Trillium Therapeutics Reports TTI-622 Preclinical Data at the 2018 AACR Annual Meeting

TORONTO, April 18, 2018 -- **Trillium Therapeutics Inc.** (Nasdaq:TRIL) (TSX:TRIL), a clinical-stage immuno-oncology company developing innovative therapies for the treatment of cancer, today announced that preclinical data from its TTI-622 (SIRPa-IgG4 Fc) immune checkpoint inhibitor program were presented at the 109th Annual Meeting of the American Association for Cancer Research (AACR).

TTI-622 (SIRPa-IgG4 Fc) is the second SIRPaFc decoy receptor that Trillium is advancing into the clinic. It consists of the CD47-binding domain of human SIRPa linked to an IgG4 Fc region and is being developed primarily for combination therapy.

The data presented at AACR demonstrate that TTI-622 induces the phagocytosis of a broad panel of tumor cells derived from patients with both hematological and solid tumors. As a monotherapy, TTI-622 treatment resulted in decreased tumor growth and improved survival in a B cell lymphoma xenograft model, and enhanced the efficacy of cetuximab (anti-EGFR) and daratumumab (anti-CD38) antibodies in solid and hematological xenograft models, respectively. Unlike CD47-blocking antibodies, TTI-622 bound minimally to human erythrocytes and did not induce hemagglutination in vitro.

“The preclinical data presented at AACR reinforce our confidence in this target and provide a solid foundation for initiating a clinical program with TTI-622,” said Dr. Niclas Stiernholm, President and CEO of Trillium Therapeutics. “This second SIRPaFc decoy receptor complements TTI-621, and allows us to evaluate the effects of CD47 blockade using different levels of Fc receptor engagement. Importantly, we believe the minimal binding of TTI-622 to human red blood cells distinguishes this agent from other IgG4-based CD47 targeted therapies.”

A two-part, multicenter, open-label, phase 1a/1b study of TTI-622 in patients with advanced relapsed or refractory lymphoma or multiple myeloma is being initiated, with the first patient expected to be dosed in Q2 2018. In the phase 1a dose-escalation study, patients will be enrolled in sequential dose cohorts to receive TTI-622 once weekly to characterize safety, tolerability, pharmacokinetics, and to determine the maximum tolerated dose. In the phase 1b study, patients will be treated with TTI-622 in combination with rituximab, a PD-1 inhibitor or a proteasome inhibitor-containing regimen.

About Trillium Therapeutics:

Trillium Therapeutics Inc. is a clinical stage immuno-oncology company developing innovative therapies for the treatment of cancer. The company’s lead program, TTI-621, is a SIRPaFc fusion protein that consists of the CD47-binding domain of human SIRPa linked to the Fc region of a human immunoglobulin (IgG1). It is designed to act as a soluble decoy receptor, preventing CD47 from delivering its inhibitory (“do not eat”) signal. Neutralization of the inhibitory CD47 signal enables the activation of macrophage anti-tumor effects by pro-phagocytic (“eat”) signals. A Phase 1 clinical trial (NCT02663518) evaluating intravenous dosing of SIRPaFc in patients with advanced cancer is ongoing, and a second Phase 1 trial evaluating direct intratumoral injections is underway in solid tumors and mycosis fungoides (NCT02890368). TTI-621 has recently been granted an Orphan Drug Designation by the FDA for the treatment of cutaneous T-cell lymphoma. TTI-622, an IgG4 SIRPaFc protein which is primarily being developed for combination therapy, is expected to begin clinical testing in 2018. Trillium also has a proprietary medicinal chemistry platform, using unique fluorine chemistry, which permits the creation of new chemical entities from validated drugs and drug candidates with improved pharmacological properties. Stemming from this platform, the company’s most advanced preclinical program is an orally-available epidermal growth factor receptor antagonist with increased uptake and retention in the brain. In addition, a number of compounds directed at undisclosed immuno-oncology targets are currently in the discovery phase.

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 our belief that the preclinical data could support a clinical pathway, and our expectations about our competitive advantage due to minimal binding of red blood cells, and about timing of first patient dosing in the TTI-622 trial. 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: preclinical results may not be indicative of clinical results; 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 more complete discussion of the 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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