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

DIVISION OF
CORPORATION FINANCE

August 28, 2018

Daniel M. Bradbury
Chief Executive Officer
Equillium, Inc.
2223 Avenida de la Playa, Suite 108
La Jolla, CA 92037

Re: Equillium, Inc.
Draft Registration Statement on Form S-1
Submitted August 3, 2018
CIK No. 0001746466

Dear Mr. Bradbury:

We have reviewed your 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.

Draft Registration Statement on Form S-1

Overview, page 1

1. Please refer to the second paragraph. We note your disclosure that "[f]ollowing completion of a Phase 3 clinical trial, itolizumab was approved in India for the treatment of moderate to severe plaque psoriasis." Please revise to clarify that the Phase 3 trial was not completed in the U.S. or Canada nor is itolizumab approved in the U.S. or Canada. Please also clarify in the summary that none of your product candidates have commenced clinical trials or been approved in the U.S. or Canada.

Development Plans Chart, page 2

2. Please revise the chart to reflect the actual, and not the anticipated, status of EQ001 and the various indications as of the latest practicable date. In this regard, we note that you have not completed any Phase 1 clinical trials for any indications. Please revise the chart to include a pre-clinical phase, to indicate that your aGVHD and cGVHD indications are at the beginning of Phase 1 and that your severe asthma indication is in the pre-clinical phase. Additionally, please delete the to be determined 4th indication as that reference appears premature.

3. We note that the chart is intended to summarize your development plans and the status thereof. Please delete the reference to Biocon and that ALZUMAb has been developed and marketed in India as it is not one of your products.

Strategy, page 3

4. We note the statement that you believe that the unique mechanism of action of EQ001 may be effective in treating a subset of severe asthma patients who are underserved by currently marketed therapies. The statement implies that your product candidate is effective, which is a determination solely within the authority of the FDA. Since your product candidate has not completed clinical trials and the FDA has not made such determination, the inference is not appropriate. Please remove this statement and similar statements throughout the prospectus, including the statement that you believe EQ001 may effectively treat Th2-low patients.

Implications of Being an Emerging Growth Company, page 5

5. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

Use of Proceeds, page 59

6. We note your disclosure that you intend to use net proceeds to fund research and development of EQ001. Please revise to specify how far in the development of EQ001 you expect to reach with the proceeds of the offering. If any material amounts of other funds are necessary to accomplish the specified purposes for which the proceeds are to be obtained, state the amounts and sources of such other funds needed for each such specified purpose and the sources thereof. Refer to Instruction 3 of Item 504 of Regulation S-K.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Contractual Obligations, page 74

7. Tell us your consideration of including the convertible promissory notes and interest on the notes in the table.

Critical Accounting Policies and Significant Judgement and Estimates
Stock-Based Compensation Expense, page 75

8. Once you have an estimated offering price or range, please explain to us the reasons for any differences between the recent valuations of your common stock leading up to the initial public offer and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation.

Business
EQ001 Product Development, page 92

9. The inclusion of the "equillium" logo in the chart on page 93 suggests that the company was responsible for the Phase 1 clinical trial referenced underneath the logo in the chart. This suggestion, however, is inconsistent with the disclosure regarding the trial that follows the chart. Please revise the chart or explain the inconsistency.

Development Plan in GVHD, page 95

10. We note the statement that you plan to initiate a Phase 2 clinical trial of EQ001 for the treatment of cGVHD in the first half of 2019. Please revise your disclosure to discuss any additional steps necessary to initiate such a trial, including the filing of an IND and any other material requirements you must satisfy.

Collaboration and License Agreement with Biocon, page 97

11. We note your disclosure in the second paragraph that you are "required to pay quarterly tiered royalties based on a percentage from the mid-single digits to low double-digits." Please revise your description of royalty rates to provide a range that does not exceed ten percent (e.g., between twenty and thirty percent).

Biocon Agreements, page 134

12. We note the disclosure elsewhere in the prospectus that Mr. Bradbury, the company's Chief Executive Officer, is a member of the board of directors of Biocon. Please revise your disclosure in this section to identify Mr. Bradbury as a related party with respect to the Biocon agreements or tell us why you believe he is not a related party.

Certain Relationships and Related Party Transactions, page 134

13. Please include a description of the common stock purchase agreement with Biocon in this section. Please also file the common stock purchase agreement and investor rights agreement as exhibits to the registration statement or tell us why you are not required to do so.

Financial Statements, page F-1

14. You have only included one year of audited financial statements when two years are required. Please advise if you are omitting one year under Section 71003 of the FAST Act and will include audited financial statements for 2018 prior to requesting effectiveness.

General

15. Please provide us mockups of any pages that include any additional pictures or graphics to be presented, including any accompanying captions. Please keep in mind, in scheduling your printing and distribution of the preliminary prospectus, that we may have comments after our review of these materials.

16. We note you have filed several exhibits pursuant to a request for confidential treatment. We will provide any comments we have on your application for confidential treatment under separate cover.

You may contact Bonnie Baynes at 202-551-4924 or Lisa Vanjoske at 202-551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Donald E. Field at 202-551-3680 or Justin Dobbie at 202-551-3469 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Karen Anderson