

Shares of Common Stock

This prospectus supplement amends, supplements, and supersedes our prospectus supplement dated August 3, 2021, relating to a purchase agreement (the "<u>Purchase Agreement</u>") with Lincoln Park Capital Fund, LLC, or Lincoln Park. The Purchase Agreement provided for the offer and sale, from time to time, of up to \$20,000,000 in the aggregate of our common stock, par value \$0.001 per share to Lincoln Park. As of the date of this prospectus supplement, we have terminated the Purchase Agreement and the offer and sale of shares under the Purchase Agreement prospectus supplement.

Prior to termination, we issued 149,507 shares under the Purchase Agreement, for net proceeds of approximately \$1.2 million.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is May 20, 2022.