

September 24, 2019

Christian Schade
Chief Executive Officer
Aprea Therapeutics, Inc.
535 Boylston Street
Boston, MA 02116

Re: Aprea Therapeutics, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed September 23, 2019
File No. 333-233662

Dear Mr. Schade:

We have reviewed your amended 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Amendment No. 1 to Registration Statement on Form S-1

Exhibits and financial statement schedules
Exhibits
Exhibit 10.3, page II-4

1. We note your disclosure in Exhibit 10.3 that "[c]ertain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions." If you intend to redact information pursuant to Item 601(b) of Regulation S-K, please revise the language in Exhibit 10.3 to state that certain identified information has been excluded from the exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Christian Schade
Aprea Therapeutics, Inc.
September 24, 2019
Page 2

You may contact Keira Nakada at 202-551-3659 or Kevin Vaughn at 202-551-3494 if you have questions regarding comments on the financial statements and related matters. Please contact Sonia Bednarowski at 202-551-3666 or Dietrich King at 202-551-8071 with any other questions.

FirstName LastNameChristian Schade
Comapany NameAprea Therapeutics, Inc.
Corporation Finance
September 24, 2019 Page 2
& Insurance
FirstName LastName

Sincerely,
Division of
Office of Healthcare