Brian F. Leaf
T: +1 703 456 8053
bleaf@cooley.com

VIA EDGAR

FOIA Confidential Treatment Request
Confidential Treatment Requested by
Clearside Biomedical, Inc. in connection
with Registration Statement on Form S-1
(File No. 333-208916)

May 4, 2016

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Mail Stop 4720
Washington, D.C. 20549

Attn: Mr. Daniel Greenspan
Ms. Alla Berenshteyn
Mr. James Peklenk
Mr. Joel Parker

RE: Clearside Biomedical, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Registration No. 333-208916

Ladies and Gentlemen:

On behalf of Clearside Biomedical, Inc. (the "***Company***"), in response to comments from the staff (the "***Staff***") of the Securities and Exchange Commission (the "***Commission***") received during a March 30, 2016 telephone conversation between Mark Ballantyne, of this office, and the Staff, relating to Amendment No. 1 to the Company's Registration Statement on Form S-1 (File No. 333-208916), filed with the Commission on March 18, 2016 (the "***Registration Statement***"), we submit this supplemental letter to update our analysis explaining the reasons for the difference between the most recent valuations of the Company's common stock used in its estimates of stock-based compensation and the estimated price per share in the Company's initial public offering (the "***IPO***"). This letter supplements our prior letter to the Staff regarding the Company's estimated offering price dated January 20, 2016 (the "***Prior Letter***").

Because of the commercially sensitive nature of information contained in this letter, this submission is accompanied by the Company's request for confidential treatment for selected portions of this letter. The Company has filed a separate letter with the Office of Freedom of Information and Privacy Act Operations in connection with the confidential treatment request, pursuant to Rule 83 of the Commission's Rules on Information and Requests, 17 C.F.R. § 200.83. For the Staff's reference, we have enclosed a copy of the Company's letter to the Office of Freedom of Information and Privacy Act Operations as well as a copy of this correspondence, marked to show the portions redacted from the version filed via EDGAR and for which the Company is requesting confidential treatment.

The Company advises the Staff that the Company preliminarily estimates a price range of $[***] to $[***] per share (the "***Price Range***") for its IPO. The Company expects to effect a reverse stock split prior to the IPO, but the Price Range and all other per-share numbers in this letter are presented on a pre-split basis. This Price Range implies a pre-money valuation for the Company of $[***] million to $[***] million. The preliminary Price Range has been estimated based, in part, upon current market conditions, the Company's financial condition and prospects and input received from Cowen and Company, LLC and Stifel, Nicolaus & Company, Incorporated, the lead underwriters for the IPO, including discussions between senior management of the Company and representatives of the lead underwriters. The Price Range does not take into account the current lack of liquidity for the Company's common stock and assumes a successful IPO with no weighting attributed to any other outcome for the Company's business, such as remaining a privately-held company or being sold in an acquisition transaction.

The Company expects to include the Price Range in an amendment to the Registration Statement that will shortly precede the commencement of the Company's road show. However, due to the recent volatility in the financial markets and the volatilities evident in the market for recent IPO issuers, the Price Range of the common stock may change. The Company confirms to the Staff that in accordance with Item 501(b)(3) of Regulation S-K and CD&I 134.04, the Price Range will be no more than $2.00, if the maximum price is $10.00 per share or less, or 20%, if the maximum price is greater than $10.00 per share. The parameters of the Price Range will be subject to then-current market conditions, continuing discussions with the underwriters and any business developments impacting the Company.

The Company advises the Staff that, since the date of the Prior Letter, it has only granted one option on February 18, 2016 to purchase 37,919 shares of common stock at an exercise price of $3.71 per share. This exercise price was based on a third-party valuation of the common stock of $3.69 per share as of December 31, 2015 (the "***Valuation***"). The Valuation was prepared in accordance with the guidance provided by the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation.* Given the absence of a public trading market for the common stock, the Company's board of directors exercised reasonable judgment and, in addition to considering the results of the Valuation, considered a number of objective and subjective factors to determine its best estimate of the fair value of the common stock, including the Company's stage of development, the progress of the Company's research and development efforts, equity market conditions affecting comparable public companies and the lack of marketability of the shares of common stock. The Company's board of directors determined that the fair value of the Company's common stock on the grant date was $3.71 per share.

In order to determine the estimated fair value of the shares of common stock, the Company and the third-party valuation firm utilized the hybrid method, which used market approaches to estimate the Company's enterprise value. The hybrid method is a probability-weighted expected return method, where the equity value in one or more of the scenarios is calculated using an option-pricing method.

For the reasons set forth below, the Company respectfully submits to the Staff that the increase in value between the Valuation and the estimated Price Range is reasonable. As a result, the Company does not propose to increase the amount of its previously recorded stock-based compensation expense.

The Company believes that the primary differences between the per share value determined in the Valuation and the estimated Price Range are a result of the following:

1. The Price Range assumes a successful IPO, with no weighting attributed to any other outcome for the Company's business, such as remaining a privately-held company. In contrast, the two IPO scenarios in the Valuation were weighted at an aggregate probability of [***]%, while the probability that the Company would remain private, be sold in an acquisition or dissolve was weighted at [***]%. In the Valuation, the two IPO scenarios were an "early" IPO [***] at a pre-money valuation of $[***], which was given a [***]% probability, and a "late" IPO [***] at a pre-money valuation of $[***], which was given a [***]% probability. The IPO scenarios within the Valuation yielded a valuation range of the Company's common stock of $[***] to $[***] per share, prior to the application of a discount of approximately [***]% on an annualized basis to reflect the risk-adjusted cost of capital. Unlike the Valuation, the Price Range excludes any discount for the Company's common stock and takes into account that the IPO would provide significant cash proceeds to the Company to help fuel its growth and substantially strengthen its balance sheet.

2. The Price Range represents a future price for shares of common stock that, if issued in the Company's IPO, would be immediately freely tradable in a public market, whereas the estimated fair value of the common stock as of the February 2016 option grant date represents a contemporaneous estimate of the fair value of the shares that were then illiquid, might never become liquid, might be for stock that is never publicly traded and, even if an IPO were to be successfully completed, would remain illiquid at least until the expiration of the 180-day lockup period following the IPO.

3. From the time of the Valuation through the determination of the Price Range, the Company has made significant progress in its business and in the clinical development of its product candidates. These developments include the following:

    - As described in the Registration Statement, the Company has received positive data from its Phase 2 clinical trial of Zuprata (formerly CLS-TA) for the treatment of macular edema associated with non-infectious uveitis, including the achievement of the primary and secondary trial endpoints.

- The Company has received positive data from its Phase 2 clinical trial evaluating the concomitant treatment of Zuprata together with Eylea for the treatment of macular edema associated with retinal vein occlusion, including the achievement of the primary and secondary trial endpoints. The Company will include a summary of these results in an amendment to the Registration Statement that will shortly precede the commencement of the Company's road show.

In addition, the discount in the estimated fair value of the Company's common stock as of the February 2016 option grant date, as compared to the Price Range, is supported by (i) the inherent uncertainty of completing a successful IPO, (ii) the possibility that the actual IPO price could be substantially lower than the Price Range recommended by the Company's underwriters and (iii) the 180-day lock-up agreement to which the shares underlying the stock options will be subject following the IPO.

In summary, the Company respectfully submits that the deemed per share fair values used as the basis for determining stock-based compensation in connection with its stock option grants are reasonable and appropriate for the reasons described herein and in the Registration Statement. As a result, the Company does not propose to increase the amount of its previously recorded stock-based compensation expense as a result of the underwriters' preliminary estimate of the Price Range.

We hereby further request, pursuant to Rule 418(b) under the Securities Act of 1933, as amended, the return of the unredacted version of this letter. The Company believes that return of the supplemental information contained in this letter will protect the interests of investors and is consistent with the provisions of the Freedom of Information Act by maintaining in confidence the potential valuation of the Company that may, if disseminated, negatively impact the trading in the stock of the Company following the IPO. The Company advises the Staff that it has not filed the supplemental information subject to this request in electronic format. Please return this letter to the Company, in care of the undersigned, a responsible representative of the Company, at One Freedom Square, Reston Town Center, 11951 Freedom Drive, Reston, VA 20190-5656.

* * * *

If you have any questions or comments with regard to this matter, please do not hesitate to contact the undersigned at (703) 456-8053 or Brent B. Siler at (202) 728-7040.

Very truly yours,

/s/ Brian F. Leaf

Brian F. Leaf

cc: Daniel H. White, Clearside Biomedical, Inc.
Darren K. DeStefano, Cooley LLP
Brent B. Siler, Cooley LLP
Peter N. Handrinos, Latham & Watkins LLP

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Cooley LLP One Freedom Square Reston Town Center 11951 Freedom Drive Reston, VA 20190-5656
t: (703) 456-8000 f: (703) 456-8100 cooley.com