

PROSPECTUS SUPPLEMENT

(To Prospectus Supplements dated April 9, 2021, May 22, 2023, May 30, 2022 and June 5, 2023)
and Prospectus dated April 9, 2021)



Up to \$8,871,000

Common Stock

This Prospectus Supplement supplements the prospectus supplements, dated April 9, 2021, May 22, 2023, May 30, 2023 and June 5, 2023 (collectively, the “ATM Prospectus Supplement”), relating to the offer and sale of shares of our common stock, \$0.001 par value per share, having an aggregate offering price of up to \$75,000,000 pursuant to the terms of an equity distribution agreement (the “Equity Distribution Agreement”) with Canaccord Genuity LLC (“Canaccord”). Through the date hereof, we have sold an aggregate of \$64.7 million of shares of our common stock through Canaccord under the Equity Distribution Agreement. This Prospectus Supplement should be read in conjunction with the ATM Prospectus Supplement, and is qualified by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the ATM Prospectus Supplement. This Prospectus Supplement is not complete without, and may only be delivered or utilized in connection with, the ATM Prospectus Supplement, and any future amendments or supplements thereto.

On March 31, 2023, the date we filed our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, we became subject to the offering limits in General Instruction I.B.6 of Form S-3. As of the date of this Prospectus Supplement, the aggregate market value of our common stock held by non-affiliates pursuant to General Instruction I.B.6 of Form S-3 is \$63,861,109, which was calculated based on 147,826,642 shares of our outstanding common stock held by non-affiliates as of the date hereof, and a price of \$0.432 per share, the closing price of our common stock on April 10, 2023, which is the highest closing sale price of our common stock on the Nasdaq Global Market within the prior 60 days. As of the date of this Prospectus Supplement, we have sold \$12,416,000 of securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to, and including, the date of this Prospectus Supplement. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities in public primary offerings on Form S-3 with a value exceeding one-third of our public float (as defined by General Instruction I.B.6) in any 12 calendar month period so long as our public float remains below \$75.0 million.

We are filing this Prospectus Supplement to amend the ATM Prospectus Supplement to increase the maximum amount of shares that we are eligible to sell pursuant to the Equity Distribution Agreement under General Instruction I.B.6. As a result of these limitations, we may currently only offer and sell shares of our common stock having an aggregate offering price of up to \$8,871,036 pursuant to the Equity Distribution Agreement. Pursuant to this Prospectus Supplement, we are registering the offer and sale of up to \$8,871,000 of shares of our common stock. However, in the event that our public float increases or decreases, we may sell securities in public primary offerings on Form S-3 with a value up to one-third of our public float, in each case calculated pursuant to General Instruction I.B.6 and subject to the terms of the Equity Distribution Agreement. In the event that our public float increases above \$75.0 million, we will no longer be subject to the limits in General Instruction I.B.6 of Form S-3.

Our common stock trades on the Nasdaq Global Market under the symbol “TTOO.” On June 8, 2023, the last reported sale price of our common stock on the Nasdaq Global Market was \$0.0825 per share.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE “RISK FACTORS” ON PAGE S-7 OF THE ATM PROSPECTUS SUPPLEMENT AND IN THE DOCUMENTS INCORPORATED BY REFERENCE IN THE REGISTRATION STATEMENT CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR COMMON STOCK.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Canaccord Genuity

The date of this prospectus supplement is June 9, 2023.