



SIDLEY AUSTIN LLP
787 SEVENTH AVENUE
NEW YORK, NY 10019
+1 212 839 5300
+1 212 839 5599 FAX

AMERICA · ASIA PACIFIC · EUROPE

GLEVIN@SIDLEY.COM
+1 212 839 5776

CERTAIN PORTIONS OF THIS LETTER HAVE BEEN OMITTED FROM THE VERSION FILED VIA EDGAR. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS. INFORMATION THAT WAS OMITTED IN THE EDGAR VERSION HAS BEEN NOTED IN THIS LETTER WITH A PLACEHOLDER IDENTIFIED BY THE MARK “[***].”

September 16, 2019

Via EDGAR and Hand Delivery

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Healthcare & Insurance
100 F Street, N.E.
Washington, D.C. 20549-3720

Attention: **Sonia Bednarowski**
 Dietrich King
 Keira Nakada
 Kevin Vaughn

FOIA Confidential Treatment
Requested Under 17 C.F.R. § 200.83

Re: Aprea Therapeutics, Inc.
Registration Statement on Form S-1 (File No. 333-233662)

Ladies and Gentlemen:

On behalf of our client, Aprea Therapeutics, Inc., we submit this letter (this “**Letter**”) in response to comments received from the staff (the “**Staff**”) of the U.S. Securities and Exchange Commission (the “**Commission**”) by letter dated August 8, 2019 (the “**Comment Letter**”), relating to the Company’s Registration Statement on Form S-1 (File No. 333-233662), originally confidentially submitted to the Commission on July 12, 2019 and filed with the Commission on September 6, 2019 (the “**Registration Statement**”). We are providing this Letter on the basis of information provided to us by the Company. The Company would like to begin marketing its initial public offering on Monday, September 23, 2019, subject, of course, to the timing of the completion of the Staff’s review. The purpose of this Letter is to respond to Comment #11 of the Comment Letter. References to the “Company” in this Letter refer to Aprea Therapeutics, Inc. and

CONFIDENTIAL TREATMENT REQUESTED BY
APREA THERAPEUTICS, INC.

Sidley Austin (NY) LLP is a Delaware limited liability partnership doing business as Sidley Austin LLP and practicing in affiliation with other Sidley Austin partnerships.

its consolidated subsidiaries, after giving effect to the Holdco Reorganization (as defined in the Registration Statement), and to Aprea Therapeutics AB and its consolidated subsidiaries prior to giving effect to the Holdco Reorganization.

We are respectfully requesting confidential treatment for certain portions of this Letter pursuant to Rule 83 promulgated by the Commission, 17 C.F.R. §200.83. This Letter is accompanied by such request for confidential treatment because of the commercially sensitive nature of the information discussed in this Letter. A redacted letter will be filed on EDGAR, omitting the confidential information contained in this Letter.

In this Letter, we have recited the prior comment from the Staff in italicized, bold type and have followed the comment with the Company's response in ordinary type.

Management's Discussion and Analysis of Financial Condition and Results of Operations Stock-based compensation, page 89

11. ***Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the initial public offering and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features.***

The Company expects to include an anticipated price range in an amendment to the Registration Statement that would be filed shortly before the commencement of the road show for the initial public offering (the "**IPO**"), which the Company anticipates could commence as soon as September 23, 2019. That price range will be subject to then-current market conditions, continuing discussions with J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and RBC Capital Markets, LLC (the "**Underwriters**") and any other factors affecting the Company or the proposed offering.

Valuation Guidance

The Company supplementally advises the Staff that, while currently not reflected in the Registration Statement, based on discussions with the Company's board of directors (the "**Board**") and in consultation with the Underwriters, if the Company were to commence marketing of an IPO raising \$[***] million in aggregate offering amount today, the Company presently anticipates that the estimated pre-offering equity value at its IPO would range from \$[***] million to \$[***] million, implying a price range of \$[***] to \$[***] per share (post-stock split (\$[***] to \$[***] per share pre-stock split)) for the Company's common stock (the "**Preliminary IPO Price Range**"), with a midpoint of the anticipated range of \$[***] per share (post-stock split) (the

“**Preliminary Assumed IPO Price**”). The Preliminary IPO Price Range and Preliminary Assumed IPO Price reflect the expected corporate reorganization referenced under the heading “Corporate Reorganization” on page 79 of the prospectus forming part of the Registration Statement, which will take effect prior to the completion of the IPO (the “**Corporate Reorganization**”). Please note that unless otherwise indicated, the per share amounts and share amounts in this letter reflect the impact of an anticipated 1-for-**[***]** split of its common stock that the Company plans to effect following the Corporate Reorganization but prior to the completion of the IPO.

The Preliminary IPO Price Range is based on a number of factors, including the market environment for the pharmaceutical and biotechnology industry, especially with respect to initial public offerings, estimates of the Company’s future prospects, the general condition of the securities markets, and preliminary discussions with the Underwriters regarding potential valuations of the Company. For consistency with the Registration Statement, all data in this letter, unless otherwise indicated, is reflected on a pre-Corporate Reorganization (and thus pre-stock split) basis. The actual bona fide price range to be included in the “red herring” preliminary prospectus in a subsequent amendment to the Registration Statement has not yet been determined and remains subject to adjustment based on factors outside of the Company’s control. However, the Company believes that the actual bona fide price range will be within the Preliminary IPO Price Range. In addition, the actual price range to be included in such amendment will comply with the Staff’s interpretive guidance regarding the parameters of a bona fide price range.

Previously Provided Information Concerning Fair Value of Common Stock

The section captioned “Critical Accounting Policies and Use of Estimates—Stock-based compensation” beginning on page 92 in the Management’s Discussion and Analysis of Financial Condition and Results of Operations section of the Registration Statement includes an explanation of (i) the Company’s approach to accounting for stock-based compensation and (ii) the methodology used by the Company to determine the fair value of its common stock on the dates that options were granted by the Board. The assumptions used for estimating the weighted average fair value of the Company’s option grants using a Black-Scholes option-pricing model are set forth in Note 10 of the Audited Consolidated Financial Statements of Aprea Therapeutics AB and the Condensed Consolidated Unaudited Interim Financial Statements of Aprea Therapeutics AB included in the Registration Statement. The Company and the Board have consistently sought to comply with the form and substance of the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* (the “**AICPA Practice Aid**”). The Company obtained independent valuations performed in accordance with the AICPA Practice Aid from an independent valuation firm and acted in good faith to ensure that relevant business developments were taken into account in making valuation determinations. The discussion that follows describes certain stock-based compensation grants made within the 12 months prior to the date of the original confidential submission of the Company’s Registration Statement to the Commission.

Stock Option Grants and Common Stock Valuation

As stated in the Registration Statement, the Company has granted stock-based awards, consisting of stock options, to its employees and certain members of its board of directors. The Company measures stock-based compensation expense for stock options granted to its employees and directors on the date of grant and recognizes the corresponding compensation expense of those awards over the requisite service period, which is generally the vesting period of the respective award.

The Registration Statement describes the Company's use of the Black-Scholes option-pricing model for the purpose of calculating the fair value of the stock options. In the preceding twelve months, equity awards were granted and the Company's board of directors, with input from management, determined the fair value of the Company's common stock to be \$1.62 per share (pre-stock split) as of July 31, 2018, \$5.11 per share (pre-stock split) as of February 28, 2019 and \$17.57 per share (pre-stock split) as of August 8, 2019, after considering valuation reports from an independent third-party valuation specialist as of October 2, 2017, December 31, 2018 and July 15, 2019, respectively, as well as the other objective and subjective factors described in the Registration Statement. Set forth below in this letter is a discussion of each common stock valuation and the option grants in the preceding twelve months, along with a comparison of the fair value of the Company's common stock from July 31, 2018 to the Preliminary Assumed IPO Price.

The following table presents a summary of equity awards in the preceding twelve months:

Grant Date	Shares of Common Stock Subject to Options Granted	Effective Date of 409A Valuation	Fair Value of Common Stock on Effective Date of 409A Valuation		Fair Value of Common Stock on Grant Date		Exercise Price of Options	
			Pre-Stock Split	Post-Stock Split	Pre-Stock Split	Post-Stock Split	Pre-Stock Split	Post-Stock Split
7/31/2018	15,000	10/2/2017	\$ 1.62	\$ [***]	\$ 1.62	\$ [***]	\$ 1.62	\$ [***]
2/28/2019	613,650	12/31/2018	\$ 5.11	\$ [***]	\$ 5.11	\$ [***]	\$ 5.11	\$ [***]
8/8/2019	129,850	7/15/2019	\$ 17.57	\$ [***]	\$ 17.57	\$ [***]	\$ 17.57	\$ [***]

October 2, 2017 Valuation

In preparing the October 2, 2017 valuation of its Common Stock, the Company determined the enterprise value using the Market Approach with Option Pricing Method ("*OPM*") based on the then-recent Series B Preferred transaction. Management concluded that the use of the Series B preferred stock transaction supported this methodology since the willingness of existing investors to invest new money into the Company demonstrated that the transaction was indicative of

enterprise value. The resulting estimated fair value of the Company's common stock was \$1.62 per share (pre-stock split).

Under the OPM, the Company used a back-solve method so that the enterprise value equaled the contemplated value of the Company determined by the Series B preferred stock financing transaction with both existing and new third-party investors, the first tranche of which closed in March of 2016 and the second tranche of which closed in October 2017. The discount for lack of marketability ("**DLOM**") of [***]% applied was derived from the then-current estimates of the time to a liquidity event made by the Company's senior management.

July 31, 2018 Grants

On July 31, 2018, the Company's board of directors determined that the fair value of the Company's common stock was \$1.62 per share (pre-stock split) in consideration of the valuation analysis as of October 2, 2017 and the other objective and subjective factors described in the Registration Statement. As part of this determination, the Company's board of directors concluded that no significant internal or external value-generating events had taken place between the October 2, 2017 valuation date and the grant date listed above.

December 31, 2018 Valuation

In preparing the December 31, 2018 valuation of the Company's Common Stock, the independent third-party valuation firm used the Hybrid Approach with OPM and determined the enterprise value using a merger and acquisition ("**M&A**") scenario and an IPO scenario. Both the M&A and the IPO scenarios enterprise values were based on the recent Series C Preferred transaction consummated in November 2018. Management concluded that the use of the Series C preferred stock transaction supported this methodology since the willingness of current and two new non-affiliated investors to invest new money into the Company demonstrated that the transaction was indicative of enterprise value. The IPO scenario was assigned a weight of [***]% reflecting that management had begun its initial consideration of an IPO and the M&A scenario was assigned a weight of [***]%. The resulting estimated fair value of the Company's common stock was \$5.11 per share (pre-stock split).

A DLOM of [***]% was applied to the M&A scenario and a weighted average cost of capital ("**WACC**") of [***]% and DLOM of [***]% was applied to the IPO scenario. The DLOMs used for both scenarios were derived from the then-current estimates of the time to the liquidity events made by the Company's senior management.

February 28, 2019 Grants

On February 28, 2019, the Company's board of directors determined that the fair value of the Company's common stock was \$5.11 per share (pre-stock split) in consideration of the valuation

analysis as of December 31, 2018 and the other objective and subjective factors described in the Registration Statement, including the investment by another new non-affiliated investor in the Series C preferred stock in February 2019 at the same price as the November 2018 transaction. As part of this determination, the Company's board of directors concluded that no significant internal or external value-generating events had taken place between the December 31, 2018 valuation date and the grant date listed above.

July 15, 2019 Valuation

In preparing the July 15, 2019 valuation of the Company's Common Stock, the independent third-party valuation firm used the Hybrid Approach with OPM and determined the enterprise value using a M&A scenario and an IPO scenario. The M&A scenario enterprise value was based on the guideline transactions (between the median and 25th percentile) and the IPO scenario enterprise value was based on recent industry IPO transactions (between the median and 75th percentile). The IPO scenario was assigned a weight of [***]% reflecting that the Company had held the organizational meeting on June 19, 2019 and confidentially submitted to the Commission its Registration Statement on Form S-1 on July 12, 2019 and the M&A scenario was assigned a weight of [***]%. As part of this determination, the Company's board of directors noted the following significant developments between the February 28, 2019 grants and the July 15, 2019 valuation date: (a) the probability of an initial public offering increased from [***]% at December 31, 2018 to [***]% at July 15, 2019, (b) the Company had received preliminary topline results from its Phase 1b/2 Trial in MDS and AML and (c) the Company had made significant process in enrollment of its pivotal Phase 3 clinical trial. The resulting estimated fair value of the Company's common stock was \$17.57 per share (pre-stock split) taking into consideration, among other factors, that, under a M&A scenario, the common stock only has value if the funds available for distribution to shareholders exceed the value of the liquidation preferences at the time of an expected liquidity event.

A DLOM of [***]% was applied to the M&A scenario and a WACC of [***]% and DLOM of [***]% was applied to the IPO scenario. The DLOMs used for both scenarios were derived from the then-current estimates of the time to the liquidity events made by the Company's senior management.

August 8, 2019 Grants

On August 8, 2019, the Company's board of directors determined that the fair value of the Company's common stock was \$17.57 per share (pre-stock split) in consideration of the valuation analysis as of July 15, 2019 and the other objective and subjective factors described in the Registration Statement. As part of this determination, the Company's board of directors concluded that no significant internal or external value-generating events had taken place between the July 15, 2019 valuation date and the grant date listed above. The Company has not granted any options since August 8, 2019.

As is typical in an initial public offering, the estimated price range for the IPO was not derived using a formal determination of estimated fair value, but was determined primarily by negotiation between the Company and the Underwriters. Among the factors that were considered in setting the Preliminary IPO Price Range were the following:

- An analysis of the typical valuation ranges seen in recent initial public offerings for clinical-stage biopharmaceutical companies;
- The general condition of the securities markets and the recent market prices of, and the demand for, publicly traded common stock of generally comparable companies;
- An assumption that there would be a receptive public trading market for pre-commercial, clinical-stage biopharmaceutical companies such as the Company; and
- An assumption that there would be sufficient demand for the Company's common stock to support an offering of the size contemplated by the Company.

The Preliminary Assumed IPO Price of \$[***] (pre-stock split) exceeds the fair value of a share of the Company's Common Stock determined on July 31, 2018 of \$1.62 (pre-stock split) by \$[***] per share, on February 28, 2019 of \$5.11 (pre-stock split) by \$[***] per share and on August 8, 2019 of \$17.57 (pre-stock split) by \$[***] per share. The Company respectfully submits that the difference between these fair values and the Preliminary Assumed IPO Price is primarily attributable to the following factors:

- Feedback from potential investors following the "testing the waters" meetings that occurred between July 2019 and September 2019.
- On November 28, 2018, the Company and certain existing and new third-party investors reached an agreement on the sale of shares of the Company's Series C preferred stock at \$19.38 per share (pre-stock split). Given the arm's length nature of, and due diligence associated with, the issuance of its Series C preferred stock, the Company and the Underwriters consider this financing round to be a meaningful indicator of total equity value.
- The methodology for determining the December 31, 2018 valuation and July 15, 2019 valuation incorporated multiple liquidity scenarios, not all of which allocate value to the Company's stockholders on a fully diluted, as-converted to common stock basis. The Preliminary Assumed IPO Price assumes with 100% probability that the Company completes an IPO, in connection with which all of the Company's convertible preferred stock will be converted into common stock. This factor is significant because the holders of the Company's preferred stock currently enjoy substantial economic rights and preferences over the holders of the Company's common stock, including (i) the right to

receive dividends prior to any dividends declared or paid on any shares of the Company's common stock and (ii) liquidation payments in preference to holders of the Company's common stock. The Preliminary Assumed IPO Price assumes the conversion of all of the Company's convertible preferred stock upon the completion of its IPO. The corresponding elimination of the preferences and rights enjoyed by the holders of such preferred stock results in a higher valuation of the Company's shares of common stock.

- The Company held the organizational meeting on June 19, 2019 and confidentially submitted to the Commission its Registration Statement on Form S-1 on July 12, 2019.
- The expected proceeds from the successful completion of the IPO would strengthen the Company's balance sheet, provide access to public equity, increase the Company's strategic flexibility and provide enhanced operational flexibility to potentially obtain regulatory approval for and commercialize its product candidates.
- The valuation reports prepared by management and the Company's independent third-party valuation specialist utilized a quantitative methodology to determine the estimated fair value of the Company's common stock, which may differ from the more qualitative and subjective methodology used by some public market investors to determine the price that they are willing to pay in the IPO. The quantitative methods used in the valuation report are both commonly accepted and applied in the valuation community, and are consistent with the methods and guidance in the AICPA Practice Guide on Valuing Equity Securities.
- The inclusion of other factors by the Underwriters in their valuation models of indicated market values in determining the Preliminary IPO Price Range, which factors may not have been expressly considered in the Company's valuations as a private company, or are not quantifiable in the Company's valuation models as a private company, or are not objectively determinable by the Company.
- The Preliminary Assumed IPO Price represents a future price for shares of the Company's common stock that, if issued in the IPO, will be immediately freely tradable in a public market, whereas the fair value of the Company's common stock as of the February 28, 2019 grant date and the August 8, 2019 grant date represents a contemporaneous estimate of the fair value of shares that were then illiquid, might never become liquid and, even if an IPO were successfully completed, would remain illiquid at least until the expiration of the 180-day lockup period following the IPO. This illiquidity accounts for a substantial portion of the difference between the fair value of the Company's common stock as of the February 28, 2019 grant date and the August 8, 2019 grant date and the Preliminary Assumed IPO Price.
- The increase in the value of the Company's common stock subsequent to the July 31, 2018 grant date valuation reflects the effects detailed above. However, the Company also notes that it has made significant progress in its research and development activities from the time of the December 31, 2018 valuation through the determination of the Preliminary IPO Price Range. These developments include the following:

- In April 2019, the Company received favorable clinical data from its studies with APR-246 that [***].
- In April 2019, the Company received FDA fast track designation and orphan drug designation for APR-246 for the treatment of Myelodysplastic Syndrome (MDS).
- In July 2019, the Company received additional favorable clinical data from two investigator led Phase 1b/2 clinical trials of APR-246 in MDS and AML.
- The Company believes it has made significant progress in enrollment in its pivotal Phase 3 clinical trial and anticipates full enrollment in the first quarter of 2020.

In conclusion, the Company respectfully submits that the differences between the Preliminary Assumed IPO Price, the latest fair values on August 8, 2019 and the prior fair values on July 31, 2018 and February 28, 2019 are reasonable in light of all of the considerations outlined above. In addition, the Company will continue to update its disclosure for all equity-related transactions through the effective date of the Registration Statement. Based on the foregoing, the Company respectfully seeks confirmation that the Staff has no further comments with respect to the matters discussed in this letter.

* * * * *

We thank you in advance for your consideration of the foregoing. If you have any questions, please direct them to me at (212) 839-5776 or glevin@sidley.com or, alternatively, Istvan Hajdu at (212) 839-5651 or ihajdu@sidley.com.

Very truly yours,

/s/ Geoffrey W. Levin

Geoffrey W. Levin

cc: Christian S. Schade, Aprea Therapeutics, Inc.
Samir A. Gandhi, Sidley Austin LLP
Istvan A. Hajdu, Sidley Austin LLP
Richard D. Truesdell, Jr., Davis Polk & Wardwell LLP
Derek Dostal, Davis Polk & Wardwell LLP