



DIVISION OF
CORPORATION FINANCE

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

March 13, 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
Registration Statement on Form S-4
Filed February 14, 2023
File No. 333-269773

Dear Rajiv Shukla:

We have reviewed your 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.

Registration Statement on Form S-4, Filed February 14, 2023

Cover Page

1. We note that certain shareholders agreed to waive their redemption rights. Please describe any consideration provided in exchange for this agreement.

Summary, page 14

2. Please disclose Carmell's current state of operations and history of net losses in this Summary section.
3. Please revise to identify the Business Combination Agreement closing conditions that are subject to waiver.
4. Please provide the information required by Item 4(a) of Form S-4.

5. Please disclose the sponsor and its affiliates' total potential ownership interest in the combined company, assuming exercise and conversion of all securities.

Risk Factors, page 24

6. Disclose the material risks to unaffiliated investors presented by taking the company public through a merger rather than an underwritten offering. These risks could include the absence of due diligence conducted by an underwriter that would be subject to liability for any material misstatements or omissions in a registration statement.

Risks Related to Carmell's Business and Industry

Risks Related to the Development and Regulatory Approval of our Product Candidates

If we fail to comply with our obligations in the agreements under which we may license intellectual property rights from third parties..., page 38

7. Please expand this risk factor to discuss the risks associated with your dependence on the CMU License Agreement and consequences of any potential termination thereof given you have two product candidates in development and both rely on the continuation of this agreement.

Risks Related to New Carmell and the New Carmell Common Stock Following the Business Combination

The Proposed Charter will designate a state or federal court located within the State of Delaware as the exclusive forum..., page 56

8. On page 56 you state that under the Proposed Charter the forum selection provision does not apply for any action asserting a claim arising under the Securities Act, for which the U.S. federal courts will be the exclusive forum. On page 242 you state that the United States District Court for the District of Delaware is designated as the sole and exclusive forum for resolving any action asserting a claim arising under the Securities Act. Please revise to reconcile these statements and also revise to state here, as you do on page 242, that this provision does not apply to Exchange Act claims, if true.

Risks Related to ALPA, the Business Combination and Redemptions

The Public Stockholders will experience immediate dilution as a consequence of the issuance of New Carmell common stock..., page 58

9. Please revise to disclose all possible sources and extent of dilution that shareholders who elect not to redeem their shares may experience in connection with the business combination. Provide disclosure of the impact of each significant source of dilution, including the amount of equity held by founders, convertible securities, including warrants retained by redeeming shareholders, at each of the redemption levels detailed in your sensitivity analysis, including any needed assumptions.

Proposal 1: the Business Combination Proposal
Background of the Business Combination, page 70

10. On page 71 you state that you entered into nondisclosure agreements with 23 potential business combination targets and, following initial diligence, ALPA's management discontinued discussions with 13 of the 16 business combination targets. Please revise to explain how you proceeded from 23 to 16 targets. Please also revise to describe discussions or negotiations with other material targets in addition to Company A and B.
11. Please revise the Background section to detail the negotiations concerning key aspects of the business combination and related transactions, including, without limitation, the scope and valuation of Carmell's business, the merger consideration and the structure of the transaction. Include further discussion of the negotiations of the terms in the term sheet with Carmell as well. Each proposal (preliminary or otherwise) and counterproposal concerning a material transaction term made between October and December of 2022 should be described and the proposing party identified. In this regard, we note that the Background section as written discusses in general terms the topical areas discussed by the parties during the negotiations and some of the final terms they mutually agreed upon, but does so without any indication of how those terms evolved during the course of the discussions/negotiations.
12. Please revise to state whether there were any discussions with Carmell about the potential loss of clients in the near future or other events that may materially affect Carmell's prospects.
13. Please revise to disclose any discussions about the need to obtain additional financing for the combined company in connection with the Business Combination transaction or shortly thereafter, such as a PIPE transaction, and, as applicable, the negotiation/marketing processes. To the extent any financing is contemplated, please revise to describe. In this regard, we note that on pages 63 and 104 you refer to the "PIPE Investment," which is not defined, you state that Carmell is in default on certain convertible notes and under the maximum redemption scenario New Carmell will need additional financings in order to pay off the convertible notes, will not have sufficient cash to pay the cash transaction costs incurred in connection with the Business Combination and will need additional equity financings in order to satisfy the maximum redemption request as well as to meet the requirement of the minimum net tangible assets for ALPA. Additionally, one requirement under the agreement with Puritan, a convertible note holder, is that "upon entering into such Business Combination Agreement, such parties shall have a commitment letter from a third party to provide capital in an amount sufficient to the surviving company to the Business Combination to, among other things, repay all amounts due and owing at such time to Puritan at the Closing." Please also revise to substantiate your statement on page 46 that you believe you will have sufficient cash to fund expenditures for the next 12 months.

The Board's Reasons for Approval of the Business Combination, page 75

14. Your proxy/registration statement indicates the Board received financial projections and we note on page 78 you state that Cabrillo reviewed certain business presentations regarding Carmell prepared by the representatives of Carmell. Please revise to describe these projections and business presentations. Please also state whether there were any valuations or other material information about ALPA, Carmell, or the Business Combination transaction provided to potential investors that have not been disclosed publicly, to the extent applicable.
15. On page 79 you state that Cabrillo did not provide advice concerning the specific amount of consideration. Please revise to clarify what Cabrillo considered in terms of the consideration involved in the transaction or how it provided an opinion without analysis of the consideration.
16. Please revise to provide cautionary language noting that the fairness opinion addresses fairness to all shareholders as a group as opposed to only those shareholders unaffiliated with the sponsor or its affiliates.
17. We note that Alpha Healthcare Acquisition Corp. completed its business combination. Please provide balanced disclosure about this record and the outcome of this prior transaction as well as any other de-SPAC transaction to the extent your sponsor and management and affiliates have a track record with SPACs.
18. We note that Cabrillo analyzed enterprise values of selected publicly traded companies. Please revise to provide the enterprise value for New Carmell as shown on slide 28 in the presentation attached to the 8-K filed January 4, 2023. Additionally, please revise page 86 to clarify what is being shown here, including the terms low and high indication. For example, it appears that the implied enterprise value for the high indication of the Guideline Public Company Method is referred to as the high quartile of enterprise value on page 80, and the implied enterprise value for the low indication is referred to as the median of enterprise value on page 80.

Interests of the Sponsor and ALPA's Directors and Officers in the Business Combination, page 87

19. Please revise the conflicts of interest discussion so that it highlights all material interests in the transaction held by the sponsor and the company's officers and directors. For example, this could include how the exercise of discretion to agree to changes or waivers to the Business Combination may affect shareholders or that directors of ALPA will be directors of the combined company. In addition, please clarify how the board considered those conflicts in negotiating and recommending the business combination.

Summary of Business Combination Agreement, page 90

20. On page 101 you state that the Termination Date under the Business Combination Agreement is August 31, 2021. In Section 7.1(d) of the Business Combination Agreement it defines “Termination Date” as June 30, 2023. Please reconcile or advise.

Certain Material U.S. Federal Income Tax Consequences, page 103

21. We note your statement that “[t]his section describes certain material U.S. federal income tax considerations.” Please revise your disclosure here to clarify that this section addresses the material U.S. federal income tax considerations as opposed to “certain” material U.S. federal income tax considerations.
22. You disclose on page 106 that the parties to the Business Combination Agreement intend for the Business Combination to qualify as a “reorganization” within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, and that if the Business Combination qualifies as a reorganization, U.S. Holders will generally not recognize gain or loss as a result of the Business Combination. If the merger will not be taxable to shareholders, please file a tax opinion as an exhibit to the proxy/registration statement. For guidance, please see Section III of Staff Legal Bulletin No. 19.

Unaudited Pro Forma Condensed Combined Financial Information, page 115

23. We note balance sheet adjustment (12) reflects the additional required borrowings to fund the transaction costs and the payoff of the convertible notes under the maximum redemption scenario. Please provide a statement of operations pro forma adjustment to reflect any related interest expense and explain the assumptions involved in the notes.
24. We note in balance sheet adjustment (12) that ALPA may not consummate any business combination unless it has net tangible assets of at least \$5,000,001 and that the Company will need additional equity financings. Please provide the computations of pro forma net tangible assets under both the No Redemption and Maximum Redemption Scenarios. In addition, provide any necessary pro forma adjustment related to these equity financings and explain your underlying assumptions in the notes.
25. We note in the Notice of Special Meeting that ALPA will not redeem Public Shares in an amount that would cause it to have net tangible assets of less than \$5,000,001. Please clarify for us why your maximum pro forma redemption scenario does not reflect this statement. Refer to Rule 11-02(a)(10) of Regulation S-X.
26. Please disclose whether CMU will have the ability to subscribe for additional equity securities so as to maintain their percentage of ownership in the Company in connection with this business combination and whether they intend to subscribe for the additional equity. Provide any necessary pro forma adjustments.

Basis of Pro Forma Presentation, page 117

27. We note footnote 6 to your table on page 119. Revise your disclosure here or elsewhere to disclose the effective underwriting fee on a percentage basis for shares at each redemption level presented in your sensitivity analysis related to dilution.

Information about Carmell

CMU Exclusive License Agreement, page 161

28. We note your disclosure that the Amended Exclusive License Agreement is effective until January 30, 2028, or until the expiration of the last-to-expire patent relating to this technology, whichever comes later. Please revise to state when these patents are expected to expire. Please also revise to state the royalty term. We note that failure to perform in accordance with the agreed upon milestones is grounds for CMU to terminate the agreement, please revise to describe any other termination provisions. To the extent applicable, describe any upfront payments and quantify all payments made to date. We note that prior to a qualified initial public offering or a qualified sale CMU has the right to subscribe for additional equity securities so as to maintain its then percentage of ownership in Carmell. To the extent the Business Combination is deemed a qualified initial public offering or a qualified sale please revise to state this ownership percentage and number of shares CMU will receive. Finally, please define "Minimum Performance Requirements."
29. We note that under the CMU License Agreement CMU granted Carmell exclusive rights to develop and commercialize plasma-based bioactive material, also known as "Biocompatible Plasma-Based Plastics" for all fields of use and all worldwide geographies and that CMU "retains the intellectual property rights to the licensed technology including patents, copyrights, and trademarks." Please clarify the meaning of the statement that CMU retains the intellectual property rights to the licensed technology or whether this arrangement differs from a typical exclusive license agreement.

Products, page 162

30. Please revise your pipeline table on page 263 to remove the text within the arrows. You may include a column for anticipated milestones or other information, but please also clarify what "EU additional clinical data TBD" means. Revise to make the table more legible. Clarify which arrow is intended to be a gradient arrow as mentioned in the footnotes. To the extent that Carmell has not begun its HEAL II trial please shorten the arrow to the end of Phase 1 for the Tibia Fracture Healing indication. We note your statement on page 164: "We are pursuing a Phase 2 trial for accelerated bone healing in severe open tibia fractures and other indications where healing bone fractures/defects/fusion is needed." The pipeline table suggests that the Foot/Ankle Fusion indication has an ongoing Phase 2 clinical trial, but aside from this statement on page 164 there appears to be no other discussion of this trial. Please revise the disclosure to provide

a clear discussion of this trial and its application to Foot/Ankle Fusion or advise. On page 169 you state “In the European Union, we intend to pursue a CE Mark for BHA under the EU MDR with an anticipated label as a bone void filler.” Therefore, please remove the “EU CE Mark” from the table for this indication as it appears Carmell has not received it. We also do not see support for the representation of the Bone Void Filler indication in Phase 2 trials, please revise to describe this trial or shorten the arrow accordingly. Finally, we note that four indications in the table are pre-clinical. Please tell us why you feel these indications are material enough to be included in the table.

31. We note your statement on page 163: “Although FDA has assigned CBER as the lead agency center for premarket review for BHA based on its PBM component, b-TCP is used in numerous FDA 510(k)-cleared products. A number of companies market b-TCP as a bone filler by itself (e.g., Vitoss, Stryker, MI). Other companies use it as one of the active ingredients in their products (e.g., OpteMx, Exactech Biologics, IsoTis Mozaik, SeaSpine). In addition, the FDA has approved a combination product (AUGMENT® Injectable) of b-TCP with a recombinant growth factor through the premarket approval (“PMA”) pathway.” Please revise these and any similar statements to not imply or suggest that your product candidates will be approved based on the approval of these other products.

Wound Care, page 166

32. In your discussion of Carmell’s preclinical trial of THA in rabbits you state on page 167 that all animals in the THA + antibiotics group were free of purulence and culture negative. Please revise to state whether there was a group that received solely the antibiotics. In your discussion of Carmell’s preclinical trial of THA in rats you state on page 167: “The endpoint to measure wound size at 17 weeks showed the THA plus vehicle arm to have more complete healing and reduction in wound size, with a statistically significant smaller average wound size versus those treated with the vehicle alone at week 14.” Please revise to provide the relevant p-values and a brief explanation of how p-values are used to measure statistical significance and how statistical significance relates to FDA approval. For both studies please specify the number of subjects.

Intellectual Property, page 173

33. In your patent chart please add expiration or expected expiration dates for each patent.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Financing Activities, page 201

34. We note your description of the Convertible Notes. Please revise to define the term "2022 Note." Please also clearly state the interest rate and outstanding principal amount of these notes. To the extent that \$1,610,413 is the amount owed under one of the Convertible Notes as of the date of the proxy/registration statement please revise to provide the

amount owed under the other Convertible Note. We note that the Convertible Notes are convertible at the option of the holders into shares of common stock at a fixed conversion price equal to the lesser of \$0.22 per share and a 25% discount to the price of the common stock in a qualified offering which is defined as an offering of equity and/or debt securities for gross proceeds to the Company of not less than \$10 million. Please revise to state whether you will interpret this provision to be triggered by the Business Combination.

Executive Compensation, page 211

35. Please update this section for Carmell's fiscal year ended December 31, 2022. Refer to Item 402(a)(4) of Regulation S-K.

Beneficial Ownership, page 218

36. Please revise your disclosure to identify the natural person or persons who have voting and/or investment control of the shares held by the 5% or more holders in the table on page 219.

Management of the Combined Company
Board Leadership Structure, page 250

37. We note your statement on page 251: "As of the closing of the Business Combination, our board of directors will consist of six independent members: Rich Upton, William Newlin, David Anderson, Steve Bariahtaris, Jaime Garza, MD and Kathryn Gregory. Our board of directors undertook a review of the composition of our board of directors and the independence of each director. Based upon information requested from and provided by each director concerning their background, employment and affiliations, including family relationships, our board of directors has determined that Steve Bariahtaris, Jaime Garza, MD, Kathryn Gregory and David Anderson qualify as "independent" as that term is defined by Nasdaq Listing Rule 5605(a)(2)." Please revise to clarify whether you will have six or four independent directors.

Exhibits

38. You appear to be missing Annex C and D. Please revise to include.
39. Please file the Restrictive Covenant Agreement with Hubbell and the agreement with Puritan as exhibits pursuant to Item 601(b)(10) of Regulation S-K. Additionally, we note that many exhibits from the IPO filing were not included, such as, for example, the Warrant Agreement and Registration Rights Agreement. Please revise to include all of these documents as exhibits.

General

40. Please quantify the aggregate dollar amount and describe the nature of what the sponsor and its affiliates have at risk that depends on completion of a business combination. Include the current value of securities held, loans extended and fees due for which the sponsor and its affiliates are awaiting reimbursement. Provide similar disclosure for the company's officers and directors, if material.
41. Please highlight the risk that the sponsor will benefit from the completion of a business combination and may be incentivized to complete an acquisition of a less favorable target company or on terms less favorable to shareholders rather than liquidate.
42. Please clarify if the sponsor and its affiliates can earn a positive rate of return on their investment, even if other ALPA shareholders experience a negative rate of return in the post-business combination company.
43. Please highlight the material risks to public warrant holders, including those arising from differences between private and public warrants. Clarify whether recent common stock trading prices exceed the threshold that would allow the company to redeem public warrants. Clearly explain the steps, if any, the company will take to notify all shareholders, including beneficial owners, regarding when the warrants become eligible for redemption.
44. Please expand your disclosure regarding the sponsor's ownership interest in Carmell. Disclose the approximate dollar value of the interest based on the transaction value compared to the price paid.
45. You renounced your interest in any corporate opportunity in your amended and restated certificate of incorporation. Please address this potential conflict of interest and whether it impacted your search for an acquisition target.
46. Quantify the value of warrants, based on recent trading prices, that may be retained by redeeming stockholders assuming maximum redemptions and identify any material resulting risks.
47. Please ensure your disclosure is up to date. As an example, see page 156: "We are a blank check company incorporated on January 21, 2021, as a Delaware corporation for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with one or more businesses. We have not selected any business combination target and we have not, nor has anyone on our behalf, initiated any substantive discussions, directly or indirectly, with any business combination target."

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.

Rajiv Shukla
ALPHA HEALTHCARE ACQUISITION CORP III
March 13, 2023
Page 10

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 Michael Fay at 202-551-3812 or Al Pavot at 202-551-3738 if you have questions regarding comments on the financial statements and related matters. Please contact Margaret Schwartz at 202-551-7153 or Celeste Murphy at 202-551-3257 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Industrial Applications and
Services

cc: Laurie Burlingame, Esq.