



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4720

June 8, 2016

Werner Cautreels, Ph.D.
President and Chief Executive Officer
Selecta Biosciences, Inc.
480 Arsenal Street, Building One
Watertown, MA 02472

**Re: Selecta Biosciences, Inc.
Registration Statement on Form S-1
Responses dated June 3, 2016, June 6, 2016, and June 6, 2016
File No. 333-211555**

Dear Dr. Cautreels:

We have reviewed your correspondence dated June 3, 2016, June 6, 2016, and June 6, 2016, regarding your registration statement on Form S-1 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.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Use of Estimates

Stock Based Compensation, page 96

1. Please refer to your response to our prior comment 4 of our June 3, 2016 letter. You attribute the difference between the fair value of your common stock as of April 30, 2016 of \$2.30 per share and the Preliminary Assumed IPO Price primarily to the receipt during the last few weeks of data from the Phase 1b clinical trial for your lead product candidate. Provide us the specifics of this data, the date received, why you believe this difference is primary due to this data and where in your filing you disclose this information.

Notes to Consolidated Financial Statements

12. Revenue arrangements

Sanofi collaboration agreement, page F-36

2. Please refer to your proposed disclosure provided in response to our prior comment 3 of our June 3, 2016 letter. Provide additional disclosure indicating the milestone(s) that comprise a majority of the amounts in each of the two milestone sub-totals (i.e. \$57 million, \$70 million) given that certain milestones are significantly higher than what could be computed as an average milestone for each sub-total.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jacob Luxenburg at (202) 551-2339 or James Rosenberg at (202) 551-3679 if you have questions regarding comments on the financial statements and related matters.

Werner Cautreels, Ph.D.
Selecta Biosciences, Inc.
June 8, 2016
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Please contact Michael Gershon at (202) 551-6598 or Amy Reischauer at (202) 551-3793 with any other questions.

Sincerely,

/s/ Amy Reischauer for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Brandon J. Bortner, Esq.