

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

June 16, 2023

Rajiv Shukla Chief Executive Officer ALPHA HEALTHCARE ACQUISITION CORP III 1177 Avenue of the Americas, 5th Floor New York, New York 10036

> Re: ALPHA HEALTHCARE ACQUISITION CORP III Amendment No. 4 to Registration Statement on Form S-4 Filed June 8, 2023 File No. 333-269773

Dear Rajiv Shukla:

We have reviewed your amended 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 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. Unless we note otherwise, our references to prior comments are to comments in our June 5, 2023 letter.

## Amendment No. 4 to Registration Statement on Form S-4

Q: What is the expected per share value of the cash consideration to be received by Carmell in the Business Combination?, page 8

1. Please revise the information presented in your beneficial ownership table on page 9 as well as throughout the Registration Statement, including in your Beneficial Ownership section beginning on page 232, to provide the beneficial ownership as of the most recent practicable date, as required by Item 403 of Regulation S-K. In addition, please amend your disclosure throughout your prospectus to provide estimates as of a recent practicable date for the following: (1) the Exchange Ratio; (2) the total number of shares of New Carmell common stock expected to be issued in connection with the business combination, and the percentage of New Carmell shares this amount will represent; (3)

Rajiv Shukla ALPHA HEALTHCARE ACQUISITION CORP III June 16, 2023 Page 2

funds in the Trust Account and an estimated per share redemption price; (4) the voting power of the Sponsor and ALPA's other initial stockholders; (5) the current dollar value of the Sponsor's and ALPA's other initial stockholders' securities; (6) the placeholders in the tables on page 9 and 10, and in the related footnotes; (7) the narrative disclosure on page 11 describing the ownership percentages of certain shareholders based on different scenarios; (8) the number of shares issuable upon the exercise of warrants; and (9) the market price of the relevant warrants and common shares. See Rule 430 of the Securities Act of 1933.

You may contact Michael Fay at 202-551-3812 or Brian Cascio at 202-551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Jessica Ansart at 202-551-4511 or Katherine Bagley at 202-551-2545 with any other questions.

Sincerely,

Division of Corporation Finance Office of Industrial Applications and Services

cc: Jocelyn M. Arel, Esq.