

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

September 6, 2017

Krish S. Krishnan Chief Executive Officer Krystal Biotech, Inc. 2100 Wharton Street, Suite 701 Pittsburgh, PA 15203

Re: Krystal Biotech, Inc.

Registration Statement on Form S-1 Response dated August 31, 2017

File No. 333-220085

Dear Mr. Krishnan:

We have reviewed your response letter dated August 31, 2017 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 Operations

<u>Critical Accounting Policies and Significant Judgments and Estimates</u> <u>Stock Based Compensation, page 55</u>

1. The number of shares underlying options granted in May and June 2017 and the weighted average exercise price per share of the June 2017 grants as presented in the table in your response letter do not agree to the table on page 56 of your Form S-1 filed August 21, 2017. Please tell us the reason for these discrepancies and revise your Form S-1 and/or cheap stock analysis accordingly.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Krish S. Krishnan Krystal Biotech, Inc. September 6, 2017 Page 2

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Christine Torney at 202-551-3652 or Sharon Blume at 202-551-3474 if you have questions regarding comments on the financial statements and related matters. Please contact Christine Westbrook at 202-551-5019 or Erin Jaskot at 202-551-3442 with any other questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: John W. Campbell, Esq.