

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

**FORM S-3
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

ENTERA BIO LTD.

(Exact name of registrant as specified in its charter)

State of Israel
(State or other jurisdiction of incorporation or organization)

**Kiryat Hadassah
Minrav Building - Fifth Floor
Jerusalem, Israel 9112002
Tel: +972-2-532-7151**
*(Address, including zip code, and telephone number,
including area code, of registrant's principal executive offices)*

Not Applicable
(I.R.S. Employer Identification Number)

**Entera Bio Ltd.
24 Gibson St
Cambridge, MA 02138
Tel +1-617-605-9650**
*(Name, address, including zip code, and telephone number,
including area code, of agent for service)*

With a copy to:

**Drew M. Altman, Esq.
Greenberg Traurig, P.A
333 S.E. 2nd Avenue, Suite 4400
Miami, Florida 33131
Phone: (305) 579-0500**

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling shareholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and we are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MAY 27, 2022

PROSPECTUS

3,763,740 Ordinary Shares offered by the Selling Shareholders



ENTERA BIO LTD.

The selling shareholders named in this prospectus (collectively, the “Selling Shareholders”) may offer and sell up to 3,763,740 of our ordinary shares, par value of NIS 0.0000769 (“ordinary shares”), from time to time in amounts, at prices and on terms that will be determined at the time of any such offering. The 3,763,740 ordinary shares offered by the Selling Shareholders hereunder are referred to collectively as the “Shares”. We will pay certain fees and expenses in connection with the registration of the Shares offered hereby, and we will not receive any of the proceeds from the sale of our Shares by the Selling Shareholders.

The securities covered by this prospectus may be offered through one or more underwriters, dealers and agents, or directly to purchasers. The names of any underwriters, dealers or agents, if any, will be included in a supplement to this prospectus. For general information about the distribution of the Shares, please see “Plan of Distribution.”

Our ordinary shares are listed on the Nasdaq Capital Market, or Nasdaq, under the symbol “ENTX”. On May 25, 2022, the closing price of our ordinary shares was \$2.225.

Investing in our securities involves risks. See “RISK FACTORS” beginning on page 4 for information you should consider before investing in our securities.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2022.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the U.S. Securities and Exchange Commission (the “SEC”), using a “shelf” registration process. Under this shelf process, the Selling Shareholders may, from time to time, sell the Shares described in this prospectus in one or more offerings. This prospectus provides you only with a description of the Shares the Selling Shareholders may offer. We will provide a prospectus supplement that will contain additional or more specific information about the terms of a particular offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should carefully read both this prospectus and any applicable prospectus supplement, together with additional information described under the headings “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” before deciding to invest in any of the Shares being offered.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the Shares, you should refer to the registration statement, including the exhibits thereto. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, if any, you should rely on the information in the 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 or any prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement.

Neither we nor the Selling Shareholders have authorized any other person to provide you with information different from or in addition to that included in this prospectus and any prospectus supplement. Neither we nor the Selling Shareholders are making an offer to sell the Shares in any jurisdiction where the offer or sale is not permitted. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front cover of those documents.

In this prospectus, 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.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Accordingly, we are required to file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the SEC’s website is www.sec.gov.

We make available free of charge on or through our website, www.enterabio.com, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with or otherwise furnish it to the SEC.

We have filed with the SEC a registration statement under the Securities Act of 1933, as amended (the “Securities Act”), relating to the securities offered under this prospectus. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. If a document has been filed as an exhibit to the registration statement, we refer you to the copy of the document that has been filed. Each statement in this prospectus relating to a document filed as an exhibit is qualified in all respects by the filed exhibit. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement for free at www.sec.gov. The registration statement and the documents referred to below under “Incorporation of Certain Documents by Reference” are also available on our website, www.enterabio.com.

Information contained on or accessible through our website is not incorporated by reference in this prospectus and does not constitute a part hereof.

PROSPECTUS SUMMARY

This prospectus summary highlights selected information appearing elsewhere in this prospectus and in documents we file with the SEC that are incorporated by reference in this prospectus. This summary may not contain all of the information that may be important to you. To understand this offering fully, you should read this entire prospectus carefully, including the information incorporated by reference herein, the information set forth under the heading “Risk Factors” and our financial statements and the related notes thereto incorporated by reference in this prospectus.

The Company

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of orally delivered macromolecule therapeutics for use in areas with significant unmet medical need where adoption of injectable therapies is limited due to cost, convenience and compliance challenges for patients. Our current strategy for our lead product candidates is to use our technology to develop an oral formulation of human parathyroid hormone (1-34), or PTH, which has been approved in the United States in injectable form for over a decade. Our lead oral PTH product candidates are EB613 for the treatment of osteoporosis and EB612 for the treatment of hypoparathyroidism.

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.

THE OFFERING

Resale of Ordinary Shares

Ordinary Shares Offered by the Selling Shareholders

Up to 3,763,740 shares.

Use of Proceeds

We will not receive any of the proceeds from the sale of the Shares by the Selling Shareholders.

Market for Our Ordinary Shares

Our ordinary shares are listed on Nasdaq under the symbol "ENTX."

Risk Factors

Any investment in the Shares offered hereby is speculative and involves a high degree of risk. You should carefully consider the information set forth under "Risk Factors" and elsewhere in this prospectus.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to purchase our securities, you should carefully consider the risk factors incorporated by reference from our 2021 Annual Report under the heading “Item 1A. Risk Factors”, any updates to those risk factors contained in our Quarterly Reports on Form 10-Q or Current Reports on Form 8-K and the other information contained in this prospectus or any applicable prospectus supplement, as updated by those subsequent filings with the SEC under the Exchange Act that are incorporated herein by reference. These risks could materially affect our business, results of operations and financial condition and could cause the value of our securities to decline in value, in which case you may lose all or part of your investment. For more information, see “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference.”

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains “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 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, 2021 filed with the SEC on March 8, 2022, as amended (the “2021 Annual Report”). Meaningful factors which could cause actual results to differ include, but are not limited to:

- the scope, progress and costs of developing our product candidates such as EB613 for Osteoporosis and EB612 for Hypoparathyroidism, including without limitation any changes to the design of the Phase 3 clinical trial of EB613;
- the accuracy of our estimates regarding expenses, capital requirements, the sufficiency of our cash resources and the need for additional financing;
- our ability to raise additional funds on commercially reasonable terms, including via our at the market program;
- our ability to develop, advance product candidates into, and successfully complete, clinical studies such as our Phase 2 clinical trial of EB613 in osteoporosis;
- 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 U.S. Food and Drug Administration (the “FDA”) feedback and guidance and how such guidance may impact our clinical development plans, specifically our ability to utilize the 505(b)(2) pathway for the development and potential approval of EB613 and any other product candidates we may develop;
- our expectations regarding licensing, business transactions and strategic collaborations, including our ongoing collaboration with Amgen;
- our ability to use and expand our drug delivery technology 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 ability to continue as a going concern absent access to sources of liquidity;
- our ability to obtain and maintain regulatory approval for any of our product candidates;
- our competitive position, especially with respect to Forteo® and other products on the market or in development for the treatment of osteoporosis;

- our ability to establish and maintain development and commercialization collaborations;
- any potential commercial launch of current or future product candidates, and the timing, cost or other aspects of such commercialization;
- our ability to manufacture and supply sufficient amounts of material to support our clinical trials and any potential future commercial requirements;
- the safety and efficacy of therapeutics marketed by competitors that are targeted toward indications for which we are developing product candidates;
- 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;
- the possibility that competing products or technologies may make any product candidates we may develop and commercialize or our oral delivery technology obsolete;
- the pricing and reimbursement of our product candidates, if approved;
- our ability to develop a sales, marketing and distribution infrastructure, if any;
- our ability to manage growth; and
- the duration and severity of the coronavirus (COVID-19) pandemic, the actions that may be required to contain the coronavirus or treat its impact, and its impact on our operations and workforce, including our research and development and clinical trials.

All forward-looking statements contained in this 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 will not receive any of the proceeds from the sale of the Shares offered by this prospectus, but we will bear all fees and expenses incident to our obligation to register the Shares being offered for resale hereunder by the Selling Shareholders.

DESCRIPTION OF ORDINARY SHARES

This section describes the general terms of our ordinary shares. The following description is a summary only and is qualified by reference to the relevant provisions of Israeli law and our Amended and Restated Articles of Association, a copy of which is incorporated by reference in this prospectus.

General

We are an Israeli company incorporated with limited liability, and our affairs are governed by the provisions of our Amended and Restated Articles of Association (the “Articles”), as amended and restated from time to time, and by the provisions of applicable Israeli law, including the Companies Law of 1999 (the “Companies Law”). Our number with the Israeli Registrar of Companies is 514330604. The purpose of our company appears in Article 3 of our Articles, which is to engage in any lawful activity. In addition, our Articles authorize us to donate reasonable amounts to any charitable cause. Our registered office is at Kiryat Hadassah, Minrav Building — Fifth Floor, Jerusalem 9112002, Israel

Ordinary Shares

Our authorized share capital consists of 140,010,000 ordinary shares, par value NIS 0.0000769 per share. All of our issued ordinary shares have been validly issued, fully paid and are non-assessable. The ordinary shares are listed on Nasdaq under the symbol “ENTX.”

Our Ordinary Shares

Dividends and Liquidation Rights

We currently have only one class of shares. We have never paid or declared any cash dividends on our ordinary shares, and we do not anticipate paying any cash dividends on our ordinary shares in the foreseeable future. We intend to retain all available funds and any future earnings to fund the development and expansion of our business. Subject to the rights of holders of shares with preferential or special rights that may be authorized in the future, holders of our ordinary shares are entitled to participate in the payment of dividends pro rata in accordance with the amounts paid-up or credited as paid-up on the par value of such ordinary shares at the time of payment without taking into account any premium paid thereon. In the event that we were to go into liquidation, holders of our ordinary shares are entitled to a pro rata share of surplus assets remaining over liabilities, subject to rights conferred on any class of shares which may be issued in the future, in accordance with the amounts paid-up or credited as paid-up on the par value of such ordinary shares, without taking into account any premium paid thereon.

According to the Companies Law, a company may make a distribution of dividends out of its profits on the condition that there is no reasonable concern that the distribution may prevent the company from meeting its existing and expected obligations when they fall due. The Companies Law defines such profit as retained earnings or earnings generated in the last two years, whichever is greater, according to the last reviewed or audited financial statements of the company, provided that the end of the period to which the financial statements relate is not more than six months before the distribution. Declaration of dividends requires a resolution of our Board, and the court, if applicable and as required by the Companies Law, the board determines that there is no reasonable concern that payment of the dividend will prevent us from satisfying our existing and foreseeable obligations as they become due, and does not require shareholder approval. Payment of dividends and proceeds from the sale of the shares or interest or other payments to non-residents of Israel, may be subject to Israeli withholding taxes. There are currently no Israeli currency control restrictions on remittances of dividends on our ordinary shares, proceeds from the sale of the shares or interest or other payments to non-residents of Israel, except for shareholders who are subjects of countries that are, or have been, in a state of war with Israel.

Voting Rights

Holders of our ordinary shares are entitled to one vote for each ordinary share on all matters submitted to a vote of shareholders, subject to any special rights of any class of shares that may be authorized in the future. Cumulative voting for the election of directors is not permitted.

Quorum

As permitted under the Companies Law, pursuant to our Articles, a quorum is required to conduct business at a shareholders' meeting. Pursuant to our Articles, the presence, in person or by proxy, of at least two shareholders who hold in the aggregate at least 25% of the voting power of our issued and outstanding shares constitutes a quorum. A proxy may be deemed to be two (2) or more shareholders pursuant to the number of shareholders it represents. If a quorum is not present within half an hour from the time scheduled for such meeting, the meeting will be adjourned to the same day in the next week (at the same time and place), or to a later time and date if so specified in the notice of the meeting, unless such day shall fall on a statutory holiday (either in Israel or in the United States), in which case the meeting will be adjourned to the first Business Day afterwards. If at such adjourned meeting a quorum as specified above is not present within half an hour from the time designated for holding the meeting, subject to certain exceptions, any two shareholders present in person or by proxy shall constitute a quorum.

Shareholders' Meetings and Resolutions

The Chairman of our board of directors is entitled to preside as Chairman of each shareholders' meeting. If he is absent, his deputy or another person elected by the present shareholders will preside.

A simple majority is sufficient to approve most shareholders' resolutions, including any amendment to our Articles, unless otherwise required by law or by our Articles.

We are required to hold an annual meeting of our shareholders once every calendar year, but no later than 15 months after the date of the previous annual meeting. All meetings other than the annual meeting of shareholders are referred to as special meetings. Our board of directors may call special meetings whenever it sees fit, at such time and place as it may determine. In addition, the Companies Law provides that the board of directors of a public company is required to convene a special meeting upon the request of:

- any two directors of the company or one quarter of the board of directors; or
- one or more shareholders holding, in the aggregate: (i) five percent of the outstanding shares of the company and one percent of the voting power in the company; or (ii) five percent of the voting power in the company.

The Companies Law enables our board of directors to fix a record date to allow us to determine the shareholders entitled to notice of, or to vote at, any meeting of our shareholders. Under current regulations, the record date may be not more than forty days and not less than four days prior to the date of the meeting and notice is required to be published at least 21 or 35 days prior to the meeting, depending on the items on the agenda. Under the Companies Law and regulations promulgated thereunder and pursuant to our Articles, one or more shareholders holding at least 1% of the voting rights at a general meeting of shareholders may request that the board of directors include a matter in the agenda of a general meeting of shareholders to be convened in the future, by submitting such proposal within seven days of publication of the Company's notice with respect to such meeting of shareholders and provided that certain resolutions are brought before the shareholders in such meeting.

Modification of Shareholders' Rights

We currently have only one class of shares. The rights attached to a class of shares may be altered by the approval of the shareholders of such class holding a majority of the voting rights of such class. The provisions in our Articles pertaining to general meetings also apply to any special meeting of a class of shareholders. Pursuant to our Articles, the presence, in person or by proxy, of at least two shareholders who hold in the aggregate at least 25% of the voting power of our issued and outstanding shares constitutes a quorum. A proxy may be deemed to be two (2) or more shareholders pursuant to the number of shareholders it represents. If a quorum is not present within half an hour from the time scheduled for such meeting, the meeting will be adjourned to the same day in the next week (at the same time and place), or to a later time and date if so specified in the notice of the meeting, unless such day shall fall on a statutory holiday (either in Israel or in the United States), in which case the meeting will be adjourned to the first business day afterwards. If at such adjourned meeting a quorum as specified above is not present within half an hour from the time designated for holding the meeting, subject to certain exceptions, any two shareholders present in person or by proxy shall constitute a quorum.

Preemptive Rights

Pursuant to our Articles of Association, no preemptive rights are attached to our ordinary shares.

Restrictions on Non-Residents of Israel

The ownership or voting of our ordinary shares by non-residents of Israel is not restricted in any way by our Articles or the laws of Israel, except for ownership by nationals of some countries that are, or have been, in a state of war with Israel.

Preferred Shares

Currently there are no preferred shares authorized under the terms of our Articles. No preferred shares are outstanding.

Transfer Agent and Registrar

The transfer agent and registrar for the ordinary shares is American Stock Transfer & Trust Company, LLC.

PLAN OF DISTRIBUTION

The Selling Shareholders may offer and sell from time to time after the date of this prospectus. We will not receive any proceeds from the sale of shares offered by the Selling Shareholders.

The Selling Shareholders may sell the Shares in public or private transactions or on any stock exchange, market or trading facility on which the Shares are traded. These sales may be at fixed public offering prices, which may be changed, or at negotiated prices. The Selling Shareholders may sell the Shares:

- through underwriters, dealers or agents;
- directly to a limited number of purchasers or to a single purchaser;
- in ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers;
- in block trades in which a broker-dealer will attempt to sell the Shares as agent but may purchase and resell a portion of the block as principal to facilitate the transaction;
- in privately negotiated transactions;
- at market prices prevailing at the time of sale or at prices related to prevailing market prices;
- through broker-dealers who may agree with the selling shareholders to sell a specified number of the Shares at a stipulated price per share;
- through a combination of any such methods of sale; and
- through any other method permitted pursuant to applicable law.

Underwriters may offer and sell the securities at a fixed price or prices, which may be changed, or from time to time at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices. The Selling Shareholders may, from time to time, authorize agents acting on a best or reasonable efforts basis as our agents to solicit or receive offers to purchase the securities upon the terms and conditions as are set forth in the applicable prospectus supplement. In connection with the sale of securities, underwriters or agents may be deemed to have received compensation from the Selling Shareholders in the form of underwriting discounts or commissions and may also receive commissions from purchasers of securities for whom they may act as agent. Underwriters may sell securities to or through dealers, and dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agent.

Certain persons participating in an offering may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act that stabilize, maintain or otherwise affect the price of the offered securities. If any such activities will occur, they will be described in the applicable prospectus supplement.

Broker-dealers engaged by the Selling Shareholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling shareholders in amounts to be negotiated. The Selling Shareholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved. The aggregate value of the compensation to be received by any participating FINRA member will not be greater than eight percent of the offering proceeds.

The Selling Shareholders and any broker-dealers or agents that are involved in selling the Shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with any sales. If a sale occurs, any commissions received by such broker-dealers or agents and any profit on the resale of the Shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

SELLING SHAREHOLDERS

This prospectus relates to the proposed sale by the Selling Shareholders named in the table below of up to an aggregate of 3,763,740 of our ordinary shares held by the Selling Shareholders. We have filed the registration statement of which this prospectus forms a part in order to permit the Selling Shareholders to offer the Shares for resale or transfer from time to time as set forth in the section entitled “Plan of Distribution”. We are registering the Shares pursuant to the Selling Shareholders’ registration rights contained in that certain Amended and Restated Investor Rights Agreement, dated October 4, 2017, by and between us, the Selling Shareholders and certain other shareholders.

We will pay the fees and the expenses incurred in effecting the registration of the Shares covered by this prospectus, including, without limitation, all registration and filing fees, stock exchange fees, printing expenses, all fees and expenses of complying with applicable securities laws, fees and expenses of our counsel and accountants. Each Selling Shareholder will pay any underwriting or broker discounts and any commissions incurred in selling its Shares.

The following table sets forth certain information regarding the Selling Shareholders and their respective beneficial ownership of our Shares as of May 25, 2022. The table is based upon information provided by the Selling Shareholders. The table below assumes that all the Shares offered by the Selling Shareholders pursuant to this prospectus are ultimately sold in the offering. The Selling Shareholders may sell some, all or none of their respective Shares covered by this prospectus; therefore, the actual number of ordinary shares held by the Selling Shareholders upon termination of the offering may exceed the minimum number set forth in the table.

Name of Selling Shareholder	Ordinary Shares Beneficially Owned Prior to the Offering	Percentage of Ordinary Shares Ownership Prior to the Offering ⁽¹⁾	Ordinary Shares Offered Pursuant to this Prospectus	Ordinary Shares Owned Following the Offering	Percentage of Ordinary Shares Ownership Following the Offering ⁽¹⁾
D.N.A Biomedical Solutions Ltd. ⁽²⁾	3,762,960	13.1%	3,762,960	—	*
Phillip Schwartz ⁽³⁾	989,910	3.4%	780	989,130	3.4%

* Represents beneficial ownership of less than one percent (1%) of the outstanding Shares

(1) Based on 28,809,923 ordinary shares outstanding as of May 25, 2022.

(2) D.N.A’s address is Shimon Hatarsi 43 St., Tel Aviv, Israel.

(3) Mr. Schwartz is the Company’s President of Research and Development and a Director. Mr. Schwartz’s ordinary shares beneficially owned consist of (i) 607,410 ordinary shares and (ii) 382,500 ordinary shares underlying currently exercisable options to acquire ordinary shares. However, this prospectus only registers 780 of such ordinary shares that Mr. Schwartz purchased prior the Company’s initial public offering. Mr. Schwartz’s address is David Alro’i Street 5, Building 1, Apartment 35, Jerusalem 9210806.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” the information we have filed with it, which means that we can disclose important information to you by referring you to the documents containing such information. The information we incorporate by reference is an important part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future documents (excluding information furnished pursuant to Items 2.02, 7.01 and 9.01 of Form 8-K or any other information that is identified as “furnished” rather than filed) we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of this prospectus and prior to the termination of this offering:

- Our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2021, filed with the SEC on March 8, 2022 as amended by our [Form 10-K/A](#) Amendment No. 1 filed with the SEC on April 29, 2022;
- Our Quarterly Report on [Form 10-Q](#) for the three months ended March 31, 2022, filed with the SEC on May 12, 2022;
- Our Current Report on [Form 8-K](#) (not including any information furnished under Item 2.02, 7.01 or 9.01 of such Form 8-K or any other information that is identified as “furnished” rather than filed, which information is not incorporated by reference herein), filed with the SEC on May 16, 2022; and
- The description of our ordinary shares contained in our registration statement on [Form 8-A](#), filed on June 25, 2018, and any amendment or report filed for the purpose of updating such description, including without limitation, [Exhibit 2.2](#) of our Annual Report on [Form 20-F](#) for the year ended December 31, 2020 filed with the SEC on March 18, 2021.

All filings filed by us pursuant to the Exchange Act after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to the effectiveness of such registration statement (excluding information furnished pursuant to Items 2.02, 7.01 and 9.01 of Form 8-K or any other information that is identified as “furnished” rather than filed) shall also be deemed to be incorporated by reference into this prospectus.

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. Any statement contained in a document incorporated by reference into this prospectus will be deemed to be modified or superseded for the purposes of this prospectus to the extent that a later statement contained in this prospectus or in any other document incorporated by reference into this prospectus modifies or supersedes the earlier statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

We will provide without charge to each person to whom a copy of this prospectus is delivered, upon written or oral request, a copy of any or all of the reports or documents that have been incorporated by reference in this prospectus but not delivered with this prospectus (other than an exhibit to these filings, unless we have specifically incorporated that exhibit by reference in this prospectus). Any such request should be addressed to us at: Kiryat Hadassah, Minrav Building - Fifth Floor, Jerusalem, Israel, Attention: Spiros Jamas, Chief Executive Officer, or made by phone at +972-2-532-7151. You may also access the documents incorporated by reference in this prospectus through our website at www.enterabio.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

SERVICE OF PROCESS AND ENFORCEMENT OF JUDGMENTS

We are incorporated under the laws of the State of Israel. Service of process upon us and upon our directors and officers and any Israeli experts named in this prospectus, may be difficult to obtain within the United States. Furthermore, because substantially all of our assets and a significant number of our directors and officers are located outside the United States, any judgment obtained in the United States against us or any of our directors and officers may not be collectible within the United States.

We have been informed by our legal counsel in Israel, Herzog Fox & Neeman, that it may be difficult to initiate an action with respect to U.S. securities law in Israel. Israeli courts may refuse to hear a claim based on an alleged violation of U.S. securities laws reasoning that Israel is not the most appropriate forum to hear such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact by expert witnesses, which can be a time-consuming and costly process. Certain matters of procedure may also be governed by Israeli law. There is little case law in Israel addressing these matters.

Subject to certain time limitations and legal procedures, Israeli courts may enforce a U.S. judgment in a civil matter which, subject to certain exceptions, is non-appealable, including judgments based upon the civil liability provisions of the Securities Act and the Exchange Act and including a monetary or compensatory judgment in a non-civil matter, provided that:

- the judgment was rendered after due process by a court which was, according to the laws of the state of the court, competent jurisdiction to render the judgment;
- the judgment is final and is not subject to any right of appeal; and
- the obligations imposed by the judgment are enforceable according to the laws of the State of Israel and according to the laws of the state in which the judgement was given, and the substance of the judgment is not contrary to public policy.

Even if these conditions are met, an Israeli court will not declare a foreign civil judgment enforceable if:

- the judgment was given in a state whose laws do not provide for the enforcement of judgments of Israeli courts (subject to exceptional cases);
- the enforcement of the judgment is likely to prejudice the sovereignty or security of the State of Israel;
- the judgment was obtained by fraud;
- the opportunity given to the defendant to bring its arguments and evidence before the court was not reasonable in the opinion of the Israeli court;
- the judgment was rendered by a court not competent to render it according to the laws of private international law as they apply in Israel;
- the judgment is contradictory to another judgment that was given in the same matter between the same parties and that is still valid; or
- at the time the action was brought in the foreign court, a lawsuit in the same matter and between the same parties was pending before a court or tribunal in Israel.

If a foreign judgment is enforced by an Israeli court, it generally will be payable in Israeli currency, which can then be converted into non-Israeli currency and transferred out of Israel. The usual practice in an action before an Israeli court to recover an amount in a non-Israeli currency is for the Israeli court to issue a judgment for the equivalent amount in Israeli currency at the rate of exchange in force on the date of the judgment, but the judgment debtor may make payment in foreign currency. Pending collection, the amount of the judgment of an Israeli court stated in Israeli currency ordinarily will be linked to the Israeli consumer price index plus interest at the annual statutory rate set by Israeli regulations prevailing at the time. Judgment creditors must bear the risk of unfavorable exchange rates.

LEGAL MATTERS

The validity of the ordinary shares in respect of which this prospectus is being delivered will be passed upon by Herzog, Fox & Neeman, Tel Aviv, Israel.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2021 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 1d 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.



Entera Bio Ltd.

PROSPECTUS

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated expenses to be borne by the registrant in connection with the issuance and distribution of the securities being registered hereby.

Securities and Exchange Commission registration fee	\$	774.56
Accounting fees and expenses		*
Legal fees and expenses		*
Miscellaneous fees and expenses		*
Total	\$	<u>774.56</u>

* Estimated

Item 15. Indemnification of Directors and Officers

General. Our Amended and Restated Articles of Incorporation the (“Articles”) set forth the following provisions regarding the grant of insurance coverage, indemnification and an exemption from liability to any of our directors or officers, all subject to the provisions of applicable law. In accordance with such provisions and pursuant to the requisite corporate approvals, we have obtained liability insurance covering our directors and officers, have granted indemnification undertakings to our directors and officers and have agreed to exempt our directors and officers from liability in each case, to the fullest extent permitted by our amended Articles and applicable law, including with respect to liabilities resulting from this offering to the extent that these liabilities are not covered by insurance.

Insurance. We are entitled to insure the liability of any director or officer to the fullest extent permitted by law. Without derogating from the aforesaid, we may enter into a contract to insure the liability of a director or officer for an obligation imposed on him or her in consequence of an act done in his or her capacity as such, in any of the following cases:

- a breach of the duty of care toward us or a third party, to the extent such a breach arises out of the negligent conduct of the office holder;
 - a breach of the duty of loyalty toward us, provided that the director or officer acted in good faith and had reasonable basis to believe that the act would not harm us;
 - a monetary obligation imposed on him or her in favor of a third party in respect of an act done in his or hers capacity as an office holder in respect of an act done in his or her capacity as an office holder;
 - a payment imposed on him or her in favor of an injured party as set forth in Section 52(54)(a)(1)(a) of the Israeli Securities Law; or
 - reasonable litigation expenses, including attorney fees, incurred by him or her in connection with a proceeding under Chapters H'3, H'4 or I'1 of the Israeli Securities Law or under Article D of the Fourth Chapter, Ninth Part of the Companies Law, if applicable, including reasonable legal expenses, which term includes attorney fees.
-

Indemnification. We are entitled to indemnify a director or officer to the fullest extent permitted by law, either retroactively or pursuant to an undertaking given in advance. Without derogating from the aforesaid, we may indemnify our directors or officers for liability or expense imposed on him or her in consequence of an action taken by him in his capacity as such, as follows:

- a financial obligation or liability imposed on or incurred in favor of another person and/or legal entity, including by any government office, or expended as a result of a court judgment, including in a settlement or an arbitrator's decision approved by a court of law, in respect of any act or omission taken or made by him or her in his or her capacity as a director or an officer of the Company of any of its subsidiaries. However, if an undertaking to indemnify an office holder with respect to such liability is provided in advance, then such an undertaking must be limited to events which, in the opinion of the board of directors, can be foreseen based on the company's activities when the undertaking to indemnify is given, and to an amount or according to criteria determined by the board of directors as reasonable under the circumstances, and such undertaking shall detail such foreseen events and amount or criteria;
- reasonable legal expenses, including attorney's fees, expended by him or her as a result of an investigation or proceeding instituted against him or her by a competent authority, provided that such investigation or proceeding concluded without the filing of an indictment against him or her and without any financial liability imposed on him or her in lieu of criminal proceedings, or that is concluded with the imposition of a financial liability in lieu of criminal proceedings but relates to a criminal offense that does not require proof of criminal intent or in connection with a financial sanction imposed on him or her in his or her capacity as a director or an officer of the Company or of any of its subsidiaries;
- reasonable legal expenses, including attorney's fees, and all other costs, expenses and obligations incurred in connection with investigating, defending, being a witness in or participating in (including on appeal), or preparing to defend in or participate, in any action, suit, proceeding, alternative dispute resolution mechanism, hearing, inquiry or investigation brought against him or her by the Company or on its behalf or by another person or in any criminal prosecution in which he or she was acquitted, or in a criminal prosecution of a crime which does not require proof of criminal intent, in which he or she was convicted, all in respect of actions taken by him or her in his or her capacity as a director or an officer of the Company or of any of its subsidiaries;
- a payment he or she was obligated to make to an injured party as set forth in Section 52(54)(a)(1)(a) of the Israeli Securities Law;
- reasonable litigation expenses, including attorney fees, incurred by the director or officer in connection with a proceeding under Chapters H'3, H'4 or I'1 of the Israeli Securities Law; or
- any other circumstances arising under the law in respect of which the Company may indemnify a director or an officer of the Company (including, without limitation, Section 50P(b)(2) of the Israeli Restrictive Trade Practices Law, 5758-1988).

Exemption. We are entitled to exempt a director or officer in advance from any or all of his or her liability for damage caused by a breach of his or her duty of care toward us, to the fullest extent permitted by law, but only if a provision authorizing such exculpation is included in its articles of association. Our Articles include such a provision. Notwithstanding, a company may not exculpate in advance a director from liability arising out of a breach of duty of care caused by dividend or distribution to shareholders.

Limitations. The Companies Law provides that a company may not provide its directors or officers with insurance or indemnification or exempt its directors or officers from liability with respect to the following:

- a breach of the duty of loyalty to the Company or any of its subsidiaries, except to the extent permitted by the Companies Law, with respect to insurance coverage or indemnification for a breach of the duty of loyalty to the Company or any of its subsidiaries while acting in good faith and having reasonable cause to assume that such act would not prejudice the interest of the Company or any of its subsidiaries, as applicable;
- a willful or reckless breach of the duty of care, other than a breach committed solely by negligence;
- an action taken or not taken with the intent of unlawfully realizing personal gain; or
- a fine, monetary sanction, forfeit or penalty levied against, or imposed upon, the office holder.

Item 16. Exhibits and Financial Statements.

Exhibit No.	Document
3.1	Amended and Restated Articles of Association of Entera Bio Ltd. (as incorporated by reference into the Company's Annual Report on Form 20-F, dated March 26, 2020)
4.1	Amended and Restated Investor's Rights Agreement, dated as of October 4, 2017, between the Registrant and the other parties thereto (incorporated herein by reference to Exhibit 10.10 to the Company's Registration Statement on Form F-1 (File No. 333-221472) filed with the SEC on November 9, 2017)
5.1	Opinion of Herzog Fox & Neeman, Israeli counsel to the Registrant, as to the validity of the Shares.
23.1	Consent of Kesselman & Kesselman, Certified Public Accountants, a member firm of PricewaterhouseCoopers International Limited, an independent registered public accounting firm.
23.2	Consent of Herzog Fox & Neeman (included in Exhibits 5.1).
24.1	Powers of Attorney (included on signature page to the Registration Statement).
107	Filing Fees

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - i. To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended;
 - ii. To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - iii. To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

provided, however, that paragraphs (1)(i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (A) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (B) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering being made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - i. Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - iv. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (7) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Jerusalem, Israel, on May 27, 2022.

ENTERA BIO LTD.

By: /s/ Spiros Jamas
Name: Spiros Jamas
Title: Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that each person whose signature appears below constitutes and appoints Spiros Jamas and Miranda J. Toledano, and each of them acting individually, his or her true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments, including post-effective amendments, to this registration statement, and any registration statement relating to the offering covered by this registration statement and filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Spiros Jamas</u> Spiros Jamas	Chief Executive Officer	May 27, 2022
<u>/s/ Miranda J. Toledano</u> Miranda J. Toledano	Chief Business Officer, Chief Financial Officer, Head of Corporate Strategy and Director (<i>principal financial officer</i>)	May 27, 2022
<u>/s/ Dana Yaacov-Garbeli</u> Dana Yaacov-Garbeli	Israel-based Chief Financial Officer (<i>principal accounting officer</i>)	May 27, 2022
<u>/s/ Gerald Lieberman</u> Gerald Lieberman	Director, Chairman of the Board of Directors	May 27, 2022
<u>/s/ Dr. Roger J. Garceau</u> Dr. Roger J. Garceau	Director	May 27, 2022
<u>/s/ Phillip Schwartz</u> Phillip Schwartz	President of R&D and Director	May 27, 2022
<u>/s/ Yonatan Malca</u> Yonatan Malca	Director	May 27, 2022
<u>/s/ Ron Mayron</u> Ron Mayron	Director	May 27, 2022
<u>/s/ Gerald M. Ostrov</u> Gerald M. Ostrov	Director	May 27, 2022
<u>/s/ Sean Ellis</u> Sean Ellis	Director	May 27, 2022



May 27, 2022

To:
Entera Bio Ltd.
Kiryat Hadassah, Minrav Building - Fifth Floor
Jerusalem
Israel

Re: **Registration Statement on Form S-3**

Ladies and Gentlemen:

We have acted as Israeli counsel for Entera Bio Ltd., an Israeli company (the "Company"), in connection with the registration statement on Form S-3 filed by the Company with the United States Securities and Exchange Commission (the "SEC") on the date hereof (the "Registration Statement"), pursuant to the United States Securities Act of 1933, as amended (the "Securities Act"), which registers the offer and sale by the selling shareholders of the Company, from time to time, of 3,763,740, in the aggregate (the "Shares"), ordinary shares, par value NIS 0.0000769 per share of the Company (the "Ordinary Shares").

This opinion letter is rendered pursuant to Item 16 of Form S-3 promulgated by the SEC and Items 601(b)(5) and (b)(23) of the SEC's Regulation S-K promulgated under the Securities Act.

In connection herewith, we have examined the originals, photocopies or copies, certified or otherwise identified to our satisfaction, of: (i) a copy of the Registration Statement signed by each member of the board of directors of the Company (the "Board"), to which this opinion letter is attached as an exhibit; (ii) a copy of the articles of association of the Company, as amended and restated and currently in effect (the "Articles"); (iii) minutes of a meeting or written resolutions of the Board at which the filing of the Registration Statement and the actions to be taken in connection therewith were approved, and (iv) such other documents, corporate records, agreements, certificates and other instruments, and have made inquiries with such officers and representatives of the Company, as we have deemed necessary or advisable for the purpose of rendering this opinion.

Based upon and subject to the foregoing, we are of the opinion that the Ordinary Shares included in the Registration Statement, when sold as described in the Registration Statement, will be duly authorized, validly issued, fully paid and non-assessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act, the rules and regulations of the SEC promulgated thereunder or Item 509 of the SEC's Regulation S-K under the Securities Act.

The opinion expressed herein is limited to Israeli law, and we do not express any opinion as to the laws of any other jurisdiction. In addition, this opinion is limited to the matters stated herein and no opinion is implied or may be inferred beyond the matters expressly stated.

This opinion letter is rendered as of the date hereof and we disclaim any obligation to advise you of facts, circumstances, events or developments that may be brought to our attention after the date hereof that may alter, affect or modify the opinions expressed herein.

Very truly yours,

/s/ Herzog Fox & Neeman
Herzog Fox & Neeman

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Entera Bio Ltd. of our report dated March 8, 2022 relating to the financial statements, which appears in Entera Bio Ltd.'s Annual Report on Form 10-K for the year ended December 31, 2021. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Kesselman & Kesselman
Certified Public Accountants (Isr.)
A member firm of PricewaterhouseCoopers International Limited

Tel-Aviv, Israel
May 27, 2022

Calculation of Filing Fee Tables

Form S-3 (Form Type)

Entera Bio Ltd.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered (1)	Proposed Maximum Offering Price Per Unit (2)	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial effective date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Equity	Ordinary shares, par value NIS 0.0000769 per share	Rule 457(c)	3,763,740	\$2.22	\$8,355,502.80	\$92.70 per \$1,000,000	\$774.56				
Fees Previously Paid												
	Total Offering Amounts					\$8,355,502.80		\$774.56				
	Total Fees Previously Paid							-				
	Total Fee Offsets							-				
	Net Fee Due							\$774.56				

- (1) Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the “Securities Act”), this registration statement shall also cover any additional ordinary shares, par value 0.0000769 per share (“ordinary shares”), of Entera Bio Ltd. that may be offered or become issuable by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of outstanding ordinary shares.
- (2) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) under the Securities Act and based upon the average of the high and low sales prices of an ordinary share as reported on the Nasdaq Capital Market on May 25, 2022.