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

TRILLIUM THERAPEUTICS REPORTS SECOND QUARTER 2017 FINANCIAL AND OPERATING RESULTS

- ***Clinical responses observed in Phase 1 trial of TTI-621***
- ***Scope of trial expanded, including dose-intensification strategy***
- ***$39 million capital raise; cash and marketable securities of $72.6 million at June 30***
- ***Guidance provided on small molecule program***

TORONTO, August 11, 2017 – Trillium Therapeutics Inc. (NASDAQ/TSX: TRIL), a clinical stage immuno-oncology company developing innovative therapies for the treatment of cancer, today provided a corporate update and reported financial results for the six months ended June 30, 2017.

"Both our intravenous and intratumoral signal-seeking Phase 1 trials of TTI-621 progressed well this quarter," said Dr. Niclas Stiernholm, Trillium's Chief Executive Officer. "We are encouraged by the preliminary multiple clinical responses seen across varied hematologic malignancies and we look forward to providing additional updates by year end."

Corporate Update

- **Additional Cohorts Added to Phase 1 Trial of TTI-621** – Based upon early evidence of anti-tumor activity in patients with both myeloid and lymphoid malignancies, the Company has amended its Phase 1 intravenous dosing trial of TTI-621 to include:
    - An additional cohort of patients with Hodgkin lymphoma treated with a combination of TTI-621 and the PD-1 checkpoint inhibitor nivolumab;
    - Two additional cohorts of patients with T- and B-cell acute lymphoblastic leukemia and small cell lung cancer treated with TTI-621 monotherapy;

- Cautious exploration of dose-intensification, building upon the observation of good overall tolerability associated with attenuated thrombocytopenia over successive weekly doses of TTI-621; and
- Increasing the size of cohorts exhibiting early evidence of clinical benefit.

- **Public Offering Completed** – In June 2017, Trillium completed an underwritten public offering of common shares and non-voting convertible preferred shares in the United States. In the offering, the Company sold 2,949,674 common shares and 3,250,000 Series II Non-Voting Convertible First Preferred Shares at a price of U.S. $5.00 per share. The gross proceeds from this offering were $41,846,775 (U.S. $30,998,370) before deducting offering expenses of $2,856,400. The net proceeds will be used for further clinical development of the Company's SIRPaFc programs, TTI-621 and TTI-622, and for general corporate and working capital purposes.

- **Development of Small Molecule Programs** – The Company has concluded that its EGFR small molecule candidate, TTI-2341, appears to be a viable and competitive drug candidate for the treatment of brain cancers and plans to continue to pursue internal development of TTI-2341 while undertaking partnering discussions in parallel.

Upcoming Clinical Events in the Second Half of 2017:

- Preliminary data from the TTI-621 Phase 1a intratumoral dose escalation trial in solid tumors

- Additional clinical data from the TTI-621 Phase 1b intravenous trial

- IND submission for TTI-622, the Company's IgG4 SIRPaFc protein that is primarily being developed for combination therapies

Second Quarter 2017 Financial Results
(Amounts in Canadian dollars)

As of June 30, 2017, Trillium had cash and marketable securities of $72.6 million compared to $50.5 million at December 31, 2016. The increase in cash was due mainly to the June 2017 financing, raising net proceeds of $39.0 million, partially offset by cash used in operations of $14.1 million and an unrealized foreign exchange loss of $2.6 million.

Net loss for the six months ended June 30, 2017 of $23.1 million was higher than the loss of $14.8 million for the six months ended June 30, 2016. The net loss was higher due mainly to higher research and development expenses of $6.2 million with two active Phase 1 trials for TTI-621 and manufacturing expenses for TTI-622 in 2017, and the recognition of a deferred tax recovery in the six months ended June 30, 2016 related to

the acquisition of Fluorinov of $3.7 million, partially offset by a lower net foreign currency loss of $1.3 million.

Selected Consolidated Financial Information:

Consolidated statements of loss and comprehensive loss

Amounts in Canadian dollars	**Six months ended June 30, 2017**	**Six months ended June 30, 2016**
Research and development expenses	$19,049,164	$12,807,186
General and administrative expenses	1,638,486	1,984,409
Net finance costs	2,403,340	3,699,808
Income tax expense (recovery)	2,260	(3,683,391)
Net loss and comprehensive loss for the period	23,093,250	14,808,012
Basic and diluted loss per common share	2.79	1.90

Consolidated statements of financial position

Amounts in Canadian dollars	**As at June 30, 2017**	**As at December 31, 2016**
Cash and marketable securities	$72,617,501	$50,472,971
Total assets	87,162,683	66,622,691
Total equity	75,405,297	58,119,519

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-622 is an IgG4 SIRPaFc protein, which is primarily being developed for combination therapy. An IND filing is targeted for 2H/17. 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 statements about, without limitation, Trillium's intended use of proceeds from the June 2017 offering, partnering plans for the EGFR program, plans to open new cohorts of cancer patients and increase the size of cohorts where there is early evidence of clinical benefit, its intention to dose intensify, the potential benefit of combining with PD-1 targeted drugs, and the expected timing of upcoming clinical events. 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 more complete discussion of the risks and uncertainties facing Trillium appears in Trillium's Annual Report on Form 20-F and 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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