Trillium Therapeutics to Provide Update on TTI-621 Clinical Programs at Two Scientific Conferences

- *Data from intralesional trial in mycosis fungoides/Sézary syndrome patients continue to show promise, with rapid reductions in CAILS scores in the majority of patients and preliminary evidence of abscopal effect with continuation therapy*
- *Safety data from 163 patients treated intravenously demonstrate that TTI-621 is well tolerated; transient thrombocytopenia not associated with increased risk of bleeding*
- *Efficacy as monotherapy in multiple indications and in combination with rituximab in DLBCL patients at relatively low intravenous doses; dose intensification ongoing*

TORONTO, Sept. 28, 2018 -- **Trillium Therapeutics Inc. (NASDAQ/TSX: TRIL),** a clinical stage immuno-oncology company developing innovative therapies for the treatment of cancer, today announced that it will be providing updates on its two clinical trials with TTI-621, a dual function SIRPaFc IgG1 decoy receptor that targets CD47, at two upcoming scientific conferences. As previously announced, the presentations will be made on September 28 at the European Organisation for Research and Treatment of Cancer, Cutaneous Lymphoma Task Force (EORTC CLTF) meeting in St. Gallen, Switzerland and the 16th Annual Discovery on Target conference in Boston, MA. The presentations will be available on the Company's website after the presentations have been delivered.

The presentation at the EORTC CLTF meeting will provide an update on the safety and efficacy of the ongoing multicenter, open-label phase 1 intratumoral trial of TTI-621 in 23 patients with relapsed/refractory mycosis fungoides/Sézary syndrome, 20 of whom only received induction therapy consisting of 1-6 injections over 2 weeks. Local delivery of TTI-621 was well tolerated, with no treatment-related $\geq$ Grade 3 adverse events or dose-limiting toxicity observed. Reductions in CAILS scores, which measure local lesion responses, were observed in 89% of patients, with 42% exhibiting reductions of 50% or greater. These responses occurred rapidly within the 2-week induction period. Similar CAILS scores changes were seen in adjacent non-injected lesions, suggesting locoregional effects that were not confined to the site of injection. Evidence of a systemic (abscopal) effect was observed in 1 of 2 patients receiving continuation monotherapy beyond the 2-week induction therapy. In addition, data suggest a combination effect with pegylated IFN-alpha-2a.

"These data expand on the observations first presented at ASH 2017, and highlight the potential value of localized delivery of TTI-621 in heavily pre-treated mycosis fungoides/ Sézary syndrome patients," said Dr. Yaping Shou, Trillium's Chief Medical Officer. "We are particularly encouraged to see reductions in CAILS scores after such a short course of therapy, and the abscopal effect seen in one of the two patients receiving continuation treatment suggest that a longer duration of dosing may offer further opportunity to induce systemic responses."

"The ability to induce rapid anti-tumor responses through local administration with our potent IgG1-containing Fc fusion protein opens up numerous possibilities, not only in mycosis fungoides but also in many solid tumors. As is the case with other agents targeting the innate immune system, such as STING and TLR agonists, local administration is the route of choice to ensure instant high local drug concentrations at the site of the tumor," said Dr. Niclas Stiernholm, Trillium's President and Chief Executive Officer. "We intend to expand the intratumoral program both with respect to additional indications and combination therapies with complementary immunostimulatory therapies, especially those acting downstream of CD47."

The presentation at the Discovery on Target conference will provide a high level update of the safety and efficacy of the ongoing multicenter, open-label phase 1a/b intravenous trial of TTI-621 in patients with relapsed/refractory hematologic malignancies. Based on an expanded data set of 163 patients, weekly infusions of TTI-621 were shown to be well tolerated. Thrombocytopenia was the most frequent grade 3 or higher treatment-emergent adverse event, occurring in 20% of patients. Platelet reductions, however, were shown to be transient and pre-dose platelet levels remained steady during the course of the study. Notably, the reversible thrombocytopenia did not lead to an increased risk of bleeding and had no impact on drug delivery, nor was there a significant impact of TTI-621 on hemoglobin levels. Monotherapy efficacy was observed in patients with mycosis fungoides (19% ORR, n=21), peripheral T-cell lymphoma, or PTCL (25% ORR, n=12), and diffuse large B-cell lymphoma, or DLBCL (25% ORR, n=8), and in DLBCL patients when combined with rituximab (25% ORR, n=24). This clinical activity was observed in patients receiving relatively low doses of drug (0.2 mg/kg for monotherapy or 0.1 mg/kg in combination with rituximab). Dose intensification beyond 0.2 mg/kg is currently ongoing, and doses of 0.5 mg/kg have been well tolerated for up to 27 weeks.

"These data reinforce our prior observations that thrombocytopenia, which we believe to be an on-target pharmacodynamic effect, does not appear to be clinically consequential. Based on the data in hand, the transient decrease in platelets is not associated with bleeding events or premature treatment discontinuations, and has not impacted our ability to dose intensify

patients beyond 0.2 mg/kg," commented Dr. Shou. "The monotherapy anti-tumor activity we have observed in multiple disease indications is particularly intriguing given that patients have received relatively low doses of drug. Characterizing the efficacy of TTI-621 at higher doses, which is currently ongoing, remains a top priority in the intravenous trial."

"Having concluded this exploratory phase in a wide variety of hematologic malignancies and having gained increased clarity with respect to potential registration paths, we plan to move forward with three distinct clinical programs: intratumoral mono- and combination-therapy in CTCL, intravenous monotherapy in both CTCL and PTCL, as well as intravenous combination therapy in DLBCL," said Dr. Stiernholm. "While we are gratified to have observed meaningful clinical responses with monotherapy at low doses, we are equally excited about how well tolerated TTI-621 appears to be, allowing us to incorporate dose intensification as a major component of our clinical efforts moving forward."

About Trillium Therapeutics

Trillium is an immuno-oncology company developing innovative therapies for the treatment of cancer. The company's two clinical programs, TTI-621 and TTI-622, target CD47, a "do not eat" signal that cancer cells frequently use to evade the immune system. Trillium also has a proprietary fluorine-based medicinal chemistry platform that is being used to develop novel compounds directed at undisclosed immuno-oncology targets.

For more information visit: www.trilliumtherapeutics.com

Caution Regarding Forward-Looking Information

This press release contains forward-looking statements within the meaning of applicable United States securities laws and forward-looking information within the meaning of Canadian securities laws (collectively, "forward-looking statements"). Forward -looking statements in this press release include statements about, without limitation, our development plan (including our proposed clinical trial program), and our belief that the observed thrombocytopenia is not clinically significant. With respect to the forward-looking statements contained in this press release, Trillium has made numerous assumptions regarding, among other things: the effectiveness and timeliness of preclinical and clinical trials; and the completeness, accuracy and usefulness of the data. While Trillium considers these assumptions to be reasonable, these assumptions are inherently subject to significant scientific, business, economic, competitive, market and social uncertainties and contingencies. Additionally, there are known and unknown risk factors that could cause Trillium's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements contained in this press release. Known risk factors include, among others: positive preliminary results from early-stage clinical trials may not be indicative of the final results from the trial or be indicative of favorable outcomes in later-stage clinical trials and data are subject to audit for inclusion in the final clinical trial database; clinical data may not demonstrate adequate efficacy and safety to result in regulatory approval to market any of our product candidates in any jurisdiction; given the early stage of Trillium's product development, there can be no assurance that its research and development programs will result in regulatory approval or commercially viable products and that Trillium can adequately demonstrate TTI-621's individual contribution in a combination therapy; clinical trials may be more costly or take longer to complete than anticipated, and may never be initiated or completed, or may not generate results that warrant future development of the tested drug candidate; Trillium may not receive the necessary regulatory approvals for the clinical development of Trillium's products; economic and market conditions may worsen; and market shifts may require a change in strategic focus. A discussion of risks and uncertainties facing Trillium appears in Trillium's Annual Information Form for the year ended December 31, 2017 filed with Canadian securities authorities and available at www.sedar.com and on Form 40-F with the U.S. Securities Exchange Commission and available at www.sec.gov, each as updated by Trillium's continuous disclosure filings, which are available at www.sedar.com and at www.sec.gov. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Trillium disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

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