

PROSPECTUS SUPPLEMENT No. 2
(To the Prospectus and Prospectus Supplement dated July 12, 2024)

Up to \$1,890,705
Common Stock



60 Degrees Pharmaceuticals, Inc.

We have entered into an At the Market Issuance Sales Agreement (the “Sales Agreement”) with WallachBeth Capital LLC (“WallachBeth”) relating to shares of our common stock offered by this prospectus supplement and the accompanying amendment no. 1 to the prospectus supplement dated as of July 22, 2024 (“Amendment No. 1 to Prospectus Supplement”), the prospectus supplement dated as of July 12, 2024 (“Prospectus Supplement”) and the prospectus dated as of July 12, 2024 (“Base Prospectus”). In accordance with the terms of the Sales Agreement, we may offer and sell shares of our common stock, par value \$0.0001 per share, from time to time through WallachBeth acting as our agent (the “ATM Offering”).

Our common stock is listed on The Nasdaq Capital Market under the symbol “SXTX.” On July 23, 2024, the last reported sale price of our common stock on The Nasdaq Capital Market was \$0.1844 per share.

We are filing this prospectus supplement to supplement and amend, as of July 24, 2024, the accompanying Amendment No. 1 to Prospectus Supplement, Prospectus Supplement and Base Prospectus to increase the maximum aggregate gross sales price of our common stock that may be offered, issued and sold under the Sales Agreement from and after the date hereof to \$1,890,705 (the “ATM Offering Size Increase”). Under the Prospectus Supplement, we initially registered up to \$1,253,603 of our common stock and under the Amendment No. 1 to Prospectus Supplement, we subsequently registered up to \$1,774,640 of our common stock for offer and sale pursuant to the Sales Agreement. As of the date of the filing of this prospectus supplement, we have sold a total of 4,964,249 shares of our common stock that are covered by Amendment No. 1 to Prospectus Supplement and Prospectus Supplement pursuant to the Sales Agreement for an aggregate gross sales price of \$0.2811.

The purpose of this prospectus supplement is to update the accompanying Amendment No. 1 to Prospectus Supplement and the Prospectus Supplement to reflect the ATM Offering Size Increase. Except as modified by this prospectus supplement, the terms of the ATM Offering remain unchanged, and the Sales Agreement remains in full force and effect.

The aggregate market value of our outstanding common stock held by non-affiliates is approximately \$5,672,117, based on 17,650,365 shares of outstanding common stock, of which 16,159,878 shares are held by non-affiliates, and a share price of \$0.351 per share, which was the closing sale price of our common stock as quoted on The Nasdaq Capital Market on June 7, 2024. During the 12 calendar months prior to and including the date of this prospectus supplement, we have sold securities with an aggregate market value of \$1,395,574 pursuant to General Instruction I.B.6 of Form S-3. One-third of our public float, calculated in accordance with General Instruction I.B.6 of Form S-3, is equal to approximately \$495,131 after deducting the aggregate market value of securities sold pursuant to General Instruction I.B.6 of Form S-3. In no event will we sell securities registered on the registration statement of which this prospectus supplement forms a part in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75 million pursuant to General Instruction I.B.6 of Form S-3.

Our business and an investment in our common stock involve significant risks. These risks are described under the caption “Risk Factors” beginning on pages S-22 and 18 of the accompanying Prospectus Supplement and Base Prospectus, respectively, and in the documents incorporated by reference into the accompanying Amendment No. 1 to Prospectus Supplement, Prospectus Supplement and Base Prospectus, as well as the risks and uncertainties described in other documents we file with the Securities and Exchange Commission (“SEC”).

Neither the SEC nor any state securities commission has approved of anyone’s investment in these securities or determined if this prospectus supplement or the accompanying Prospectus Supplement or Base Prospectus are truthful or complete. Any representation to the contrary is a criminal offense.

WallachBeth Capital LLC

The date of this prospectus supplement is July 24, 2024
