

**PROSPECTUS SUPPLEMENT**

(To Prospectus Supplement dated September 20, 2021)

**LIXTE BIOTECHNOLOGY HOLDINGS, INC.**

**Common Stock**

This prospectus supplement amends, supplements and supersedes our prospectus supplement, dated September 20, 2021 (the “September 2021 Prospectus”), related to an At-the-Market Sales Agreement with WestPark Capital, Inc., dated as of September 20, 2021 (the “Sales Agreement”), and should be read together with the accompanying prospectus dated February 5, 2021.

Our shares of common stock are listed on the Nasdaq Capital Market under the symbol “LIXT.” The closing price of our shares of common stock on May 5, 2023 on the Nasdaq Capital Market was \$0.57. Under the September 2021 Prospectus, we initially registered up to \$10,000,000 of our shares of common stock for offer and sale pursuant to the Sales Agreement.

Effective May 9, 2023, we terminated the Sales Agreement. Between September 20, 2021, the date of the Sales Agreement, and May 9, 2023, we have not sold any securities under the Sales Agreement.

**Neither the 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 9, 2023.**

---