

May 15, 2018

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Healthcare & Insurance
100 F Street, N.E.
Washington, DC 20549

Attn: Ms. Christine Westbrook
Ms. Mary Beth Breslin

**Re: Eleven Biotherapeutics, Inc.
Registration Statement on Form S-3
Filed March 19, 2018
File No. 333-223750**

Ladies and Gentlemen:

On behalf of Eleven Biotherapeutics, Inc. (the "Company"), we respectfully submit this letter in response to comments received from the staff (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission") in its letter, dated April 2, 2018, to the Company (the "Comment Letter"), with respect to the above-referenced Registration Statement on Form S-3, filed on March 19, 2018 (the "Registration Statement"). In response to the comments set forth in the Comment Letter, the Company has revised the Registration Statement and is filing Amendment No. 1 to the Registration Statement on Form S-3 (the "Amended Registration Statement") with this response letter.

For ease of reference, the Staff's comments as set forth in the Comment Letter are set forth in italic type immediately before the Company's response.

- 1. It is not clear how the purchase contracts you propose to issue should be characterized for purposes of the federal securities laws. For example, the disclosure in the filing indicates that these contracts obligate you to sell to holders of these contracts and for holders of these contracts to purchase securities at a purchase price that may be fixed or may be determined by a specific formula. The disclosure in the filing also indicates that these contracts may require you to make periodic payments to the holders of the purchase units or for holders of these purchase units to make periodic payments to you. Finally, the disclosure in the filing indicates that these contracts may require the holders of the contracts to secure their obligations in a specified manner. Based on this disclosure it appears that these contracts may have characteristics associated with forwards, options and security-based swaps. Please provide us with your legal analysis as to how these contracts should be appropriately characterized under the federal securities laws.*

The Company respectfully advises the Staff that it has decided not to offer purchase contracts or purchase units through the Registration Statement and accordingly has removed references to both purchase contracts and purchase units in the Amended Registration Statement.

- 2. We note your disclosure that you may offer warrants separately or together with one or more additional securities, or any combination of those securities in the form of units. Please amend your registration statement to add units as a separate security and file a revised Exhibit 5.1 legality opinion that covers such units.*

The Company respectfully advises the Staff that units have been added as a separate security in the Amended Registration Statement and a revised opinion of counsel covering the legality of the units is being filed as Exhibit 5.1 with the Amended Registration Statement.

- 3. Please update the registration statement with audited financial statements for the fiscal year ended December 31, 2017. Refer to Rule 8-08 of Regulation S-X. We note that your annual report on Form 10-K is due on April 2, 2018. After such date, please update the documents incorporated by reference pursuant to Item 12 of Form S-3. If you intend to incorporate by reference information required by Part III of Form 10-K from your definitive proxy statement, please note that we will not be in a position to declare your registration statement effective until you amend your Form 10-K to include Part III information or your definitive proxy statement is filed.*

The Company respectfully advises the Staff that the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 was filed on April 2, 2018. The "Incorporation by Reference" section of the Amended Registration Statement has been updated as requested and the Amended Registration Statement now incorporates by reference the Company's audited financial statements for the fiscal year ended December 31, 2017.

The Company acknowledges the Staff's comment regarding the incorporation by reference of the information required by Part III of Form 10-K and respectfully advises the Staff that the Company's definitive proxy statement was filed with the Commission on April 30, 2018.

* * * *

The Company has endeavored to fully respond to the Staff's comments. Thank you in advance for your review. Please direct any questions, comments and advice of the Staff to the undersigned at 267-675-4671.

Sincerely,

/s/ Steven J. Abrams

Steven J. Abrams

cc: Stephen A. Hurly, Eleven Biotherapeutics, Inc.