Prospectus Supplement (To Prospectus dated September 9, 2022)

\$6,762,420



Common Stock

This prospectus supplement amends and supplements the information in the prospectus, dated September 9, 2022 and the prospectus supplement, dated August 8, 2023 (collectively, the "Prospectus"), each filed with the Securities and Exchange Commission under our registration statement on Form S-3 (File No. 333-267221) initially filed on September 1, 2022 and declared effective on September 9, 2022, relating to the offer and sale of shares of our common stock, par value \$0.0001 per share, pursuant to that certain Controlled Equity Offering SM Sales Agreement, dated September 1, 2022 (the "Sales Agreement"), by and between the Company and Cantor Fitzgerald & Co. ("Cantor"). This prospectus supplement is not complete without, and may only be delivered or utilized in connection with, the Prospectus and any future amendments or supplements thereto.

Through the date hereof, we have sold 640,305 shares of our common stock for gross proceeds of approximately \$8.5 million in accordance with the Sales Agreement under the Prospectus. We are subject to General Instruction I.B.6 of Form S-3, which limits the amounts that we may sell under the registration statement of which this prospectus supplement and the Prospectus are a part. After giving effect to these limitations and the current public float of our common stock, and after giving effect to the terms of the Sales Agreement, we currently may offer and sell shares of our common stock having an aggregate offering price of up to \$6,762,420 under the Sales Agreement. If our public float increases such that we may sell additional amounts under the Sales Agreement and the registration statement of which this prospectus supplement and the Prospectus are a part, we will file another prospectus supplement prior to making additional sales.

Our common stock is listed on the Nasdaq Capital Market under the symbol "EFTR." The aggregate market value of our common stock held by non-affiliates as of April 1, 2024 pursuant to General Instruction I.B.6 of Form S-3 is \$69.0 million, which was calculated based on 4,070,340 shares of our common stock outstanding held by non-affiliates and at a price of \$16.95 per share, the closing price of our common stock on March 4, 2024. As of the date hereof, we have offered and sold \$16,235,001 of securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12 calendar month period that ends on and includes the date hereof. As a result of the limitations of General Instruction I.B.6 of Form S-3, and in accordance with the terms of the Sales Agreement, we are registering the offer and sale of shares of our common stock having an aggregate offering price of up to \$6,762,420 from time to time through or to Cantor acting as our agent or principal.

Investing in our common stock involves a high degree of risk. Before making an investment decision, please read the information under the heading "Risk Factors" beginning on page S-7 of the Prospectus and in the documents incorporated by reference into this prospectus supplement and the Prospectus.

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. Any representation to the contrary is a criminal offense.



The date of this prospectus supplement is April 4, 2024.