

October 31, 2017

Via EDGAR

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street N.E.
Washington, D.C. 20549

Attn: Jeffrey Gabor
Erin Jaskot

Re: Eleven Biotherapeutics, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed October 30, 2017
File No. 333-220809

Ladies and Gentlemen:

On behalf of our client, Eleven Biotherapeutics, Inc. (the “*Company*”), we are responding to the comments of the staff (the “*Staff*”) of the Securities and Exchange Commission (the “*Commission*”) contained in its letter dated October 31, 2017 (the “*Comment Letter*”), relating to Amendment No. 2 (“*Amendment No. 2*”) to the above referenced Registration Statement on Form S-1. In response to the comments set forth in the Comment Letter (the “*Comments*”), the Company has revised the Registration Statement and is filing a revised Registration Statement (“*Amendment No. 3*”) with this response letter. For the Staff’s reference, we have included both a clean copy of Amendment No. 3 and a copy marked to show all changes from Amendment No. 2 filed on October 30, 2017.

Set forth below is the Company’s response to the Comments. The numbering of the paragraph below corresponds to the numbering of the Comments, which for your convenience we have incorporated into this response letter.

Exhibits

1. Please have counsel revise the legal opinion to opine on the units and pre-funded units. Please refer to Section II.B.1.h. of Staff Legal Bulletin No. 19 for guidance.

Response to Comment 1:

In response to the Staff's comment, counsel has revised its opinion and is refileing its opinion as Exhibit 5.1 to Amendment No. 3.

We thank you for your prompt attention to this letter responding to the Staff's Comment Letter and look forward to hearing from you at your earliest convenience. Please direct any questions concerning this filing to the undersigned at (267) 675-4671.

Sincerely,

/s/ Steven J. Abrams
Steven J. Abrams

Enclosures

cc: Stephen A. Hurly, President and Chief Executive Officer, Eleven Biotherapeutics, Inc.

Megan N. Gates, Esq., Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.