Filed pursuant to Rule 424(b)(5)
Registration No. 333-265286

Supplement No. 1 dated January 10, 2025
to Prospectus Supplement dated September 2, 2022
(to Prospectus dated June 9, 2022)

Up to 30,000,000 Ordinary Shares

This supplement no. 1 (this "Supplement") supplements certain information contained in the prospectus supplement dated September 2, 2022 (as amended by this Supplement, the "prospectus supplement") relating to the issuance and sale of our ordinary shares, par value NIS 0.0000769 per share (the "ordinary shares"), from time to time through Leerink Partners LLC ("Leerink Partners" or the "sales agent") pursuant to a sales agreement (the "Sales Agreement") with Leerink Partners, dated September 2, 2022. This Supplement should be read in conjunction with the prospectus supplement and the prospectus dated June 9, 2022 to which the prospectus supplement relates. Capitalized terms used in this Supplement and not defined herein have the respective meanings ascribed to such terms in the prospectus supplement. This Supplement amends and restates only those sections of the prospectus supplement contained in this Supplement; all other sections of the prospectus supplement remain unchanged. For clarity, references to "the prospectus supplement" or "this prospectus supplement" refer to the prospectus supplement as amended by this Supplement.

This Supplement relates to the potential issuance and sale from time to time of up to an additional 30,000,000 ordinary shares through Leerink Partners pursuant to the Sales Agreement.

As of the date of this Supplement, out of 5,000,000 shares originally registered, we had sold 4,940,156 ordinary shares through Leerink Partners under the prospectus supplement and the accompanying prospectus for an aggregate gross sales price of approximately $10.1 million. Under this prospectus supplement, we may offer and sell from time to time up to an additional 30,000,000 ordinary shares through Leerink Partners under the Sales Agreement.

Sales of our ordinary shares, if any, under this prospectus supplement will be made from time to time by any method deemed an "at the market offering" as defined in Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"). Leerink Partners is not required to sell any specific dollar amount or number of ordinary shares, but will act as our sales agent or principal using commercially reasonable efforts consistent with its normal trading and sales practices. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Our ordinary shares trade on the Nasdaq Capital Market ("Nasdaq") under the trading symbol "ENTX". On January 9, 2025, the closing price for our ordinary shares on Nasdaq was $2.45 per share.

Investing in our ordinary shares involves risks. See "Risk Factors" beginning on page S-3 of this prospectus supplement, the accompanying prospectus and in the reports we file with the Securities and Exchange Commission (the "SEC") pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), incorporated by reference in this prospectus supplement before making a decision to invest in our ordinary shares.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Leerink Partners

The date of this Supplement is January 10, 2025

ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is this prospectus supplement, which describes the specific terms of the offering. The second part is the accompanying prospectus, which is part of a registration statement that we filed with the SEC, using a "shelf" registration process. The accompanying prospectus describes more general information, some of which may not apply to this offering. As of the date of this Supplement, out of 5,000,000 shares originally registered, we had sold 4,940,156 ordinary shares through Leerink Partners under the prospectus supplement and the accompanying prospectus for an aggregate gross sales price of approximately $10.1 million. Under this prospectus supplement, we may from time to time offer and sell up to an additional 30,000,000 ordinary shares at prices and on terms to be determined by market conditions at the time of the offering. The 30,000,000 ordinary shares that may be sold under this prospectus supplement are included in the $100.0 million of securities that may be sold under our shelf registration statement, which became effective on June 9, 2022. However, in no event will we offer securities pursuant to this prospectus supplement to the extent the aggregate offering price of such securities exceeds the remaining aggregate offering amount registered under the registration statement of which this prospectus supplement forms a part.

As permitted by the rules and regulations of the SEC, the prospectus supplement and accompanying prospectus include additional information not contained herein. You may read the shelf registration statement and the other reports we file with the SEC at the SEC's web site or at the SEC's offices described below under the headings "Where You Can Find Additional Information" and "Incorporation of Certain Documents By Reference."

To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference in this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement.

We have not authorized anyone to provide any information other than that contained in or incorporated by reference in this prospectus supplement, accompanying prospectus and any related free writing prospectus filed by us with the SEC. We have not, and Leerink Partners has not, authorized anyone to provide you with different information. We take no responsibility for, and provide no assurance as to the reliability of any other information that others may give you. This prospectus supplement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in this prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus supplement, the documents incorporated by reference and any related free writing prospectus are accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

You should also read and consider the information in the documents to which we have referred you in the sections entitled "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference" in this prospectus supplement and the accompanying prospectus.

In this prospectus supplement, the terms "Entera," "we," "us," "our," "the Company" and "our company" refer to Entera Bio Ltd. and its consolidated subsidiaries, unless the context otherwise requires.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained elsewhere in this prospectus supplement, the accompanying prospectus and in the documents we incorporate by reference. This summary does not contain all of the information you should consider before making an investment decision. You should read this entire prospectus supplement carefully, especially the risks of investing in our ordinary shares discussed under "Risk Factors" beginning on page S-3 of this prospectus supplement, the accompanying prospectus and under the section "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 8, 2024, and any amendment or update thereto reflected in subsequent filings with the SEC and incorporated by reference in this prospectus supplement, along with our consolidated financial statements and notes to those consolidated financial statements and the other information incorporated by reference in this prospectus supplement and the accompanying prospectus.

Entera Bio Ltd.

Our Business

Entera is a clinical stage company focused on developing first-in-class oral tablet formats of peptides or protein replacement therapies. We focus on underserved, chronic medical conditions for which oral administration of a protein therapy has the potential to significantly shift a treatment paradigm.

Entera leverages a proprietary technology platform (N-Tab™) and its pipeline includes five differentiated, first-in-class oral peptide programs. The Company's most advanced product candidate, EB613 (oral PTH (1-34)), is being developed as the first oral, osteoanabolic (bone building) once-daily tablet treatment for post-menopausal women with low BMD and high-risk osteoporosis. A placebo controlled, dose ranging Phase 2 study of EB613 tablets (n=161) met primary (PD/bone turnover biomarker) and secondary (BMD) endpoints. The EB612 program is being developed as the first oral PTH (1-34) tablet peptide replacement therapy for hypoparathyroidism. In collaboration with OPKO Health, Entera is also developing the first oral oxyntomodulin, a dual targeted GLP-1/glucagon peptide, in tablet form for the treatment of obesity; and the first oral GLP-2 peptide tablet as an injection-free alternative for patients suffering from rare malabsorption conditions such as short bowel syndrome.

Corporate Information

Our principal and registered office is located at Kiryat Hadassah Minrav Building - Fifth Floor, Jerusalem, Israel, and our telephone number is +972-2-532-7151. Our corporate website is located at www.enterabio.com. The information on our website shall not be deemed part of this prospectus supplement or the accompanying prospectus.

THE OFFERING

Ordinary Shares Offered by Us	Up to 30,000,000 ordinary shares.
Ordinary Shares to be Outstanding after this Offering	Up to 71,537,220 ordinary shares assuming the sale of 30,000,000 ordinary shares. The Company is not required to issue and sell any minimum number of shares.
Plan of Distribution	Sales of ordinary shares, if any, will be made from time to time in sales deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act. Leerink Partners will act as agent or principal and will use reasonable best efforts to sell on our behalf all of the ordinary shares requested to be sold by us, consistent with its normal trading and sales practices. See "Plan of Distribution."
Use of Proceeds	We intend to use the net proceeds from this offering, if any, primarily for general corporate purposes, which may include, but are not limited to, research and development costs, including the conduct of one or more clinical trials and process development and manufacturing of our product candidates, potential strategic acquisitions of complementary businesses, services or technologies, expansion of our technology infrastructure and capabilities, working capital, capital expenditures and other general corporate purposes . Because we are not required to sell any minimum number of ordinary shares in this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. See "Use of Proceeds."
Risk Factors	You should read the "Risk Factors" section of this prospectus supplement and in our Annual Report on Form 10-K for the year ended December 31, 2023, and in any updates to those risk factors in our Quarterly Reports on Form 10-Q or subsequent Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q incorporated by reference herein, for a discussion of factors to consider carefully before deciding to purchase our ordinary shares.
Nasdaq Capital Market Symbol	Our ordinary shares are listed for trading on Nasdaq under the symbol "ENTX."
Passive Foreign Investment Company Considerations	We may be a passive foreign investment company for the current or any other taxable year, which generally would result in adverse U.S. federal income tax consequences to our U.S. investors. See "Risk Factors" beginning on page S-3 for further information.

The number of shares to be outstanding after this offering above is based on our actual ordinary shares outstanding as of January 9, 2025 and excludes:

- 8,557,684 of our ordinary shares issuable upon the exercise of options outstanding as of September 30, 2024, at a weighted average exercise price of $2.40 per ordinary share;
- 212,011 of our ordinary shares issuable upon the exercise of restricted shares units outstanding as of September 30, 2024;
- 1,254,490 of our ordinary shares issuable upon the exercise of pre-funded warrants outstanding as of September 30, 2024;
- 8,494,195 of our ordinary shares issuable upon the exercise of warrants outstanding as of September 30, 2024, at a weighted average exercise price of $1.00 per ordinary share; and
- 1,826,726 of our ordinary shares reserved for future issuance under our 2018 Equity Incentive Plan as of September 30, 2024.

RISK FACTORS

You should carefully consider the risks and uncertainties described under "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 8, 2024 and in any updates to those risk factors in our Quarterly Reports on Form 10-Q or subsequent Annual Reports on Form 10-Ks and Quarterly Reports on Form 10-Q incorporated by reference herein, as well as the other information in this prospectus supplement and the accompany prospectus before making an investment in our ordinary shares. Our business, financial condition or results of operations could be materially and adversely affected if any of these risks occurs, and as a result, the market price of our ordinary shares could decline and you could lose all or part of your investment. This prospectus supplement also contains forward-looking statements that involve risks and uncertainties. See "Cautionary Note Regarding Forward-Looking Statements." Our actual results could differ materially and adversely from those anticipated in these forward-looking statements as a result of certain factors.

Risks related to this offering and ownership of our ordinary shares

The price of our ordinary shares may be volatile, and holders of our ordinary shares could lose all or part of their investment.

The price of securities for publicly traded emerging biopharmaceutical and drug discovery and development companies has been highly volatile and is likely to remain highly volatile in the future. The market price of our ordinary shares on Nasdaq may fluctuate as a result of a number of factors, some of which are beyond our control, including, but not limited to:

- Our clinical trial results and the timing of the release of such results;
- the amount of our cash resources and our ability to obtain additional funding;
- announcements of research activities, business developments, technological innovations or new products, or acquisitions or expansion plans by us or our competitors;
- success or failure of our research and development projects or those of our competitors;
- our entering into or terminating strategic relationships;
- changes in laws or government regulation;
- actual or anticipated fluctuations in our and our competitors' results of operations and financial condition;
- regulatory developments and the decisions of regulatory authorities as to the approval or rejection of new or modified products and plans for clinical development;
- departure of our key personnel;
- disputes related to intellectual property and proprietary rights, including patents, litigation matters and our ability to obtain intellectual property protection for our technologies;
- our sale, or the sale by our significant shareholders, of ordinary shares or other securities in the future;

- public concern regarding the safety, efficacy or other aspects of the products or methodologies we are developing;
- market conditions in our industry and changes in estimates of the future size and growth rate of our markets;
- market acceptance of our products;
- the mix of products that we sell and related services that we provide;
- the success or failure of our licensees to develop, obtain approval for and commercialize our licensed products, for which we are entitled to contingent payments and royalties;
- publication of the results of preclinical or clinical trials for EB613, EB612 or any other product candidates we may develop; including the oral GLP-2 and OXM programs we are developing with OPKO Health, Inc.
- failure by us to achieve a publicly announced milestone;
- delays between our expenditures to develop and market new or enhanced products and the generation of sales from those products;
- changes in the amounts that we spend to develop, acquire or license new products, technologies or businesses;
- changes in our expenditures to promote our products;
- variance in our financial performance from the expectations of market analysts;
- the limited trading volume of our ordinary shares; and
- general economic and market conditions, including factors unrelated to our industry or operating performance.

In addition, the stock market in general has recently experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of individual companies. Broad market and industry factors may materially affect the market price of companies' stock, including ours, regardless of actual operating performance.

Future sales of our ordinary shares, other securities convertible into our ordinary shares or preferred shares could cause the market value of our ordinary shares to decline and could result in dilution of your shares.

We may issue up to 30,000,000 of our ordinary shares as part of the offering contemplated by this prospectus supplement and the accompanying prospectus. In addition, our board of directors is authorized, without your approval, to cause us to issue additional shares of our ordinary shares or to raise capital through the issuance of debt securities convertible into ordinary shares, options, warrants and other rights, on terms and for consideration as our board of directors in its sole discretion may determine. Sales of substantial amounts of our ordinary shares could cause the market price of our ordinary shares to decrease significantly. We cannot predict the effect, if any, of future sales of our ordinary shares, or the availability of our ordinary shares for future sales, on the value of our ordinary shares. Sales of substantial amounts of our ordinary shares by our directors or officers or another large shareholder, or the perception that such sales could occur, may adversely affect the market price of our ordinary shares.

There is a risk that we may be a passive foreign investment company, for U.S. federal income tax purposes for any taxable year, which generally would result in certain adverse U.S. federal income tax consequences to our U.S. investors.

There is a risk that we may be treated as a passive foreign investment company, or PFIC, for any taxable year. The application of the PFIC rules to a company like us is subject to uncertainties, and for the reasons described below, we cannot express a view as to whether we will be a PFIC for the current or any future taxable year. In general, a non-U.S. corporation is a PFIC for any taxable year in which (i) 75% or more of its gross income consists of passive income, or the income test, or (ii) 50% or more of the average value of its assets consists of assets (generally determined on a quarterly basis) that produce, or are held for the production of, passive income, or the assets test. Generally, passive income includes interest, dividends, rents, royalties and certain gains, and cash is generally treated as a passive asset that produces passive income for PFIC purposes. The assets shown on our balance sheet consist, and are expected to continue to consist, primarily of cash and cash equivalents for the foreseeable future. Therefore, whether we will satisfy the assets test for the current or any future taxable year will depend largely on the quarterly value of our goodwill and on how quickly we utilize our cash in our business. Because (i) the value of our goodwill may be determined by reference to the market price of our ordinary shares, which has been, and may continue to be volatile given the nature and early stage of our business, (ii) we hold, and expect to continue to hold, a significant amount of cash, and (iii) a company's annual PFIC status can be determined only after the end of each taxable year, we cannot express a view as to whether we will be a PFIC for the current or any future taxable year. In addition, it is not clear how to apply the income test to a company like us, which is still developing its key intangible assets and whose overall losses from research activities significantly exceed the amount of its income (including passive income). If our losses from research and development activities are disregarded for purposes of the income test, we may be a PFIC for any taxable year if 75% or more of our gross income (as determined for U.S. federal income tax purposes) for the relevant year is from interest and financial investments. Because the revenue shown on our financial statements is not calculated based on U.S. tax principles, and because for any taxable year we may not have sufficient (or any) non-passive revenue, there is a risk that we may be or become a PFIC under the income test for any taxable year. If we were a PFIC for any taxable year during which a U.S. investor owned our ordinary shares, such U.S. shareholder generally will be subject to certain adverse U.S. federal income tax consequences, including increased tax liability on gains from dispositions of the ordinary shares and certain distributions and a requirement to file annual reports with the Internal Revenue Service. U.S. investors should consult with their tax advisers regarding the application of the PFIC rules as they may relate to an investment in our company and should read the discussion below under "Material U.S. Federal Income Tax Considerations for U.S. Holders—Passive Foreign Investment Company Rules."

We have broad discretion to use the proceeds from this offering, and our investment of those proceeds may not yield a favorable return.

Our management has broad discretion to use the proceeds from this offering in ways with which you may not agree. The failure of our management to apply these funds effectively could result in unfavorable returns. This could harm our business and could cause the market value of our ordinary shares to decline. See "Use of Proceeds."

You may experience immediate and substantial dilution.

The offering price per share in this offering may exceed the net tangible book value per share of our ordinary shares prior to this offering. The exercise of outstanding stock options and warrants may result in further dilution of your investment.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our ordinary shares, including pursuant to our at-the-market sales program. We cannot predict the effect, if any, of future sales of our ordinary shares, or the availability of our ordinary shares for future sales, on the value of our ordinary shares, and investors purchasing shares or other securities in the future could have rights superior to existing shareholders, including investors who purchase shares of ordinary shares pursuant to our at-the-market sales program.

It is not possible to predict the actual number of shares we will sell under the Sales Agreement, or the gross proceeds resulting from those sales.

Subject to certain limitations in the Sales Agreement and compliance with applicable law, we have the discretion to deliver a placement notice to the sales agent at any time throughout the term of the Sales Agreement. The number of shares that are sold through the sales agent after delivering a placement notice will fluctuate based on a number of factors, including the market price of the ordinary shares during the sales period, the limits we set with the sales agent in any applicable placement notice, and the demand for our ordinary shares during the sales period. Because the price per share of each share sold will fluctuate during the sales period, it is not currently possible to predict the number of shares that will be sold or the gross proceeds to be raised in connection with those sales, if any.

The ordinary shares offered hereby will be sold in "at the market offerings," and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so they may experience different levels of dilution and different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold in this offering. In addition, there is no minimum or maximum sales price for shares to be sold in this offering. Investors may experience a decline in the value of the shares they purchase in this offering as a result of sales made at prices lower than the prices they paid.

If securities or industry analysts fail to continue publishing research about our business, if they change their recommendations adversely or if our results of operations do not meet their expectations, our share price and trading volume could decline.

The trading market for our ordinary shares will be influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our share price or trading volume to decline. In addition, it is likely that in some future period our operating results will be below the expectations of securities analysts or investors. If one or more of the analysts who cover us downgrade our shares, or if our results of operations do not meet their expectations, our share price could decline.

Because we do not intend to declare cash dividends on our ordinary shares in the foreseeable future, shareholders must rely on appreciation of the value of our ordinary shares for any return on their investment and may not receive any funds without selling their ordinary shares.

We have never declared or paid cash dividends on our ordinary shares and do not anticipate declaring or paying any cash dividends in the foreseeable future. As a result, we expect that only appreciation of the price of our ordinary shares, if any, will provide a return to investors in this offering for the foreseeable future. In addition, because we do not pay cash dividends, if our shareholders want to receive funds in respect of our ordinary shares, they must sell their ordinary shares to do so.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus contain "forward-looking statements," as that term is defined under the Private Securities Litigation Reform Act of 1995 ("PSLRA"), Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Various statements in this report are "forward-looking statements" within the meaning of the PSLRA and other U.S. Federal securities laws. In addition, historic results of scientific research and clinical and preclinical trials do not guarantee that the conclusions of future research or trials would not be different, and historic results referred to in this prospectus supplement and the accompanying prospectus may be interpreted differently in light of additional research and clinical and preclinical trial results. Forward-looking statements include all statements that are not historical facts. We have based these forward-looking statements largely on our management's current expectations and future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. Forward-looking statements involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this report regarding our strategy, future operations, future financial position, projected costs, prospects, plans and objectives of management are forward-looking statements. These statements are subject to risks and uncertainties and are based on information currently available to our management. Words such as, but not limited to, "anticipate," "believe," "contemplates," "continue," "could," "design," "estimate," "expect," "intend," "likely," "may," "ongoing," "plan," "potential," "predict," "project," "will," "would," "seek," "should," "target," or the negative of these terms and similar expressions or words, identify forward-looking statements. The events and circumstances reflected in our forward-looking statements may not occur and actual results could differ materially from those projected in our forward-looking statements. These factors include those described in "Item 1A-Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 8, 2024 and our subsequent Quarterly Reports on Form 10-Q. Meaningful factors which could cause actual results to differ include, but are not limited to:

- Clinical development involves a lengthy and expensive process with uncertain outcomes. We may incur additional costs and experience delays in developing and commercializing or be unable to develop or commercialize our current and future product candidates;
- The regulatory approval processes of the U.S. Food and Drug Administration ("FDA") and comparable foreign authorities are lengthy, time-consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be materially harmed;
- Preclinical development is uncertain. Our preclinical programs may experience delays or may never advance to clinical trials, which would adversely affect our ability to obtain regulatory approvals or commercialize these programs on a timely basis or at all;
- Positive results from preclinical studies and early-stage clinical trials may not be predictive of future results. Initial positive results in any of our clinical trials may not be indicative of results obtained when the trial is completed or in later stage trials;
- The scope, progress and costs of developing our product candidates such as EB613 for Osteoporosis and EB612 or other oral peptides for Hypoparathyroidism may alter over time based on various factors such as regulatory requirements, collaboration agreements, the competitive environment and new data from pre-clinical and clinical studies;
- the accuracy of our estimates regarding expenses, capital requirements, the sufficiency of our cash resources and the need for additional financing;
- our ability to continue as a going concern absent access to sources of liquidity;
- Our ability to raise additional funds or consummate strategic partnerships to offset additional required capital to pursue our business objectives, which may not be available on acceptable terms or at all. A failure to obtain this additional capital when needed, or failure to consummate strategic partnerships, could delay, limit or reduce our product development, and other operations;
- Even if a current or future product candidate receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success;

- The successful commercialization of our product candidates, if approved, will depend in part on the extent to which governmental authorities and third-party payors establish adequate coverage and reimbursement levels and pricing policies;
- Failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue;
- If we are unable to obtain and maintain patent protection for our product candidates, or if the scope of the patent protection obtained is not sufficiently broad or robust, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our product candidates may be adversely affected;
- Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain;
- Our reliance on third parties to conduct our clinical trials and on third-party suppliers to supply or produce our product candidates;
- Our interpretation of FDA feedback and guidance and how such guidance may impact our clinical development plan;
- Our ability to use and expand our drug delivery technology ("N-Tab™") to additional product candidates;
- Our operation as a development stage company with limited operating history and a history of operating losses and our ability to fund our operations going forward;
- our expectations regarding licensing, business transactions and strategic collaborations, including our ongoing collaboration with Amgen;
- Our competitive position with respect to other products on the market or in development for the treatment of osteoporosis, hypoparathyroidism, short bowel syndrome, obesity, metabolic conditions and other disease categories we pursue;
- Our ability to establish and maintain development and commercialization collaborations;
- Our ability to manufacture and supply enough material to support our clinical trials and any potential future commercial requirements;
- The size of any market we may target and the adoption of our product candidates, if approved, by physicians and patients;
- Our ability to obtain, maintain and protect our intellectual property and operate our business without infringing, misappropriating, or otherwise violating any intellectual property rights of others;
- Our ability to retain key personnel and recruit additional qualified personnel;
- Our ability to comply with laws and regulations that currently apply or become applicable to our business in Israel, the United States and internationally;
- Our ability to manage growth; and
- The duration and intensity of the ongoing Israel-Hamas War, and escalation of Hezbollah's conflict since October 2023 as well as the developing conflict with Iran and its proxies in the Middle East, such as the Houthis in Yemen and militias in Iraq and Syria, and their impact on our operations and workforce, including our research and development and clinical trials.

All forward-looking statements contained in this prospectus supplement and the accompanying prospectus are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We caution investors not to rely too heavily on the forward-looking statements we make or that are made on our behalf. Except as required by applicable law, we are under no duty, and expressly disclaim any obligation, to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosures we make on related subjects in any annual, quarterly or current reports that we may file with the SEC.

USE OF PROCEEDS

We may issue and sell up to 30,000,000 of our ordinary shares from time to time in this offering. Because we are not required to sell any minimum number of ordinary shares in this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time.

We currently intend to use the net proceeds from this offering, if any, primarily for general corporate purposes, which may include, but are not limited to, research and development costs, including the conduct of one or more clinical trials and process development and manufacturing of our product candidates, potential strategic acquisitions of complementary businesses, services or technologies, expansion of our technology infrastructure and capabilities, working capital, capital expenditures and other general corporate purposes.

Our expected use of net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus supplement, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering, if any, or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual use of net proceeds will vary depending on numerous factors, including our ability to obtain additional financing, the relative success and cost of our research, preclinical and clinical development programs, the amount and timing of additional revenues, if any, received from our collaborations and whether we enter into future collaborations. As a result, management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds of this offering. In addition, we might decide to postpone or not pursue other clinical trials or preclinical activities if the net proceeds from this offering and our other sources of cash are less than expected.

Pending their use, we plan to invest the net proceeds, if any, from this offering in short- and intermediate-term interest-bearing financial assets and certificates of deposit.

PLAN OF DISTRIBUTION

We have entered into a Sales Agreement with Leerink Partners under which we may issue and sell up to 30,000,000 of our ordinary shares from time to time through or to Leerink Partners acting as our sales agent or principal.

Upon delivery of a placement notice and subject to the terms and conditions of the Sales Agreement, Leerink Partners may sell our ordinary shares by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act. We may instruct Leerink Partners not to sell ordinary shares if the sales cannot be effected at or above the price designated by us from time to time. We or Leerink Partners may suspend the offering of ordinary shares upon notice and subject to other conditions.

We will pay Leerink Partners commissions, in cash, for its services in acting as agent in the sale of our ordinary shares. Leerink Partners will be entitled to compensation at a fixed commission rate equal to 3.0% of the gross sales price per share sold pursuant to the Sales Agreement. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We have also agreed to reimburse Leerink Partners for certain specified expenses, including the fees and disbursements of its legal counsel, in an amount not to exceed $75,000. Additionally, pursuant to the terms of the Sales Agreement, we agreed to reimburse Leerink Partners for the documented fees and costs of its legal counsel reasonably incurred in connection with Leerink Partners' ongoing diligence arising from the transactions contemplated by the Sales Agreement in an amount not to exceed $15,000 per calendar quarter. We estimate that the total expenses for the offering, excluding compensation and reimbursement payable to Leerink Partners under the terms of the Sales Agreement, will be approximately $110,000.

Settlement for sales of ordinary shares will occur on the first business day following the date on which any sales are made, or on some other date that is agreed upon by us and Leerink Partners in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our ordinary shares as contemplated in this prospectus supplement will be settled through the facilities of the Depository Trust Company or by such other means as we and Leerink Partners may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

Leerink Partners will use its commercially reasonable efforts, consistent with its sales and trading practices, to solicit offers to purchase the ordinary shares under the terms and subject to the conditions set forth in the Sales Agreement. In connection with the sale of the ordinary shares on our behalf, Leerink Partners will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Leerink Partners will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Leerink Partners against certain civil liabilities, including liabilities under the Securities Act.

This offering of our ordinary shares pursuant to Sales Agreement will terminate upon the earlier of (1) sale of all shares of our ordinary shares subject to this prospectus supplement or (2) the termination of the Sales Agreement as permitted therein. We and Leerink Partners may each terminate the Sales Agreement at any time upon five days' prior written notice.

Any portion of the ordinary shares included in this prospectus supplement that is not previously sold or included in an active placement notice pursuant to the Sales Agreement is available for sale in other offerings pursuant to our registration statement, of which this prospectus supplement forms a part, and the accompanying base prospectus.

Our ordinary shares are listed on the Nasdaq Capital Market and trades under the symbol "ENTX." The transfer agent of our ordinary shares is American Stock Transfer & Trust Company.

EXPERTS

The financial statements incorporated in this Prospectus Supplement by reference to the Annual Report on Form 10-K for the year ended December 31, 2023 have been so incorporated in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in note 1c to the financial statements) of Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.