UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant \boxtimes

Filed by a party other than the Registrant \Box

Check the appropriate box:

Preliminary Proxy Statement

- □ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- □ Definitive Proxy Statement
- Definitive Additional Materials
- □ Soliciting Material under § 240.14a-12

MEDTECH ACQUISITION CORPORATION

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check all boxes that apply):

- ⊠ No fee required
- □ Fee paid previously with preliminary materials
- Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11

Explanatory Note

MedTech Acquisition Corporation ("MTAC" or the "Company") is filing these definitive additional proxy materials to include information previously and separately disclosed on MTAC's Current Report on Form 8-K that was filed with the U.S. Securities and Exchange Commission (the "SEC") on August 2, 2023.

As previously reported, on November 11, 2022, MTAC entered into an Agreement and Plan of Merger (as amended, the "Merger Agreement") with MTAC Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of MTAC ("Merger Sub"), and TriSalus Life Sciences, Inc., a Delaware corporation ("TriSalus"), pursuant to which, subject to the satisfaction or waiver of certain conditions set forth therein, Merger Sub will merge with and into TriSalus (the "Merger"), with TriSalus surviving the Merger as a wholly owned subsidiary of MTAC, and with TriSalus' equity holders receiving shares of MTAC common stock (the transactions contemplated by the Merger Agreement and the related ancillary agreements, the "Business Combination"). Upon consummation of the Business Combination, MTAC will be renamed "TriSalus Life Sciences, Inc." In connection with the Business Combination, MTAC filed a registration statement on Form S-4 (File No. 333-269138) (as amended, the "Registration Statement") with the SEC. On July 18, 2023, the Registration Statement was declared effective by the SEC and on July 18, 2023, MTAC filed the Definitive Proxy Statement/Prospectus") relating to MTAC's special meeting (the "Special Meeting") that was originally scheduled for August 2, 2023 but has been since adjourned to August 8, 2023, at which MTAC is seeking to obtain the approvals required to consummate the Business Combination.

Since the filing of the Definitive Proxy Statement/Prospectus, TriSalus received written responses from the U.S. Food and Drug Administration ("FDA") in reference to a Type B meeting request for TriSalus' PERIO-01 clinical program, which was previously and separately disclosed on the above-referenced Form 8-K that was filed with the SEC on August 2, 2023.

SUPPLEMENT TO DEFINITIVE PROXY STATEMENT/PROSPECTUS

This supplemental information should be read in conjunction with the Definitive Proxy Statement/Prospectus, which should be read in its entirety and is available free of charge on the Internet site maintained by the SEC at http://www.sec.gov. The supplemental information below supplements and updates the information set forth in the section entitled "TriSalus' Business" in the Definitive Proxy Statement/Prospectus. Defined terms used but not defined herein have the meanings set forth in the Definitive Proxy Statement/Prospectus. To the extent the following information differs from or conflicts with the information contained in the Definitive Proxy Statement/Prospectus, the information set forth below shall be deemed to supersede the respective information in the Definitive Proxy Statement/Prospectus.

On July 31, 2023, TriSalus received written responses ("FDA Responses") from the FDA in reference to a Type B meeting request for TriSalus' PERIO-01 clinical program. The FDA acknowledged that preliminary data from the PERIO-01 program suggests a tolerable safety profile of SD-101 delivered by TriSalus' pressure-enabled drug delivery ("PEDD") method in combination with systemic checkpoint inhibition in metastatic uveal melanoma patients, and that there were no concerns raised with respect to delivery of SD-101 via PEDD with the TriNav device. The FDA has asked for additional exploration of the optimal SD-101 dose, in a smaller study prior to proceeding with a registrational trial. TriSalus currently expects to have Phase 1 more mature efficacy data at the multiple SD-101 doses for its PERIO-01 clinical trial in the second half of 2023. Based on the FDA's feedback, TriSalus will move forward with a 40-50 patient study to generate additional efficacy data to determine the optimal SD-101 dose for the PERIO-01 program. TriSalus plans to initiate the Phase 2 trial for its PERIO-01 program to generate the additional efficacy and dose optimization data in 2023; however, the initiation and timing of such Phase 2 trials and related data milestones are subject to change and dependent on multiple factors, including interactions with regulatory authorities, enrollment rates, and external events which may impact operations at clinical sites. As a further result of the FDA Responses, TriSalus anticipates that a potential new drug application submission with respect to SD-101 in uveal melanoma with liver metastases is likely to occur beyond 2025, pending Phase 2 efficacy and dose optimization data.

In connection with its development plan for hepatocellular carcinoma ("HCC"), TriSalus is also considering a separate study for advanced second line and beyond HCC with SD-101 in combination with Y90 radioembolization. HCC study prioritization will be based on data expected to be available in the second half of 2023.

Special Meeting

As previously reported, the Special Meeting, which had been scheduled to be held at 11:00 a.m. Eastern Time, on August 2, 2023, has been adjourned to August 8, 2023 and will be conducted exclusively over the Internet by means of a live video webcast, which can be accessed by visiting https://www.cstproxy.com/medtechacquisition/sm2023. The purpose of the Special Meeting is to vote on certain proposals related to the Merger Agreement and the proposed Business Combination. All information about the Special Meeting, including the Definitive Proxy Statement/Prospectus, is available at https://www.cstproxy.com/medtechacquisition/sm2023. In connection with the adjournment of the Special Meeting, the deadline for holders of MTAC's Class A common stock to elect to redeem their shares, which was originally scheduled for 5:00 p.m., Eastern Time on Monday, July 31, 2023, has been extended to 5:00 p.m., Eastern Time on Friday, August 4, 2023.

Additional Information

In connection with the Merger Agreement and the proposed Business Combination, the Company filed the Registration Statement with the SEC, which includes a proxy statement/prospectus of the Company that will be both the proxy statement to be distributed to holders of the common stock in connection with its solicitation of proxies for the vote by the Company's stockholders with respect to the Business Combination and other matters as may be described in the Registration Statement, as well as the prospectus relating to the offer and sale of the securities to be issued in the Business Combination. On or about July 18, 2023, MTAC mailed the Definitive Proxy Statement/Prospectus to the MTAC stockholders as of the close of business on July 3, 2023, which is the record date established in connection with MTAC's solicitation of proxies for the vote on the Business Combination and related matters to be presented at the Special Meeting. The Company's stockholders and other interested persons are advised to carefully read the Definitive Proxy Statement/Prospectus, any amendments or supplements thereto, as well as any other documents filed by MTAC with the SEC because they will contain important information about MTAC, TriSalus and the Business Combination. The Company's stockholders and other interested persons may obtain free copies of the Definitive Proxy Statement/Prospectus and other documents filed with the SEC by MTAC through the website maintained by the SEC at www.sec.gov. Copies of the documents filed with the SEC by the Company can be obtained free of charge by directing a written request to MedTech Acquisition Corporation at 48 Maple Avenue, Greenwich, CT 06830.

Participation in Solicitation

The Company and TriSalus and their respective directors and executive officers, under SEC rules, may be deemed to be participants in the solicitation of proxies of the Company's stockholders in connection with the Business Combination. Investors and security holders may obtain more detailed information regarding the names and interests in the Business Combination of the Company's directors and officers in the Company's filings with the SEC, including the Company's registration statement on Form S-1, which was originally filed with the SEC on November 30, 2020, as amended, the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the SEC on March 22, 2023, and the Definitive Proxy Statement/Prospectus. To the extent that holdings of the Company's securities have changed from the amounts reported in the Definitive Proxy Statement/Prospectus, such changes have been or will be reflected on Statements of Change in Ownership on Form 4 filed with the SEC. Information regarding the persons who may, under SEC rules, be deemed participants in the solicitation of proxies from the Company's stockholders in connection with the Business Combination are included in the Definitive Proxy Statement/Prospectus. Investors and security holders of the Company and TriSalus are urged to carefully read in their entirety the Definitive Proxy Statement/Prospectus and other relevant documents that will be filed with the SEC, when they become available, because they will contain important information about the Business Combination.

Investors and security holders will be able to obtain free copies of the Definitive Proxy Statement/Prospectus and other documents containing important information about the Company and TriSalus through the website maintained by the SEC at www.sec.gov. Copies of the documents filed with the SEC by the Company can be obtained free of charge by directing a written request to MedTech Acquisition Corporation at 48 Maple Avenue, Greenwich, CT 06830.

INVESTMENT IN ANY SECURITIES DESCRIBED HEREIN HAS NOT BEEN APPROVED OR DISAPPROVED BY THE SEC OR ANY OTHER REGULATORY AUTHORITY NOR HAS ANY AUTHORITY PASSED UPON OR ENDORSED THE MERITS OF THE OFFERING THEREOF OR THE ACCURACY OR ADEQUACY OF THE INFORMATION CONTAINED HEREIN. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Forward-Looking Statements

This Current Report on Form 8-K contains certain "forward-looking statements" within the meaning of the United States federal securities laws regarding the Company's or TriSalus' expectations, hopes, beliefs, assumptions, intentions or strategies regarding the future including, without limitation, statements regarding the anticipated timing of the Special Meeting and the completion of the Business Combination. These forward-looking statements generally are identified by words such as "intend," "may," "plan," "will" and similar expressions or the negative or other variations of such statements. These statements are predictions, projections and other statements about future events that are based on various assumptions, whether or not identified in this Current Report on Form 8-K and on the current expectations of the Company's and TriSalus' respective managements and are not predictions of actual performance and, as a result, are subject to risks and uncertainties.

Many factors could cause actual results or developments to differ materially from those expressed or implied by such forward-looking statements, including but not limited to: (i) the risk that the Business Combination may not be completed in a timely manner or at all, which may adversely affect the price of the Company's securities; (ii) the risk that the Business Combination may not be completed by the Company's business combination deadline; (iii) the failure to satisfy the conditions to the consummation of the Business Combination, including the approval of the Merger Agreement by the stockholders of the Company, the satisfaction of the minimum cash amount following any redemptions by the Company's public stockholders, and the receipt of certain governmental and regulatory approvals; (iv) the lack of a third-party valuation in determining whether or not to pursue the Business Combination on the terms set forth in the Merger Agreement; (v) the failure to satisfy the conditions to the consummation of the private placement of a tobe-authorized class of preferred stock, par value \$0.0001 per share, that will be designated as Series A Convertible Stock to close concurrently with the Business Combination and the resulting impact on the amount of capital available to the Company at the potential closing of the Business Combination; (vi) the occurrence of any event, change or other circumstance that could give rise to the termination of the Merger Agreement; (vii) the receipt of an unsolicited offer from another party for an alternative transaction that could interfere with the Business Combination; (viii) the effect of the announcement or pendency of the Business Combination on TriSalus' business relationships, operating results and business generally; (ix) the risk that the Business Combination disrupts current plans and operations of TriSalus; (x) the outcome of any legal proceedings that may be instituted against TriSalus or the Company related to the Merger Agreement or the Business Combination; (xi) the ability to maintain the listing of the Company's securities on the Nasdaq; (xii) changes in business, market, financial, political and legal conditions; (xiii) unfavorable changes in the reimbursement environment for TriSalus' products; (xiv) the ability of the Company or the combined company to raise additional financing in connection with the Business Combination or to finance its operations in the future; (xv) the ability to implement business plans, forecasts and other expectations after the completion of the Business Combination, and identify and realize additional opportunities; (xvi) TriSalus' expectations for the timing and results of data from clinical trials and regulatory approval applications; (xvii) costs related to the Business Combination; (xviii) the failure to realize the anticipated benefits of the Business Combination or to realize estimated pro forma results and the underlying assumptions, including with respect to estimated stockholder redemptions; and (xix) other risks and uncertainties indicated from time to time in the Definitive Proxy Statement/Prospectus, including those under the "Risk Factors" section therein and in the Company's other filings with the SEC. The foregoing list of factors is not exclusive.

The Company's other SEC filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those expressed or implied in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and none of the Company, TriSalus, or any of their respective representatives assume any obligation and do not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. None of the Company, TriSalus, or any of their respective representatives gives any assurance that either the Company or TriSalus will achieve its expectations.

No Offer or Solicitation

This Current Report on Form 8-K shall not constitute an offer to sell, a solicitation of an offer to buy or a recommendation to purchase any securities, or the solicitation of any proxy, vote, consent or approval in any jurisdiction in connection with the Business Combination, nor shall there be any offer, solicitation or sale of securities in any jurisdiction in which the offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of such jurisdictions. This communication is restricted by law; it is not intended for distribution to, or use by any person in, any jurisdiction where such distribution or use would be contrary to local law or regulation. No offering of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act.