PROSPECTUS SUPPLEMENT

(To prospectus dated March 19, 2021 and prospectus supplements dated May 18, 2023 and December 21, 2021)

LINEAGE CELL THERAPEUTICS, INC.



Up to \$40,000,000 Common Shares

This prospectus supplement updates and amends certain information in the prospectus supplements dated May 18, 2023 and December 21, 2021, in each case, to the prospectus dated March 19, 2021 (collectively, the "May 2023 prospectus"), relating to the offer and sale from time to time of our common shares through Cantor Fitzgerald & Co. acting as sales agent ("Cantor Fitzgerald") in "at the market offerings," as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, pursuant to a Controlled Equity Offering SM Sales Agreement dated as of May 1, 2020 that we entered into with Cantor Fitzgerald.

This prospectus supplement should be read in conjunction with the May 2023 prospectus, including the documents incorporated by reference therein, and is qualified by reference to the May 2023 prospectus, except to the extent that the information presented herein supersedes the information contained in the May 2023 prospectus. This prospectus supplement is not complete without, and may only be delivered or used in connection with, the May 2023 prospectus, including any amendments or supplements thereto.

Our common shares are listed on the NYSE American and on the Tel Aviv Stock Exchange under the symbol "LCTX." On February 5, 2024, the last reported sale price of our common shares on the NYSE American was \$1.04 per share.

We are filing this prospectus supplement to update and amend the May 2023 prospectus to reduce the dollar amount of common shares we may sell in this offering. From and after the date of this prospectus supplement, we may offer and sell from time to time common shares having an aggregate offering price of up to \$40,000,000.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described in the sections under the heading "Risk Factors" in the May 2023 prospectus and under similar headings in the documents that are incorporated by reference into this prospectus supplement.

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



The date of this prospectus supplement is February 6, 2024.