



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

DIVISION OF  
CORPORATION FINANCE

Mail Stop 4720

January 29, 2016

Charlie Deignan  
Chief Financial Officer  
Clearside Biomedical, Inc.  
1220 Old Alpharetta Road, Suite 300  
Alpharetta, GA 30005

**Re: Clearside Biomedical, Inc.  
Registration Statement on Form S-1  
Filed January 8, 2016  
File No. 333-208916**

Dear Mr. Deignan

We have reviewed the above referenced 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.

Stock-based compensation, page 73

1. Please expand your analysis to include the preferred stock issued in November and December of 2015.

Business, page 85

2. Please define the term "clinically meaningful" when the term first appears in this section. In addition, when you discuss your top line data from your Phase 2 trial in patients with macular edema, please explain what top line data is, whether this is preliminary, how this relates to a complete analysis and final data, and the likelihood that clinical observations based on top line data may be subject to change when and if final data is evaluated.

Charlie Deignan  
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Notes to the Financial Statements

13. License Agreements, page F-26

3. Please revise your disclosure for the NovaMedica LLC and Spark Therapeutics license agreements to comply with ASC 605-25-50-2 and clarify why you are deferring the upfront payments.

You may contact James Peklenk at (202) 551-3661 or Joel Parker at (202) 551-3651 if you have questions regarding comments on the financial statements and related matters. You may contact Alla Berenshteyn at (202) 551-4325, Daniel Greenspan at (202) 551-3623 or me at (202) 551-3675 with any other questions

Sincerely,

/s/ Suzanne Hayes

Suzanne Hayes  
Assistant Director  
Office of Healthcare and Insurance

cc: Via E-mail  
Brent B. Siler  
Cooley LLP