

June 20, 2023

Christopher Dewey  
Chief Executive Officer  
MedTech Acquisition Corp  
48 Maple Avenue  
Greenwich, CT 06830

Re: MedTech Acquisition

Corp  
Registration Statement on Form S-4

Amendment No. 4 to  
Filed June 8, 2023  
File No. 333-269138

Dear Christopher Dewey:

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 May 31, 2023 letter.

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

Ownership of the Combined Company After the Closing, page 33

1. We note your disclosure on pages 30-31 that your Sponsor and certain of its affiliates will be participating in the PIPE, including pursuant to the Backstop Letter Agreement. Please revise your discussion here and your table on page 34 to disclose the Sponsor and its affiliates' total potential ownership interest in the combined company, assuming exercise and conversion of all securities, including the Series A Convertible Preferred Stock they may receive pursuant to the PIPE and Backstop Letter Agreement.

Christopher Dewey  
FirstName LastName Christopher Dewey  
MedTech Acquisition Corp  
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June Name MedTech Acquisition Corp  
20, 2023

June 20,  
Page 2 2023 Page 2  
FirstName LastName  
Description of MTAC's Securities  
Series A Convertible Preferred Stock  
Anti-dilution Provisions, page 327

2. Please state whether the Sponsor and its affiliates may receive additional securities pursuant to an anti-dilution adjustment based on the company's additional financing activities with respect to the PIPE. If so, please quantify the number and value of securities the sponsor and its affiliates will receive. In addition, disclose the ownership

percentages in the company before and after the additional financing  
to highlight dilution  
to public stockholders.

Exhibits

3. To the extent you have a placement agent or other agreement with Ceros  
Financial

Services, Inc. please file it as an exhibit.

You may contact Christie Wong at 202-551-3684 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 Margaret Schwartz at 202-551-7153  
with any other  
questions.

Sincerely,

Division of

Office of

Services

Corporation Finance

Industrial Applications and

cc: Kevin Shuler