February 2, 2023

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

> Re: MedTech Acquisition Registration Filed January 6, File No. 333-269138

Statement on Form S-4

2023

Corp

Dear Christopher Dewey:

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. Form S-4 filed on January 6, 2023 Q: What equity stake will current stockholders of MTAC and TriSalus stockholders hold in the Combined Company after the closing?, page 10 1 Please revise your disclosure here and elsewhere throughout the prospectus, such as on pages 27-28, to disclose the Sponsor and its affiliates' total potential ownership interest in the combined company, assuming exercise and conversion of all securities, including the private placement and conversion warrants. Please revise your 2. disclosure in this section to show the potential impact of redemptions on the per share value of the shares owned by non-redeeming stockholders by including a sensitivity analysis showing a range of redemption scenarios, including minimum, maximum and interim redemption levels. Christopher Dewey FirstName LastNameChristopher Dewey MedTech Acquisition Corp Comapany2, NameMedTech February Acquisition Corp 2023 February Page 2 2, 2023 Page 2 FirstName LastName We note your disclosure that the maximum redemption scenario reflects 3. maximum redemptions of 1,149,694 shares of Class A Common Stock owned by MTAC public stockholders. Please clarify what percentage of total outstanding common stock held by

MTAC public stockholders this maximum redemption scenario represents. We note your disclosure beginning on page 29 regarding additional 4. dilution that

stockholders may experience following the closing of the business combination. Please revise your disclosure here to disclose all possible sources and extent of dilution that stockholders 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 stockholders, at each of the redemption levels detailed in your sensitivity analysis, which should include an interim redemptions scenario, including any needed assumptions. Questions and Answers about the Proposals Q: Are there any arrangements to enable MTAC to obtain sufficient funds, together with the proceeds in its Trust Account..., page 10 Please highlight material differences in the terms and price of 5. securities issued at the time of the IPO as compared to the Magnetar Convertible Notes, which are contemplated to be issued at the time of the business combination, and the Combined Company Common Stock that the Notes convert into. We note that you have arranged to sell additional securities to 6. Magnetar Capital LLC to raise funds to help satisfy the minimum cash required to complete the husiness combination transaction after returning funds to redeeming stockholders. Revise the disclosure to discuss the key terms of these convertible securities, including the antidilution rights and exclusivity mentioned on page 10, and the potential impact of those securities on non-redeeming stockholders. Q: Do any of MTAC's directors or officers have interests that may conflict with mv interests with respect to the Business Combination?, page 11 We note your disclosure on page 145 that "MTAC s independent directors reviewed and considered these interests during the negotiation of the Business Combination." Please clarify how the board considered these conflicts in negotiating and recommending the business combination here as well as in your discussion of the interests of certain persons in the business combination beginning on page 30. Q: How do I exercise my redemption rights?, page 13 8. We note your disclosure on page 261 that your Sponsor, officers and directors have agreed to waive their redemption rights. Please revise your disclosure here to discuss this waiver. Additionally, please describe any consideration provided in exchange for this agreement. Christopher Dewey FirstName LastNameChristopher Dewey MedTech Acquisition Corp Comapany2, NameMedTech February Acquisition Corp 2023 February Page 3 2, 2023 Page 3 FirstName LastName Summary of the Proxy Statement Parties to the Business Combination, page 20 9 Please disclose TriSalus current state of operations and history of net losses in this Summary section. The Merger Agreement Conditions to Closing, page 21 10. We note your disclosure on page 130 that [a]ny party to the Merger Agreement may [ - 1 waive any of the terms or conditions of the Merger Agreement. Please identify the closing conditions that are subject to waiver here and in your

disclosure beginning on page 128. Please also revise your risk factor on page 93, as applicable, to address material risks that are subject to waiver. Interests of Certain Persons in the Business Combination, page 30 We note your disclosure that if the "founder shares were unrestricted 11. and freely tradeable, they would be valued at approximately \$62.8 million, based on the closing price of the Class A Common Stock on January 4, 3023" and that the Sponsor has invested an aggregate of \$7,425,000. Please expand your disclosure regarding the Sponsor's ownership interest in the target company here and elsewhere throughout the prospectus, as appropriate, to also disclose the approximate dollar value of the interest based on the transaction value and to discuss the interest based on the transaction value and recent trading prices as compared to the price paid. Recommendations of the Board and Reasons for the Business Combination, page 33 12. We note your disclosure here as well as on page 144 that the board did not obtain a fairness opinion on which to base its assessment. Please revise your disclosure to clarify the basis for the board determining it was not necessary to obtain a fairness opinion for the business combination. **Risk Factors** Risks Related to TriSalus' Intellectual Property TriSalus may be subject to claims challenging the inventorship or ownership of its patents and other intellectual property, page 80 13. We note your statement on page 80 that "TriSalus has been subject to claims that former employees, collaborators or other third parties have an ownership interest in the patents and intellectual property that TriSalus is or that it may own or license in the future." You describe one litigated case here as an example, please revise to describe any other material claims. Christopher Dewey FirstName LastNameChristopher Dewey MedTech Acquisition Corp Comapany2, NameMedTech Acquisition Corp February 2023 February Page 4 2, 2023 Page 4 FirstName LastName Internal Controls, page 87 Please clarify your description of the 2021 material weakness. 14. Quantify the number of "trained resources" that perform the task(s) identified as a weakness and the estimated number of additional resources needed to remedy the weakness. Identify the steps you have taken to remediate the weakness. Explain to readers how this weakness actually impacted, or could impact, your financial reporting. Proposal 1 - the Business Combination Proposal Background of the Business Combination, page 134 Please revise the Background section to detail the negotiations 15. concerning key aspects of the business combination and related transactions, including, without limitation, the scope and valuation of TriSalus' business, the merger consideration and the structure of the transaction (including the negotiation and marketing processes for the PIPE transaction). Each proposal (preliminary or otherwise) and counterproposal concerning a material transaction term made between June 16 and November 11 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 five months of 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. 16. Please disclose whether the Sponsor and management and affiliates have a track record with SPACs. If so, please provide balanced disclosure about this record and the outcomes of prior transactions. 17. In the event that the Sponsor has other SPACs in the process of searching for a target company, please revise to disclose whether the Sponsor considered more than one active SPAC to be the potential acquirer of TriSalus and how the final decision was reached. Please clarify whether there were any discussions about continuing 18. employment or involvement for any persons affiliated with the SPAC before the merger or any formal or informal commitment to retain the financial advisors after the merger. We note your disclosure on page 136 that you and Memic mutually agreed 19. to terminate your business combination agreement on March 10, 2022 due to the challenging market conditions in the first quarter of 2022, along with the associated volatility related to world Please clarify why you chose not to resume discussions with events. Memic later in 2022, but decided instead to engage with other potential target businesses. 20. Please clarify whether any discussions took place with TriSalus about the potential loss of clients in the near future or other events that may materially affect its prospects or its financial projections for future performance of the business. Christopher Dewey FirstName LastNameChristopher Dewey MedTech Acquisition Corp Comapany2, NameMedTech February 2023 Acquisition Corp February Page 5 2, 2023 Page 5 FirstName LastName Please revise to clarify when in discussions with TriSalus you were 21. first provided its financial projections and the date the projections were prepared. Please also disclose any discussions that took place relating to the assumptions underlying the projections. We note your disclosure on page 138 that you also engaged 22. third-party consultants to review certain aspects of TriSalus business, including TriSalus current reimbursement model. Please identify the consultants who were engaged to conduct this review and disclose when they were retained. Please also revise to describe any materials or information that these consultants shared with your board in connection with this transaction, to the extent material. 23. We note your disclosure on page 139 that from September through November 2022 potential investors met with MTAC, TriSalus and Raymond James to discuss the possibility of making an investment in MTAC in connection with the potential business combination. Please revise your disclosure to clarify whether there were any valuation or other material information about the SPAC, TriSalus, or the de-SPAC transaction provided to these potential investors that have not been disclosed publicly. Please also state whether Magnetar has a preexisting relationship with the Sponsor. MTAC's Board's Reasons for the Approval of the Business Combination, page 141 24. You state the companies shown on pages 146-147 are a select group of high growth publicly traded companies in the healthcare and medical device sector

that were identified by Raymond James. Please revise to state whether any companies meeting the selection criteria were excluded from the analyses and, if so, explain why. Please also provide additional detail concerning the qualitative aspect of your analysis, such as whether operating history or, with respect to therapeutics companies, clinical stage, was considered, as well as how long these entities have had commercial operations. Projected Financial Information, page 147 We note your assumption that 40% of an estimated total market size of 25. 30,000 patients would be eligible TriNav candidates. Please revise your disclosure to provide your basis for the estimates of patients that would be unachievable due to anatomy and tortuosity with the current TriNav design, that would make use of office-based labs and that would use the super selective approach combined with radio segmentectomy. We note your assumed TriNav market shares of 12%, 22% and 37% in 26. FY2022, FY2023 and FY2024, respectively. Please revise your disclosure to clearly describe the basis for projecting this revenue growth, specifically, the basis for the projected unit sales for each year in the forecast period and assumed TriNav total market opportunity for each such year, and the factors or contingencies that would affect such growth ultimately materializing. For example, please clarify whether these projections assume any new market entrants during this period or take into account macroeconomic factors. Christopher Dewey FirstName LastNameChristopher Dewey MedTech Acquisition Corp Comapany2, NameMedTech February 2023 Acquisition Corp February Page 6 2, 2023 Page 6 FirstName LastName Certain Engagements in Connection with the Business Combination and Related Transactions, page 152 We note your disclosure here as well as elsewhere, such as on page 32, 27. that Raymond James will receive compensation for its investment banking advisory services as well as its role as sole placement agent with respect to the institutional debt financing arrangement and that payment of these fees is contingent on the closing of the business combination. Please quantify the aggregate fees payable to Raymond James that are contingent on completion of the business combination. Management's Discussion and Analysis of Financial Condition and Results of Operations of MTAC Results of Operations, page 189 Please disclose your results of operations for fiscal year ended 28. December 31, 2021 and 2020. See the Instructions to Item 303(b) of Regulation S-K. Our Platform Solution: Addressing the Limitations of Current Approaches in Cancer Immunotherapy, page 196 29. Please revise your description of TriSalus' PEDD devices to state that its TPT payments approval from CMS for its TriNav device expires at the end of this year. Please also state here expressly whether its  $\ensuremath{\mathsf{PRVI}}$  device is a commercial-stage device that is actively sold. 30. We note your statements that TriSalus' PEDD with standard of care therapies achieved

improved results as compared to standard endhole microcatheter

approaches as well as the statement in your graphic at the top of page 201, where you appear to be comparing TriSalus' Synergy -001/KEYNOTE-184 Phase 1b/2 study to a single agent pembro study in an academic journal. Please clarify whether TriSalus conducted head-to-head trials for each of these comparisons. 31. We note your disclosure regarding results from three clinical trials of PEDD with SD-101. You state that initial data indicate that SD-101 efficiently reduced MDSC and has a "favorable emerging safety profile" when delivered by PEDD. We note similar statements on page 200 where you refer to SD-101 s tolerable safety profile and therapeutic activity that was substantiated, and your statement on page 201, where you state that TriSalus' strategy is to "replicate the strong response that SD-101 demonstrated in Stage IV melanoma across a wide array of liver and pancreatic indications." Conclusions regarding efficacy and safety are determinations that only the FDA or a foreign government equivalent has the authority to make. Please revise your disclosure throughout your document, including but not limited to the statements noted here, to eliminate the implication that any TriSalus' product candidate has been or will ultimately be determined safe and/or effective. Alternatively, we advise you that you may present the objective data from pre-clinical and clinical trials without drawing a conclusion from the results. For example, you may note that a candidate was well tolerated or the number of trial Christopher Dewey FirstName LastNameChristopher Dewey MedTech Acquisition Corp Comapany2, NameMedTech February Acquisition Corp 2023 February Page 7 2, 2023 Page 7 FirstName LastName participants who met the identified trial endpoints. Market Opportunity for TriNav Delivery Technology and Investigational Therapeutic SD-101, page 197 We note that footnote three to the table on page 198 indicates that 32. the SD101/PEDD US patient population estimates were management estimates based on TriSalus data and models and prepared by Lumanity. Please clarify what role Lumanity played in preparing these estimates and when and by whom Lumanity was retained. Additionally, please tell us whether you commissioned this data and, if so, file a consent for the use of such data or advise. Refer to Securities Act Rule 436. Competitive Strengths, page 200 33. We note that TriSalus' TriNav device has support from key opinion leaders. Please revise your disclosure to clarify who these key opinion leaders are and to discuss their relation and significance to TriSalus' business. We note your statement that TriNav 34. has near-term expansion opportunities by partnering or collaborating with companies advancing CPIs, CAR-T therapies and other cell immunotherapies. Please expand your disclosure here or elsewhere in the business section to discuss any material near-term partnerships or collaborations that TriSalus is pursuing. 35. We note your statement on page 201: Our targeting of orphan indications and rare disease creates an opportunity for expedited development and the potential for an accelerated path to approval and commercialization. Please revise

to state here, and elsewhere as applicable, if true, that TriSalus currently does not have orphan drug designation, fast track designation or priority review from the FDA or other comparable regulators and may never obtain it. Additionally, we note your statement on page 204 that in orphan and ultra-orphan indications, including many cancer indications, there is a regulatory pathway for approval based on a single pivotal clinical trial. Thus, diseases with unmet medical need may only require a single pivotal study as compared to the regulatory approval pathway for new medicines generally. Please revise to clarify that the FDA can require more trials or reject trial data in both the orphan drug and non-orphan drug context. Clinical Development Plan, page 204 Please revise page 206 to provide further information about TriSalus 36. PERIO-03 trial such as, but not limited to, the number of participants anticipated to be enrolled, the primary and secondary endpoints and any statistical analysis to be performed. We note your statement on page 205 that there were no serious cytokine 37. adverse events related to SD-101 and there were no severe immune-related events in the procedure rooms or during follow-up. Please revise to state whether there were any serious adverse events Christopher Dewey FirstName LastNameChristopher Dewey MedTech Acquisition Corp Comapany2, NameMedTech February 2023 Acquisition Corp February Page 8 2, 2023 Page 8 FirstName LastName related to SD-101 aside from the two types of events mentioned, and if so, describe them. For each of TriSalus' material partnerships, such as the 5-year 38. Alliance Program with MD Anderson Cancer Center, the partnership with the University of Colorado Anschutz Medical School and the agreement with Lifespan, please expand your disclosure to discuss all material terms of these arrangements. Please also file these agreements as exhibits to your registration statement. Alternatively, advise us why such agreements are not material and required to be described and filed. See Item 601(b)(10) of Regulation S-K. Clinical Development Approach, page 206 39. Please revise your table to include columns for Phase 2 and Phase 3 in addition to the two columns already shown. Additionally, please clarify in the table that "IND-enabling" is a preclinical trial stage. Given the PERIO-01, PERIO-02 and PERIO-03 trials are not completed, please shorten the arrow for those studies in the pipeline table. Industry and Competition, page 214 Please revise your table showing the comparison of TriNav to TriSalus' 40. direct competitors so that all the fonts are legible. Intellectual Property, page 216 Please revise to disclose for each material patent and patent 41. application the specific products to which such patents or patent applications relate, whether the patents are owned or licensed, the type of patent protection, the expiration dates and applicable material jurisdictions, including any foreign jurisdiction. Consider disclosure in tabular format by patent family or otherwise in addition to the

narrative provided. We

also note your disclosure in a risk factor on page 76 that certain of TriSalus patents relating to SD-101 will expire in 2023. Please revise here to disclose what effect you expect the expiration of these patents to have on TriSalus' patent portfolio and business and if there is an intent to mitigate such effect. 42. We note your disclosure on page 240 regarding the Dynavax Asset Purchase Agreement, please revise to describe the Agreement here and expand your disclosure to ensure that you are disclosing all material terms, including the following: the nature and scope of any intellectual property transferred; each parties' rights and obligations; quantification of all up-front or execution payments received or paid to date; aggregate amounts paid or received to date under the agreement; aggregate amounts of all potential development, regulatory and commercial milestone payments; quantification of the royalty rate, or a range no greater than 10 percentage points per tier; Christopher Dewey FirstName LastNameChristopher Dewey MedTech Acquisition Corp Comapany2, NameMedTech Acquisition Corp February 2023 February Page 9 2, 2023 Page 9 FirstName LastName disclosure of the duration of the agreement and when royalty provisions expire; and disclosure of termination provisions. Additionally, please provide the same disclosure for and file any other material license agreements as exhibits pursuant to Item 601(b)(10) of Regulation S-K, or advise. Facilities, page 227 43. Please file TriSalus' leases as material contracts under Item 601(b)(10) of Regulation S-K, or, in the alternative, please tell us why you do not believe you are required to do so. Revenue Recognition, page 241 Please disclose herein whether your variable consideration sales 44. reserve balance is material to either sales or to the asset from which it is deducted. If material, then please disclose the activity in the reserve for each periods so that readers can assess the accuracy of management's accounting estimates and assumptions. Also, please tell us whether TriSalus has any customer that exceeded 10% of its total sales in any period presented. Description of MTAC's Securities, page 259 Please revise to update your disclosures throughout this section. As 45. examples only: "Because our Existing Charter authorizes the issuance of up to 100,000,000 shares of Class A Common Stock, if we were to enter into an initial business combination, we may (depending on the terms of such an initial business combination) be required to increase the number of shares of Class A Common Stock "If we seek stockholder approval of our initial business combination and we do not conduct redemptions in connection with our initial business combination pursuant to . " the tender offer rules, our Existing Charter provides "If we submit our initial business combination to our public stockholders for a vote, our Sponsor, officers and directors have agreed (and its permitted transferees will agree) pursuant to the Letter Agreement to vote any founder shares held by them and any public shares held by them in favor of our initial business

Experts, page 309 46. We understand that during 2022 TriSalus hired Plante & Moran to audit their 2020 financial statements and also hired KPMG to audit their 2021 financial statements. Please tell us whether Plante & Moran resigned or was dismissed and the date thereof. Tell us also whether there were any disagreements or reportable events (as defined in Item 304 of Regulation S-K) between TriSalus and Plante & Moran. In this regard, please also explain to us how you considered the disclosure requirement outlined in Item 17(b)(6) of the Form Instructions. Christopher Dewey MedTech Acquisition Corp February 2, 2023 Page 10

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.

You may contact Christie Wong at 202-551-3684 or Al Pavot at 202-551-3738 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.

FirstName LastNameChristopher Dewey Corporation Finance

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combination

Applications and Comapany NameMedTech Acquisition Corp

February 2, 2023 Page 10 cc: Kevin Shuler FirstName LastName Sincerely, Division of Office of Industrial

Services