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

DIVISION OF
CORPORATION FINANCE

July 16, 2020

Thomas J. Schuetz, M.D., Ph.D.
Chief Executive Officer
Compass Therapeutics, Inc.
245 First Street
3rd Floor
Cambridge, Massachusetts 02142

Re: Compass Therapeutics, Inc.
Form 8-K
Filed June 23, 2020
File No. 000-55939

Dear Dr. Schuetz:

We have reviewed your filing 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 8-K filed June 23, 2020

Description of Business, page 9

1. Throughout this section, please remove all statements that reference efficacy and safety, including synonyms and similar terms (e.g., "robust" and "potent cytotoxic activity"), as safety and efficacy determinations are solely within the authority of the Food and Drug Administration or other regulatory agencies.

Overview, page 9

2. We note that you state that you "plan to rapidly advance [your] product candidates through clinical development." Please revise your disclosure here and throughout your filing to remove any implication that you will be successful in commercializing your product candidates in a rapid or accelerated manner, as such statements are speculative.

Pipeline, page 11

3. Please revise the chart on page 11 to clarify the term "TAA" and provide a brief narrative below of what this line in the chart is depicting. Please also include the specific indication(s) for which your product candidates are being developed.

Figure 1. We have assembled a panel of proprietary antibodies against a broad panel of key immune targets, page 13

4. Please provide a brief narrative of what your graphic is depicting.

Phase 1 clinical trial data as of May 24, 2020, page 20

5. We note your disclosure that the ongoing Phase 1 trial of CTX-471 was designed to evaluate the safety and tolerability of your product candidate, but it appears that you are presenting efficacy data from this trial on page 21. Please revise to remove the statements regarding efficacy if it is not being measured in the current trial, or revise to clarify the current trial phase and disclose the efficacy endpoints of the trial.

License Agreement, page 29

6. Please disclose that you have additional milestone payments due under your collaboration agreement and quantify the aggregate potential milestone payments due.

Management's Discussion and Analysis of Financial Condition and Results of Operation
Overview, page 99

7. We note you will need substantial additional funding to support your continuing operations and pursue your growth strategy. Please disclose how far in the development of your product candidates you expect to reach with your current capital resources.

Results of Operations, page 104

8. We note that you have multiple products in varying stages of development and clinical testing. Please revise to disclose more detail for your research and development expenses each period presented, including but not limited to by product candidate and the nature of the expenses.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Eric Atallah at 202-551-3663 or Brian Cascio at 202-551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Courtney Lindsay at 202-551-7237 or Mary Beth Breslin at 202-551-3625 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences