PROSPECTUS SUPPLEMENT NO. 5 (To Prospectus dated April 3, 2024)

Microbot Medical Inc.

1,005,965 Shares of Common Stock

This prospectus supplement (this "Prospectus Supplement") is being filed to update and supplement our prospectus dated April 3, 2024, as supplemented (the "Prospectus"), relating to the resale of up to 1,005,965 shares of our common stock, \$0.01 par value per share, representing shares held by the selling stockholders named in the Prospectus, including their transferees, pledgees, donees or successors.

Specifically, this Prospectus Supplement is being filed to update and supplement the information included in the Prospectus with certain information reported by us with the Securities and Exchange Commission. Accordingly, we have included such information in this Prospectus Supplement below. Any statement contained in the Prospectus shall be deemed to be modified or superseded to the extent that information in this Prospectus Supplement modifies or supersedes such statement.

Capitalized terms used but not defined herein have the meanings ascribed to them in the Prospectus.

This Prospectus Supplement is not complete without, and may not be utilized except in connection with, the Prospectus, including any supplements and amendments thereto.

We may further amend or supplement the Prospectus and this Prospectus Supplement from time to time by filing amendments or supplements as required. You should read the entire Prospectus, this Prospectus Supplement and any amendments or supplements carefully before you make your investment decision.

Our common stock is listed on The Nasdaq Capital Market under the symbol "MBOT". On July 17, 2024, the closing price of our common stock was \$1.07.

Investing in our common stock involves significant risks. You should read the section entitled "Risk Factors" beginning on page 11 of the Prospectus for a discussion of certain risk factors that you should consider before investing in our common stock.

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

The date of this Prospectus Supplement is July 18, 2024

The Company completed the enrollment of clinical sites in its pivotal human clinical trial with the addition of Memorial Sloan Kettering Cancer Center, New York. Memorial Sloan Kettering Cancer Center will conduct the clinical trial as part of the Investigational Device Exemption for the Company's LIBERTY® Endovascular Robotic Surgical System, and the Company expects its results will support the future marketing submission to the Food and Drug Administration and subsequent commercialization.