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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

January 21, 2016

Via E-mail
Gerald R. Mattys
Chief Executive Officer
Tactile Systems Technology, Inc.
1331 Tyler Street NE, Suite 200
Minneapolis, MN 55413

Re: Tactile Systems Technology, Inc.
Amendment No. 2 to
Draft Registration Statement on Form S-1
Submitted December 31, 2015
CIK No. 0001027838

Dear Mr. Mattys:

We have reviewed your amended draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Graphics

1. It is not clear from the face of the graphic what is meant by "Clinically Proven." Please revise to remove this language.

Our Competitive Strengths, page 4

2. We note your response to prior comment 3. However, please include disclosure that your system was not compared to an advanced pneumatic compression device in any of your clinical studies or advise.

Stock-Based Compensation, page 85

3. In response to comment 6, you state that based on feedback received in 2015, you revised your original 2015 fair value determinations but did not adjust any prior periods. Please explain in more detail why you concluded that your original 2015 fair value determinations required revision, the nature of the feedback received, and how the changes impacted your original valuation methodologies. For example, explain if you revised assumptions or added additional valuation methodologies in determining the fair value of your common stock. Tell us why these changes to correct your 2015 valuations should not also be considered for prior period valuations.

4. Further, to help explain the reasonableness of the increase in your valuation from 2014 to 2015 please address the following:

    - Tell us why the increase in your revenues during 2014 did not result in an increasing valuation during this period. We note that you valued your common stock at the same amount for all 2014 grants.
    - Tell us why it was reasonable to use different valuation methodologies and different comparable companies for the 2014 grants versus 2015 grants.
    - Tell us why it was reasonable to use a valuation report as of September 30, 2013 to value all of your grants in 2014 and use a valuation report as of December 31, 2014 to value all of your grants in 2015.

5. Also, please revise your disclosure beginning on page 87 to be consistent with the description of how you valued your common stock in your response.

Impact on Clinical Outcomes and Healthcare Costs with Use of our Flexitouch System, page 99

6. We note your response to prior comment 8. However, it is unclear what treatment each patient received during that 12 month period before receiving your device, e.g., no treatment, treatment using a particular device for the entire 12 months, or some form of treatment between the two. Please revise to include that information or advise.

Third-Party Reimbursement, page 117

7. Please revise this section to reflect your response to prior comment 4.

8. It appears that you have not disclosed the specific time frame for the required trial of conservative therapy for all patients under the new Local Coverage Determination as your response to prior comment 10 suggests. Please revise.

You may contact David Burton at (202) 551-3626 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Heather Percival at (202) 551-3498 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Jonathan R. Zimmerman
Faegre Baker Daniels LLP