announced that it entered into an At-the-Market (ATM) equity offering sales agreement with Canaccord Genuity LLC. The ATM allows the Company, at its sole discretion, to issue common shares from treasury, at prevailing market prices, with an aggregate gross sales amount of up to \$30 million over the course of the next 19 months. Having this access to capital will allow Oncolytics to negotiate development agreements with potential pharmaceutical partners from a position of financial strength while managing dilution. Management believes that the ATM represents the lowest cost of capital available to Oncolytics. Proceeds, if any, will be used to advance our business and clinical development programs.

In connection with the ATM, Oncolytics has filed a Prospectus Supplement with the Alberta Securities Commission and with the United States Securities and Exchange Commission, which supplements Oncolytics' Canadian short form base shelf prospectus dated May 4, 2018, and Oncolytics' shelf registration statement on Form F-10 declared effective on May 7, 2018 by the United States Securities and Exchange Commission. Sales of the ATM offering will only be conducted in the United States through NASDAQ or another exchange at market prices. No sales will be conducted in Canada or through the Toronto Stock Exchange.

A copy of the Prospectus Supplement will be available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov or may be obtained upon request to Oncolytics' Investor Relations Department using the contact information set out below. Before you invest, you should read the Prospectus Supplement and accompanying base shelf prospectus and the other documents the Company has filed with the SEC for more complete information about the Company and the ATM offering. Alternatively, a copy of the Prospectus Supplement and accompanying base shelf prospectus are available upon request by contacting Canaccord Genuity LLC, 99 High Street, Suite 1200, Boston, MA 02110, Attn: Equity Syndicate Department, by telephone at (617) 371-3900 or by e-mail at prospectus@canaccordgenuity.com.

This press release does not constitute an offer to sell or the solicitation of an offer to buy securities, nor will there be any sale of the securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such jurisdiction.

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 amount of proceeds raised under the ATM and the use of such proceeds and anticipated 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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