



DIVISION OF
CORPORATION FINANCE

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

October 17, 2019

David M. Epstein
Chief Executive Officer
Black Diamond Therapeutics, Inc.
139 Main Street
Cambridge, MA 02142

**Re: Black Diamond Therapeutics, Inc.
Amendment No. 1 to
Draft Registration Statement on Form S-1
Submitted October 7, 2019
File No. 377-02808**

Dear Dr. Epstein:

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.

Amendment No. 1 to Draft Registration Statement on Form S-1

Our BDTX-189 program, page 4

1. We note your response to comment 3. Please revise this section of the prospectus to provide additional details regarding the head-to-head comparison studies that were completed to support the comparisons detailed in the chart. In this regard, we note that the additional information provided on page 125 provides helpful context for investors to understand the supporting studies and any limitations and qualifications associated with such studies.

David M. Epstein
Black Diamond Therapeutics, Inc.
October 17, 2019
Page 2

You may contact Sasha Parikh at 202-551-3627 or Kevin Vaughn at 202-551-3494 if you have questions regarding comments on the financial statements and related matters. Please contact Donald Field at 202-551-3680 or Dietrich King at 202-551-8071 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences