UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

September 8, 2014

Via E-mail
James Parsons
Chief Financial Officer
Trillium Therapeutics, Inc.
96 Skyway Avenue
Toronto, Ontario, Canada M9W 4Y9

Re: Trillium Therapeutics, Inc.
Registration Statement on Form 20-F
Filed August 12, 2014
File No. 001-36595

Dear Mr. Parsons:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. Since you appear to qualify as an "emerging growth company," as defined in the Jumpstart Our Business Startups Act, please disclose that you are an emerging growth company. In addition, describe how and when a company may lose emerging growth company status and provide a brief description of the exemption from Section 404(b) of the Sarbanes-Oxley Act of 2002.

2. We note that there are additional exhibits that still need to be filed. Please provide these exhibits as promptly as possible. Please note that we may have comments on these materials once they are provided.

D. Risk Factors
Risks Related to our Business and our Industry
We will require additional capital to finance our operations, which may not be…, page 8

3. Please quantify your cash and cash equivalents in this risk factor as of the most recent practicable date and estimate how long you will be able to continue your current operations with existing funds.

We rely on contract manufacturers over whom we have limited control. If we…, page 10

4. Please briefly describe the applicable "Good Manufacturing Practice ("cGMP")" regulations to which you refer.

We may expand our business through the acquisition of companies or…, page 15

5. Please also indicate in this risk factor that you have entered into a license agreement with UHN and HSC to in-license exclusive rights to SIRPaFc.

Item 4. Information on the Company
B. Business Overview
General, page 27

6. We note that you are seeking a development partner to advance your CD200 mAb program into IND-enabling preclinical studies. If you have not yet begun formal preclinical studies of CD200, please revise the table on page 27 so that the arrow indicating the phase of development for CD200 mAb stops before the preclinical phase rather than at the midway point of the phase.

7. To the extent practicable, please minimize the use of highly technical terminology on pages 27 through 32 that may be unfamiliar to lay investors. If the use of such terms is necessary, please give the meaning and significance of such terms in plain language that may be readily understood by a person not acquainted with this industry or scientific field. By way of example only and not as an exhaustive list, an explanation of the following terms should accompany their first usage in your Form 20-F:

    - monoclonal;
    - antibodies;
    - imunoregulatory pathways;
    - fusion protein;
    - hematopoietic;
    - xenograft models;
    - Fc regions;
    - debulking;
    - recombinant;

- macrophages;
- receptor;
- upregulated;
- CD47-SIRPa axis;
- pro-phagocytic signals;
- cross-react;
- murine;
- nanomolar affinity;
- ligand;
- growth factor;
- HB-EGF levels;
- epithelium;
- urothelium; and
- sink effect

8. Please expand your disclosure at the bottom of page 27 to identify the "several marketed anti-cancer antibodies" with which CD47 has been reported to synergize.

Products in Development
SIRPaFc, page 28

9. Please identify the independent body of work to which you refer in the last sentence on page 28.

10. Where the reference appears near the top of page 29, please clarify the meaning of "non-Good Laboratory Practice" preclinical studies and explain how they differ from Good Laboratory Practice preclinical studies and the significance, if any, of such difference.

11. Please expand your disclosure on pages 29-30 regarding your license agreement with UHN and HSC to disclose the milestones payable for the submission of the first BLA and regulatory approval in the U.S. In addition, here and on page 78 under Item 10.C., please disclose the aggregate milestones that may be paid under the agreement, duration of the agreement, termination provisions and any other material rights and obligations of the parties.

AML/Competitive Environment, page 31

12. Please explain in greater detail your approach of using the natural ligand to CD47, how that differs from treatments that use CD47-specific antibodies, and the comparative advantages of your approach.

Intellectual Property, page 32

13. For purposes of clarification, please revise your disclosure of material patent rights to break out, for each of CD200 mAbs and SIRPaFc:

    - the number of patents and patent applications owned in each jurisdiction;
    - the number of patents and patent applications licensed in each jurisdiction, and identify the licensor;
    - the subject matter of the patents and patent applications and the type of protection conveyed; and
    - the expiration dates and expected expiration dates of such patents and patent applications, respectively

European Approval Process, page 34

14. Please expand your disclosure to describe the material differences between the FDA and EMA review process.

Item 5. Operating and Financial Review and Prospects
A. Operating Results
For the years ended December 31, 2013 and 2012
Research and Development, page 39

15. Tell us how patent fees due to a favorable patent interference settlement are properly classified as research and development expense under IFRS and reference for us the authoritative literature you rely upon to support your position. Although paragraphs 126, 127 and 66c of IAS 38 permit the inclusion of fees to register a legal right as research and development costs, they do not address patent fees related to patent interference settlements. In your response, tell us how the nature of prosecution and defense costs as contemplated by paragraphs 97 and 98 of IAS 1 is such to meet the definition of research or development activities as stipulated in paragraph 8 of IAS 38.

B. Liquidity and Capital Resources
June 30, 2014 Compared to December 31, 2013, page 42

16. Please revise the date disclosed for the obligations to make future payments from June 30, 2013 to June 30, 2014.

F. Tabular Disclosure of Contractual Obligations, page 45

17. Please explain why the other long-term liabilities line item in the table specifies that it is reflected on your balance sheet under IFRS. It appears that this could imply that other balances in the table are not reported under IFRS.

18. Please expand your disclosures to include the amount of the potential future milestone payments.

Item 7. Major Shareholders and Related Party Transactions
A. Major Shareholders, page 61

19. Please be advised that Item 7.A.1 of Form 20-F requires you to provide beneficial ownership information for each director, officer or beneficial owner who owns 5% or more of your common shares, and not just those who own "more than 5%," as you have stated. Accordingly, please revise your disclosure as necessary.

Item 10. Additional Information
A. Share Capital, page 66

20. Please state the number of record holders in the United States and the corresponding percentage of your outstanding stock currently held in the United States. See Item 7.A.2 of Form 20-F.

B. Memorandum and Articles of Association, page 75

21. Please expand your disclosure in this section to discuss any material differences in the laws of Canada compared to the United States.

Meetings, page 77

22. Please include discussion of the minimum number of days that advance notice of meetings may be provided to shareholders.

Notes to the Consolidated Financial Statements
10. Share capital, page F-16

23. Provide us how you determined the volatility of 75% for 2014 and why volatility decreased so much from 118% in 2013.

4. Acquisition of Trillium Privateco, page F-33

24. Please expand your disclosures to describe the method and assumptions used to determine the fair value of the acquired technology asset.

7. Intangible assets, page F-35

25. You disclose that the acquired technology asset is in-process research and development. It appears that you have classified this as a finite lived intangible asset subject to amortization. Please tell us why you did not classify this as an indefinite lived asset and the authoritative accounting literature that you relied upon.

15. Commitments and contingencies, page F-44

26. Please revise your disclosure to include the amounts of the potential milestone payments.

Exhibit 15.2

27. The consent references the report dated September 27, 2012 (except Note 16 as to which the date is August 12, 2014). Please file a revised consent which correctly references the report dated September 27, 2012, except as to note 16 which is as of August 11, 2014.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Vanessa Robertson at (202) 551-3649 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Johnny Gharib at (202) 551-3170, Daniel Greenspan at (202) 551-3623 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ *Daniel Greenspan for*

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Daniel M. Miller, Esq.
Dorsey & Whitney LLP