

Rajiv Shukla  
Chief Executive Officer  
Constellation Alpha Capital Corp.  
Emerald View, Suite 400  
2054 Vista Parkway  
West Palm Beach, FL 33411

Re: Constellation Alpha Capital Corp.  
Registration Statement on Form S-4  
Filed June 18, 2019  
File No. 333-232181

Dear Mr. 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

Cover Page

1. We note the registration table includes registration of the common stock to be issued to equity holders of the Constellation equity holders in the domestication transaction. Please revise the prospectus cover page to include a discussion of all shares being offered pursuant to this registration statement. See Item 501(b)(2) of Regulation S-K. Selected Historical Financial Data of Constellation, page 30

2. Please update this information to include income statement and balance sheet data for the fiscal year ended March 31, 2019. We also note you disclose that the information for the period from July 31, 2015 (inception) to March 31, 2016 and for the year ended March 31, Rajiv Shukla  
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2016 is derived from audited financial statements included elsewhere in the filing, however these financial statements do not appear to be included. Please revise to eliminate this inconsistency.  
Comparative Historical and Unaudited Pro Forma Earnings and Book Value Per Share Data,  
page 31

3. We note that your calculation of DermTech's historical book value per share as of March

31, 2019 and December 31, 2018 assumes conversion of DermTech's

preferred shares.

Please tell us how your calculation is consistent with your presentation of DermTech's

historical net loss per share and in compliance with Item 3(f)(1) of Form S-4.

The Business Combination

Background of the Business Combination, page 95

4. Please disclose whether DermTech was a company that received one of the initial non-binding letters of intent. If not, please disclose how the negotiations with DermTech commenced.

5. We note the disclosure that you entered into a share purchase agreement with Medall Healthcare Private Limited on August 2, 2018 which terminated automatically on December 3, 2018. Please further describe why the agreement with Medall was not consummated.

6. Please describe the revised valuation and cash condition to closing that was discussed in the February 13, 2019 between Dr. Dobak and Constellation. Also, please further describe the discussions between February 13, 2019 and March 5, 2019 regarding the new capital and valuation structure. Additionally, please describe the agreement reached between March 9, 2019 and March 13, 2019.

7. Please discuss in greater detail the role of Cowen and Company in the negotiations of the business combination. Please also disclose the relationship of Cowen to Constellation.

Material U.S. Federal Income Tax Consequences of the Business Combination, page 106

8. Please revise this section to clearly state that the disclosure in the tax consequences section is the opinion of the named counsel and clearly articulate the opinion of counsel.

For guidance, see Staff Legal Bulletin No. 19.II.B. Lock-Up Agreement, page 129

9. Please clarify the certain shareholders that will be subject to the lock-up agreement.

Material U.S. Federal Income Tax Consequences of the Domestication, page 134

10. Please revise this section to clearly state that the disclosure in the tax consequences section is the opinion of the named counsel and clearly articulate the opinion of counsel.

Rajiv Shukla

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For guidance, see Staff Legal Bulletin No. 19.II.B. In addition, we note the statement that

US shareholders "should not" recognize taxable gain or loss as a result of the

domestication. Please explain why you cannot give a "will" opinion and describe the

degree of uncertainty. For guidance, see Staff Legal Bulletin No.

19.II.C.4.

DermTech Business, page 157

11. Please disclose the total number of employees, in addition to the number of full time employees, as required by Item 101(h)(4)(xii) of Regulation S-K.

12. We note that contract research accounts for more than half of your revenues. Please provide a discussion of this part of your business, as required by Item 101(h)(4)(i) of Regulation S-K  
DermTech Management's Discussion and Analysis of Financial Condition and Results of Operations, page 194

13. The Management's Discussion and Analysis section is one of the most critical aspects of your disclosure. As such, we request that you revise this section to provide a more detailed executive overview to discuss the events, trends, and uncertainties that management views as most critical to your future revenues, financial position, liquidity, plan of operations, and results of operations, to the extent known and foreseeable. To assist you in this regard, please refer to the Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations, Release Nos. 33-8350 (December 19, 2003) at <http://www.sec.gov/rules/interp/33-8350.htm>.  
Management Following the Business Combination, page 211

14. Please disclose for each director, the specific experience, qualifications, attributes or skills that led to the conclusion that the person should serve as a director of the company in light of the company's business and structure. See Item 401(e)(1) of Regulation S-K.  
Employment Arrangements and Potential Payments Upon Termination of Employment or Change in Control, page 220

15. We note that this transaction is considered a change in control for purposes of various option and RSU agreements. Please revise the discussion in this section and the interests of officers, directors and affiliates of DermTech to discuss in greater detail and quantify to the extent practicable, the value of the immediate vesting of these securities.  
DermTech Director Compensation, page 221

16. Please revise to include the \$30,000 paid to a director for consulting services, as referenced in footnote 8 to the financial statements. See Item 402(r)(2)(vii)(F) of Regulation S-K.  
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Unaudited Pro Forma Condensed Combined Financial Information  
Description of the Business Combination, page 224

17. Please revise the introductory paragraph to the pro forma financial information to disclose the planned accounting treatment for the merger transaction and the basis or rationale for this planned accounting treatment pursuant to the guidance in ASC 805.  
Pro Forma Adjustments to the Unaudited Condensed Combined Balance Sheet, page 227

18. You state in footnote 2 that this adjustment assumes that the maximum

number of shares of 1,187,532 are redeemed into cash by the Constellation shareholders at a price of \$10.41. Given that less than the maximum number of shares may be redeemed in connection with the merger transaction, please tell us how you considered providing a sensitivity analysis explaining how the pro forma balance sheet will be impacted in the event that less than the maximum number of shares are redeemed.

19. You indicate in footnote 8 that this adjustment reflects the conversion of DermTech outstanding common stock into the combined entity's common stock and assumes that 9,928,285 shares of DermTech common stock will be converted into 12,729,061 shares of Constellation common stock at a conversion ratio of 1.28. Please disclose how you arrived at the 12,729,061 shares to be issued in the business combination and tell us why the conversion ratio presented here differs from the 1.16 ratio disclosed at page 21 of the prospectus summary. Your disclosure in footnote 4 on page 229 should be similarly revised.

Unaudited Pro Forma Condensed Consolidated Statement of Operations and Comprehensive Loss, page 228

20. Footnote 4 indicates that you have assumed that the maximum number of shares subject to redemption will be redeemed in connection with the merger. Please tell us how you considered providing a sensitivity analysis explaining how weighted average shares outstanding and your resultant earnings per share will be impacted in the event that less than the maximum number of shares are redeemed in connection with the offering.

21. The disclosure on page 129 under the heading "Forfeiture Agreement" indicates that Constellation's sponsor entered into a forfeiture agreement under which the sponsor has agreed to forfeit to Constellation an aggregate 2,694,779 shares of Constellation common stock immediately prior to consummation of the business combination. Please explain why an adjustment for the forfeiture of these shares has not been reflected in the computation of the weighted average shares, basic and diluted, to be outstanding after completion of the merger as disclosed on page 229.

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Rights, page 243

22. Your disclosure on page 243 indicates that there are currently 14,936,250 rights to receive ordinary shares issued and outstanding and that each holder of a right will receive one-tenth of one ordinary share upon consummation of Constellation's initial business combination. Please explain why the shares that will be issued for these rights upon consummation of the DermTech merger have not been reflected in adjustments to the pro forma financial information included on pages 224 through 229 of the

registration  
statement.  
Principal Stockholders of DermTech, page 250

23. Please disclose the control person(s) for Paulson Investment Company  
LLC and RTW  
Investments L.P.  
Report of Independent Registered Public Accounting Firm, page F-2

24. Please revise to obtain a report of the independent registered public  
accounting firm which  
indicates that their audits were conducted in accordance with  
standards of the PCAOB  
rather than just the auditing standards of the PCAOB. Refer to the  
guidance in paragraph  
.09 of AS3101.  
Constellation Alpha Capital Corp. Financial Statements  
Notes to Financial Statements  
Reconciliation of net loss per ordinary share, page F-58

25. In the reconciliation of net loss per ordinary share, you reflect an  
adjustment for the  
income attributable to ordinary shares subject to redemption. Please  
revise to explain in  
further detail how you calculated or determined the amount of this  
adjustment for each  
period presented.  
Exhibits, page II-3

26. Please file executed Exhibits 10.24, and 10.29. In addition, please  
file Exhibit A to  
Exhibit 10.24.

27. Please file the convertible bridge notes and the amendment to these  
notes, as referenced  
on page 195.

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.

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.

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You may contact Linda Cvrkel at 202-551-3813 or Craig Arakawa at  
202-551-3650 if  
you have questions regarding comments on the financial statements and related  
matters. Please  
contact Michael Killoy at 202-551-7576 or Pam Howell at 202-551-3357 with any  
other  
questions.

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Corporation Finance  
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Sincerely,  
Division of  
Office of Beverages,  
Mining