

September 20,

2018

Emily M. Leproust, Ph.D.
President and Chief Executive Officer
Twist Bioscience Corporation
455 Mission Bay Boulevard South, Suite 545
San Francisco, CA 94158

Re: Twist Bioscience Corporation
Amendment No. 4 to Draft Registration Statement on Form S-1
Submitted September 11, 2018
CIK No. 0001581280

Dear Dr. Leproust:

We have reviewed your amended draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Capitalization, page 61

1. The total amount for your capitalization calculation includes all of your liabilities. Please revise the total capitalization calculation to include only the liability line items shown of total debt and redeemable convertible preferred stock warrant along with the stockholders' equity related balances. In addition, include double lines under your Cash, cash equivalents and short-term investments caption amounts to make it clear that these amounts are not part of your capitalization.

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Management's discussion and analysis . . . , page 69

Revenues, page 76

2. Please revise to clarify the effect changes in price and/or volume had on the disclosed changes in revenues, as well as the reasons underlying those changes. For example, you attribute the revenue changes to increased revenues from synthetic genes and NGS tools; however, it is unclear why revenues related to those products increased.

Side Letter with Ever Alpha Fund L.P., page 153

3. Please revise to clarify the nature and extent of Ever Alpha's interest in the transaction described here. Please also file the side letter as an exhibit.

You may contact Tara Harkins at (202) 551-3639 or Kevin Kuhar, Accounting Branch Chief, at (202) 551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Geoff Kruczek at (202) 551-3641 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of

Electronics and Machinery

cc: John V. Bautista, Esq.
Peter M. Lamb, Esq.
Christopher J. Austin, Esq.