FOR IMMEDIATE RELEASE **NASDAQ: TRIL**
TSX: TRIL

TRILLIUM THERAPEUTICS ANNOUNCES DOSING OF FIRST PATIENT IN PHASE 1B/2 STUDY OF TTI-621 IN COMBINATION WITH DOXORUBICIN IN LEIOMYOSARCOMA

CAMBRIDGE, MA, June 29, 2021 – Trillium Therapeutics Inc. (NASDAQ/TSX: TRIL), a clinical stage immuno-oncology company developing innovative therapies for the treatment of cancer, today announced that it has dosed the first patient with TTI-621 (SIRPα-IgG1 Fc), an investigational checkpoint inhibitor of the innate immune system, in combination with doxorubicin in a Phase 1b/2 study in leiomyosarcoma (LMS).

TTI-621 binds CD47, an innate immune checkpoint that binds SIRPα and delivers a "don't eat me" signal to suppress macrophage phagocytosis. Overexpression of CD47 can allow tumor cells to escape immune surveillance. TTI-621 is a fusion protein consisting of the CD47 binding domain of SIRPα linked to the Fc region of human IgG1. It is designed to enhance phagocytosis and tumor cell destruction by blocking the CD47-SIRPα interaction and delivering an activating ("eat me") signal to macrophages. The IgG1 backbone can also activate NK cell-mediated anti-tumor activity. Published preclinical studies suggest that anti-CD47 agents may exhibit anti-tumor activity against LMS cells.

"The dosing of this patient marks the beginning of the first Phase 1b/2 solid tumor clinical trial for Trillium," commented Dr. Ingmar Bruns, Trillium's Chief Medical Officer. "We're committed to exploring solid tumors and build upon our potentially best-in-class initial hematologic malignancy datasets."

For newly diagnosed LMS patients, doxorubicin is considered part of standard of care. In this open-label Phase 1b/2 study, Trillium is adding TTI-621 to frontline doxorubicin and enrolling approximately 60 newly diagnosed LMS patients. The primary endpoints are safety and overall response rate.

"Metastisized LMS, the most common form of soft tissue sarcoma, is a serious disease with significant unmet need. We believe that the combination of TTI-621 and doxorubicin has the potential to provide benefit for these patients where few therapeutic options exist," added Dr. Bruns.

About Trillium Therapeutics

Trillium is an immuno-oncology company developing innovative therapies for the treatment of cancer. The company's two clinical programs, TTI-622 and TTI-621, target CD47, a "don't eat me" signal that cancer cells frequently use to evade the immune system.

For more information visit: www.trilliumtherapeutics.com

Caution Regarding Forward-Looking Information

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and applicable United States federal securities laws and forward-looking information within the meaning of Canadian securities laws (collectively, "forward-looking statements"). The use of words such as "may," "will, "could", "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "projects," "seeks," "endeavor," "potential," "continue" or the negative of such words or other similar expressions can be used to identify forward-looking statements. Forward-looking statements in this press release include, but are not limited to, express or implied statements regarding the therapeutic potential of our programs, our clinical development plans and our expectations with respect to the timing of clinical development milestones, including with respect to enrolling patients in Phase 1b/2 studies in hematological and solid tumor malignancies. With respect to the forward-looking statements contained in this press release, Trillium has made numerous assumptions regarding, among other things: the impact of the COVID-19 pandemic on its operations, 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. A discussion of risks and uncertainties facing Trillium appears in Trillium's Annual Report on Form 10-K for the year ended December 31, 2020, with the U.S. Securities Exchange Commission, 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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