

PROSPECTUS SUPPLEMENT NO. 1
(To Prospectus dated July 28, 2023)



EKSO BIONICS HOLDINGS, INC.

This prospectus supplement amends and supplements the information in our base prospectus, dated June 20, 2023, as supplemented by our prospectus supplement dated July 28, 2023 (the “Initial Prospectus Supplement,” and, collectively with the base prospectus, the “Prospectus”), relating to the offer and sale of shares of our common stock from time to time through H.C. Wainwright & Co., LLC, as sales agent, in sales deemed to be an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, pursuant to the sales agreement (as defined in the Prospectus).

This prospectus supplement should be read in conjunction with the Prospectus, and is qualified by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the Prospectus. 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.

Our common stock trades on Nasdaq Capital Market (“Nasdaq”) under the symbol “EKSO.” On October 27, 2025, the last reported sale price of the common stock on Nasdaq was \$4.92 per share.

The purpose of this prospectus supplement is to terminate our continuous offering under the Prospectus. We sold 275,245 shares of common stock under the Prospectus. The termination of our continuous offering under the Prospectus does not otherwise impact the sales agreement and our rights and obligations thereunder.

As of October 28, 2025, the aggregate market value of our outstanding common stock held by non-affiliates, or the public float, was approximately \$14.3 million based on 2,623,233 shares of outstanding common stock, of which 2,555,564 are held by non-affiliates, and a per share price of \$5.60, which was the closing sale price of our common stock on October 3, 2025. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell our common stock in a public primary offering with a value exceeding more than one-third of our public float in any 12 calendar month period so long as our public float remains below \$75,000,000. During the 12 calendar months prior to and including the date of this prospectus supplement, we have sold \$1,008,975 pursuant to General Instruction I.B.6 of Form S-3. As a result, we are eligible to offer and sell up to an aggregate of approximately \$3,761,411 of our securities pursuant to General Instruction I.B.6. of Form S-3.

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.

H.C. Wainwright & Co.

The date of this prospectus supplement is October 28, 2025