

September 9, 2021

VIA EDGAR AND FEDERAL EXPRESS

United States Securities and Exchange Commission
Division of Corporation Finance
Office of Life Sciences
100 F Street, N.E.
Washington, D.C. 20549
Attention: Ada D. Sarmento and Irene Paik

**Re: 2seventy bio, Inc.
Amendment No. 1 to Draft Registration Statement on Form 10
Submitted August 12, 2021
CIK No. 0001860782**

Dear Ms. Sarmento and Ms. Paik:

This letter is submitted on behalf of 2seventy bio, Inc. (the “**Company**”) in response to the comments of the staff of the Division of Corporation Finance (the “**Staff**”) of the U.S. Securities and Exchange Commission (the “**Commission**”) with respect to the Company’s Amendment No. 1 to Draft Registration Statement on Form 10, originally confidentially submitted on August 12, 2021 (“**Confidential Amendment No. 1**”), as set forth in the Staff’s letter, dated August 24, 2021, addressed to Nick Leschly, the Company’s chief executive officer (the “**Second Comment Letter**”). The Company is concurrently filing its Registration Statement on Form 10 (the “**Registration Statement**”), which includes changes to reflect responses to the Staff’s comments and other updates.

For reference purposes, the text of the Comment Letter has been reproduced herein with responses below each numbered comment. For your convenience, we have italicized the reproduced Staff comments from the Comment Letter. Unless otherwise indicated, page references in the descriptions of the Staff’s comments refer to Confidential Amendment No. 1, and page references in the responses refer to the Registration Statement. All capitalized terms used and not otherwise defined herein shall have the meanings set forth in the Registration Statement.

Business

Our Approach, page 100

1. *We note your revisions in response to prior comment 3. Please revise your disclosure that you believe that certain technologies "have the potential" to enable bbT369 to drive rapid tumor clearance, a hallmark of the CD19 CAR T cell patients who proceed to achieve complete responses, as this statement still suggests that your product candidate will be effective. You may provide a summary of the data that you used to draw these conclusions, but not the conclusions or predictions regarding efficacy.*

RESPONSE: The Company respectfully acknowledges the Staff's comment and has revised the disclosure on pages 108 and 112 of the Registration Statement accordingly.

Our Programs

Multiple Myeloma, page 108

2. *We note your revisions in response to prior comment 4. Please remove the disclosure regarding your belief that the clinical endpoints observed in the Phase 1 CRB-402 study for bb21217 were "encouraging."*

RESPONSE: The Company respectfully acknowledges the Staff's comment and has revised the disclosure on page 119 of the Registration Statement accordingly.

Strategic Collaborations

BMS, page 110

3. *We note your revisions in response to prior comment 5. Please revise to disclose the royalty rate or range and the royalty term, or how the term is determined, for the royalties on U.S. sales that you are eligible to receive should you not exercise your option to codevelop and co-promote bb21217 within the U.S. Please also revise to provide the termination provisions for each of the active agreements with BMS.*

RESPONSE: The Company respectfully acknowledges the Staff's comment and has revised the disclosure on pages 121 and 122 of the Registration Statement accordingly.

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If you should have any questions, please contact the undersigned at (617) 570-1406.

Sincerely,

/s/ Gregg L. Katz

Gregg L. Katz, Goodwin Procter LLP

cc: Nick Leschly, 2seventy bio, Inc.
Helen Fu, bluebird bio, Inc.
Michael Bison, Goodwin Procter LLP
Yasin Akbari, Goodwin Procter LLP