

BIOLINERX LTD.

NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS

To be held on June 29, 2025

Notice is hereby given that the Annual General Meeting of the shareholders (the “**Meeting**”) of BioLineRx Ltd. (the “**Company**”) will be held at the offices of the Company at Modi’in Technology Park, 2 HaMa’ayan Street, Modi’in 7177871, Israel, on Sunday, June 29, 2025, at 3:00 p.m. (Israel time), for the following purposes:

1. To approve the re-election of Dr. BJ Bormann and Dr. Raphael Hofstein as Class II directors, each to serve until the Company’s annual general meeting of shareholders to be held in 2028, and until their respective successors have been duly elected and qualified;
2. To approve an increase in the Company’s authorized share capital, and to amend the Company’s Articles of Association accordingly;
3. To approve the adoption of the renewed compensation policy for executive officers and directors of the Company for a three-year period, in accordance the requirements of the Israeli Companies Law, 5759-1999 (the “**Companies Law**”); and
4. To approve the reappointment of Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, as the Company’s independent registered public accounting firm for the year ending December 31, 2025, and until the Company’s next annual general meeting of shareholders, and to authorize the Audit Committee of the Board of Directors to fix the compensation of said auditors in accordance with the scope and nature of their services.

In addition, at the Meeting, representatives of the Company’s management will be available to review and discuss with shareholders the Company’s financial statements for the year ended December 31, 2024.

You are entitled to receive notice of, and vote at, the Meeting and any adjournments or postponements thereof if you are a holder of record of the Company’s ordinary shares or American Depositary Shares (“**ADSs**”) at the close of business on Wednesday, May 28, 2025 (the “**Record Date**”). You are also entitled to notice of, and to vote at the Meeting, and any adjournments or postponements thereof if you are a beneficial owner who holds ordinary shares or ADSs through a broker, bank or other nominee as of the Record Date. All shareholders are cordially invited to attend the Meeting in person.

Whether or not you plan to attend the Meeting, it is important that your ordinary shares be represented.

A holder of ordinary shares at the close of business on the Record Date shall also be entitled to participate in the Meeting by proxy, which proxy shall be in writing and signed by the appointing party or its authorized attorney, and if the appointing party is a corporation, the appointment shall be in writing signed by authorized corporate signatories together with the company stamp or by an authorized attorney. A proxy from the holder of ordinary shares must be received by the Company at its registered offices to the address provided above no later than 3:00 p.m., Israel time (8:00 a.m. ET), on June 27, 2025, to be validly included in the tally of ordinary shares voted at the Meeting. Return of your proxy does not deprive you of your right to attend the Meeting, to revoke the proxy or to vote your shares in person.

Holders of ADSs (whether registered in their name or in “street name”) will receive voting instruction forms from the Bank of New York Mellon (which acts as the Depository for the ADSs) in order to instruct their banks, brokers or other nominees on how to vote, and they are kindly requested to complete, date, sign and mail the voting instruction form in the envelope provided at the earliest convenience so that it will be received no later than the date and time indicated on the voting instruction form.

Shareholders who hold ordinary shares through members of the Tel Aviv Stock Exchange (“TASE”) may (i) vote their shares in person at the Meeting by presenting a certificate signed by the member of the TASE through which the shares are held, which complies with the Israel Companies Regulations (Proof of Ownership for Voting in General Meetings), 5760-2000 as proof of ownership of the shares, (ii) send such a certificate, along with a duly executed proxy (in the form to be filed by us on MAGNA, the distribution site of the Israeli Securities Authority (the “ISA”), at www.magna.isa.gov.il) to the Company at its registered offices to the address provided above, to be received by the Company no later than 3:00 p.m. Israel time (8:00 a.m. ET), on June 27, 2025; or (iii) complete the voting process via the electronic voting system of the ISA, after receiving a personal identifying number, an access code and additional information regarding this Meeting from the member of the TASE and after carrying out a secured identification process, up to six hours before the time set for the Meeting.

The last date for submitting a request to include a proposal in accordance with Section 66(b) of the Companies Law, is May 30, 2025. The full version of the proposed resolutions may be viewed in the proxy statement, which together with the accompanying voting instruction form and proxy card (collectively, the “**Proxy Materials**”), are being furnished to the U.S. Securities and Exchange Commission under cover of Form 6-K and will be publicly available via its website at <http://www.sec.gov>. This Notice of Annual General Meeting of Shareholders and the Proxy Materials will also be submitted to the ISA and TASE and will be available on their respective websites at <http://www.magna.isa.gov.il> and <http://www.tase.co.il>, respectively. The Proxy Materials will also be made available on the *Investors* portion of our website at <https://biolinerx.com> and may also be viewed at our offices, upon prior coordination during regular business hours (+972-8-642-9100), at 2 HaMa’ayan Street, Modi’in 7177871, Israel, until the date of the Meeting. Detailed voting instructions are provided in the proxy statement, the voting instruction form and the proxy card.

By Order of the Board of Directors,

Dr. Aharon Schwartz
Chairman of the Board of Directors

May 23, 2025

PROXY STATEMENT

BIOLINERX LTD.
Modi'in Technology Park
2 HaMa'ayan Street
Modi'in 7177871
Israel

ANNUAL GENERAL MEETING OF SHAREHOLDERS

To be held on June 29, 2025

This Proxy Statement is being furnished to the holders of ordinary shares, par value NIS 0.10 per share (the “**Ordinary Shares**”), and to holders of American Depositary Shares (“**ADSs**”), each representing 600 Ordinary Shares issued by the Bank of New York Mellon (“**BNY Mellon**”), in connection with the solicitation of proxies on behalf of the Board of Directors of BioLineRx Ltd. (“**we**,” “**us**,” “**our**,” or the “**Company**”) to be voted at the Annual General Meeting of Shareholders (the “**Meeting**”) to be held on June 29, 2025, at 3:00 p.m. Israel time, and at any adjournment or postponement thereof, at the offices of the Company at Modi'in Technology Park, 2 HaMa'ayan Street, Modi'in 7177871, Israel.

You are entitled to receive notice of, and vote at, the Meeting and any adjournments or postponements thereof if you are a holder of record of Ordinary Shares or ADSs at the close of business on Wednesday, May 28, 2025 (the “**Record Date**”). You are also entitled to notice of, and to vote at the Meeting, and any adjournments or postponements thereof if you are a beneficial owner who holds ordinary shares or ADSs through a broker, bank or other nominee as of the Record Date.

Purpose of the Meeting

At the Meeting, shareholders will be asked to consider and vote upon on the following items:

1. The re-election of Dr. BJ Bormann and Dr. Raphael Hofstein as Class II directors, each to serve until the Company's annual general meeting of shareholders to be held in 2028, and until their respective successors have been duly elected and qualified;
2. An increase in the Company's authorized share capital, and to amend the Company's Articles of Association accordingly;
3. The approval of the adoption of the renewed compensation policy for executive officers and directors of the Company for a three-year period, in accordance the requirements of the Israeli Companies Law, 5759-1999 (the “**Companies Law**”); and
4. The reappointment of Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, as the Company's independent registered public accounting firm for the year ending December 31, 2025, and until the Company's next annual general meeting of shareholders, and to authorize the Audit Committee of the Board of Directors to fix the compensation of said auditors in accordance with the scope and nature of their services.

In addition to the foregoing agenda items, at the Meeting, representatives of the Company's management will be available to review and discuss with shareholders the Company's financial statements for the year ended December 31, 2024.

Board Recommendation

The Board of Directors recommends that you vote “FOR” each of the proposals on the agenda.

Quorum and Adjournment

At least two holders of Ordinary Shares (or ADSs representing Ordinary Shares) who are present at the Meeting, in person, by proxy, voting instruction form or voting via the electronic voting system of the Israel Securities Authority (the “ISA” and the “ISA Electronic Voting System”), who hold Ordinary Shares (or ADSs representing Ordinary Shares) that represent in the aggregate at least 25% of the Company’s voting rights will constitute a quorum for the Meeting. If a quorum is not present within half an hour from the time scheduled for the Meeting, the Meeting will be adjourned to the following week, at the same time and place, without it being necessary to notify our shareholders. A quorum at such adjourned meeting shall be any number of participants. Abstentions and “broker non-votes,” as well as any abstentions by ADS holders with respect to our Ordinary Shares held by BNY Mellon, are counted as present and entitled to vote for purposes of determining a legal quorum.

How You Can Vote

- **Holders of Record of Ordinary Shares.** Shareholders registered in the Company’s shareholders’ register in Israel as of the Record Date are entitled to vote at the Meeting (i) by attending and voting in person at the Meeting. In order to attend and vote in person at the Meeting, all such shareholders must have a form of government-issued photograph identification (e.g., passport or certificate of incorporation (as the case may be)); or (ii) by proxy. A proxy from the holder of Ordinary Shares must be received by the Company no later than 3:00 p.m. Israel (8:00 a.m. ET), on June 27, 2025, to be validly included in the tally of Ordinary Shares voted at the Meeting.
- **Holders of Ordinary Shares Traded on TASE.** A shareholder whose Ordinary Shares are registered with a TASE member as of the Record Date may vote at the Meeting (i) by attending the Meeting and voting in person, by presenting an ownership certificate, as of the Record Date, from the applicable TASE member through which the Ordinary Shares are held, in accordance with the Israeli Companies Regulations (Proof of Ownership of Shares for Voting at General Meeting) of 5760-2000, as amended (an “**Ownership Certificate**”), (ii) by proxy, by sending the Ownership Certificate together with the duly executed proxy to the Company at its registered offices to the address provided above, to be received by the Company no later than 3:00 p.m. Israel time (8:00 a.m. ET), on June 27, 2025. An Ownership Certificate may be obtained, upon request, at the TASE member’s offices or may be sent to the shareholder by mail (subject to payment of the cost of mailing), at the election of the shareholder, on condition that the shareholder’s request be submitted with respect to a specific securities account; and (iii) by voting electronically via the ISA Electronic Voting System, after receiving a personal identifying number, an access code and additional information regarding the Meeting from the relevant member of the TASE and after carrying out a secured identification process, up to six hours before the time set for the Meeting.
- **Holders of ADSs.** Holders of ADSs (whether registered in their name or in “street name”) will receive from BNY Mellon (which acts as the Depository for the ADSs) a voting instruction form in order to instruct their banks, brokers or other nominees on how to vote. For ADSs that are held in “street name” through a bank, broker or other nominee, the voting process will be based on the underlying beneficial holder of the ADSs directing the bank, broker or other nominee to arrange for BNY Mellon to vote the Ordinary Shares represented by the ADSs in accordance with the beneficial holder’s voting instructions. ADS holders should return their BNY Mellon voting instruction form by no later than the date and time set forth on such voting instruction form. Under the terms of the Deposit Agreement among the Company, BNY Mellon, as Depository, and the holders of the Company’s ADSs, the Depository shall endeavor (insofar as is practicable and in accordance with the applicable law and the articles of association of the Company) to vote or cause to be voted the number of Ordinary Shares represented by ADSs in accordance with the instructions provided by the holders of ADSs to the Depository. If no instructions are received by the Depository from any holder of ADSs with respect to any of the Ordinary Shares represented by the ADSs evidenced by such holder’s receipts on or before the date established by the Depository for such purpose, then the Depository will deem the holder of the Ordinary Shares to have instructed the Depository to give a discretionary proxy to a person designated by the Company with respect to the Ordinary Shares represented by such ADSs, and the Depository will give such instruction.

Vote Required for Approval of the Proposals

Each outstanding Ordinary Share (including Ordinary Shares represented by ADSs) held by a shareholder is entitled to one vote.

Pursuant to the Companies Law, the approval of each of the proposals requires the affirmative vote of the holders of a majority of the shares (including those represented by ADSs) represented at the Meeting, in person, by proxy or voting instruction form, and voting thereon, or voting via the ISA Electronic Voting System.

In addition, the approval of Proposal 3 is also subject to the fulfillment of one of the following additional voting requirements (the “**Special Majority for Compensation**”): (i) at least a majority of the shares (including those represented by ADSs) held by shareholders (including ADS holders) who are non-controlling shareholders and shareholders (including ADS holders) who do not have a personal interest in the matter voted in favor of the proposal (excluding abstentions); or (ii) the total number of shares (including those represented by ADSs) voted against the proposal by shareholders and ADS holders (as applicable) referred to in clause (i), does not exceed two-percent (2%) of the outstanding voting power in the Company.

We are not aware of any shareholder or holder of ADSs that would be deemed to be a controlling shareholder of our Company as of the current time for purposes of Proposal 3. The Companies Law requires that each shareholder and ADS holder voting on Proposal 3 inform the Company, prior to voting on the proposal at the Meeting, if the shareholder or ADS holder has a personal interest in the proposal; otherwise, a shareholder or ADS holder’s vote will not be counted for the purposes of the proposal. **In accordance with regulations promulgated under the Companies Law, a shareholder who votes via proxy, and an ADS holder who signs and returns a voting instruction form, will be deemed to have confirmed that such shareholder or ADS holder (as applicable), and any related party thereof, does not have a personal interest in Proposal 3, unless such shareholder or ADS holder has delivered a written notice to the Company notifying of the existence of a personal interest no later than 10:00 a.m. (Israel time) on Sunday, June 29, 2025. Any such written notice must be sent to the Company via registered mail at the Company’s Offices; Attention: Chief Financial Officer.** All other shareholders voting on Proposal 3 are required to indicate via the ISA Electronic Voting System, or, if voting in person at the Meeting, inform us prior to voting on the matter at the Meeting, whether or not the shareholder has a personal interest in the proposal; otherwise, any such shareholder’s vote will not be counted for the purposes of such proposal.

Under the Companies Law, a “personal interest” of a shareholder (including ADS holder) in an act or transaction of a company (i) includes a personal interest of (a) any relative (i.e., spouse, sibling, parent, grandparent or descendant of the shareholder (including ADS holder), any descendant, sibling or parent of a spouse of the shareholder (including ADS holder) and the spouse of any of the foregoing); and (b) a company with respect to which the shareholder (including ADS holder) or any of the foregoing relatives of the shareholder or ADS holder, owns at least 5% of the outstanding shares or voting rights, serves as a director or chief executive officer or has the right to appoint one or more directors or the chief executive officer; and (ii) excludes a personal interest arising solely from the ownership of shares. Under the Companies Law, in the case of a person voting by proxy, “personal interest” includes the personal interest of either the proxy holder or the shareholder granting the proxy, whether or not the proxy holder has discretion how to vote.

Change or Revocation of Vote

- **Holders of Record of Ordinary Shares.** If you are a holder of record of Ordinary Shares who has executed and delivered a proxy, you may change your mind and cancel your proxy vote (i) by filing a written notice of revocation with the Company before the applicable deadline, (ii) by completing and returning a duly executed proxy card bearing a later date before the applicable deadline, or (iii) by voting in person at the Meeting. Attendance at the Meeting will not in and of itself constitute revocation of proxy.

- ***Holders of Ordinary Shares Traded on TASE.*** If you are a beneficial owner of Ordinary Shares registered in the name of a member of the TASE, you may change your vote (i) by attending the Meeting and voting in person, by presenting a valid Ownership Certificate as of the Record Date, (ii) by delivering a later-dated duly executed proxy, together with a valid Ownership Certificate as of the Record Date, to the Company’s registered offices to the address provided above at least 48 hours prior to the designated time for the Meeting, or (iii) by following the relevant instructions for changing your vote via the ISA Electronic Voting System by no later than six hours before the time set for the Meeting.
- ***Holders of ADSs.*** A holder of ADSs (whether registered in their name or in “street name”) who has executed and returned a voting instruction form may revoke its voting instructions at any time before the applicable deadline by filing with BNY Mellon a written notice of revocation or a duly executed voting instruction form bearing a later date. If your ADSs are held in “street name,” you may change your vote by submitting new voting instructions to your broker, bank, trustee, or nominee or, if you have obtained a legal proxy from your broker, bank, trustee or nominee giving you the right to vote your shares, by attending the Meeting and voting in person.

Solicitation of Proxies

We may bear the reasonable and actual cost of solicitation of proxies, including preparation, assembly, printing, and mailing of the BNY Mellon voting instruction form and any additional information furnished to beneficial holders of Ordinary Shares or ADSs. The Notice of Annual General Meeting of the Shareholders, the Proxy Statement, and the proxy card will not be mailed to holders of Ordinary Shares traded on TASE. We may reimburse brokerage firms and other persons representing beneficial owners of Ordinary Shares or ADSs only for reasonable expenses incurred by them in forwarding proxy soliciting materials to such beneficial owners. In addition to solicitation by mail, certain of our directors, officers and employees, without additional remuneration, may solicit proxies by telephone, facsimile, email or personal contact.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

As of May 15, 2025, (i) no person was known by us to be the owner of more than 5% of our outstanding Ordinary Shares, based on public filings or information provided to us; (ii) no officer or director individually beneficially owned 1% or more of our outstanding Ordinary Shares; and (iii) all of our officers and directors as a group 11 persons beneficially owned 45,768,000, or 1.97%, of our outstanding Ordinary Shares. Such number of Ordinary Shares includes 41,495,400 Ordinary Shares issuable under outstanding options and performance stock units (“PSUs”) currently exercisable or exercisable within 60 days of May 15, 2025.

Beneficial ownership is determined in accordance with SEC rules. Under SEC rules, a person is deemed to be a ‘beneficial’ owner of a security if that person has or shares voting power or investment power, which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Accordingly, Ordinary Shares underlying options currently exercisable or exercisable within 60 days as of May 15, 2025, and Ordinary Shares underlying PSUs that are subject to vesting conditions expected to occur within 60 days as of May 15, 2025, are deemed outstanding for computing the percentage of the person holding such securities but are not deemed outstanding for computing the percentage of any other person. The percentage of Ordinary Shares beneficially owned is based on 2,232,601,990 Ordinary Shares issued and outstanding as of May 15, 2025.

EXECUTIVE OFFICER COMPENSATION

For information regarding the compensation incurred by the Company in relation to our five most highly compensated office holders (within the meaning of the Israeli Companies Law) for the year ended December 31, 2024, see “Item 6B. Directors, Senior Management and Employees — Compensation — Compensation of Directors and Senior Management” of the Company’s Annual Report on Form 20-F for the year ended December 31, 2024, which was filed with the SEC on March 31, 2025 (the “**2024 Form 20-F**”). Additional information regarding our Board of Directors, its committees and our corporate governance practices may be found in “Item 6C. Directors, Senior Management and Employees — Compensation — Board Practices” of the 2024 Form 20-F. We encourage you to review those portions of our 2024 Form 20-F to obtain additional information.

PROPOSAL 1
RE-ELECTION OF DIRECTORS
(Item 1 on the Proxy Card)

Background

Our Articles of Association specify that the number of directors will be at least five but not more than ten. Under our Articles of Association, our directors are divided into three classes with staggered three-year terms. The term of one class of directors expires at each annual general meeting, at which the election (or re-election) of directors of the class whose term expired at such annual general meeting shall be for a term that expires on the date of the third annual general meeting following such election (or re-election) and until his or her respective successor has been elected and qualified, unless the tenure of such director expires earlier pursuant to the Companies Law, or unless removed from office.

Our Board of Directors currently consists of eight members and is divided into three classes with staggered three-year terms, as follows:

- the Class I directors, consisting of Dr. Avraham Molcho, Mr. Gal Cohen and Mr. Rami Dar, will hold office until our annual general meeting of shareholders to be held in 2027;
- the Class II directors, consisting of Dr. B.J. Bormann and Dr. Raphael Hofstein, will hold office until the Meeting; and
- the Class III directors, consisting of Dr. Sandra Panem, Dr. Aharon Schwartz and Dr. Shaoyu Yan, will hold office until our annual general meeting of shareholders to be held in 2026.

We rely on the exemption available to foreign private issuers under the Nasdaq Listing Rules and follow Israeli law and practice with regard to the process of nominating directors, in accordance with which our Board of Directors is authorized to recommend to our shareholders director nominees for election.

At the Meeting, the term of the members of our Class II directors, Dr. B.J. Bormann and Dr. Raphael Hofstein, expires. Our Board of Directors has nominated both of Dr. B.J. Bormann and Dr. Raphael Hofstein for re-election at the Meeting as Class II directors for an additional term to expire at our 2028 annual general meeting of shareholders, and until his or her successor has been duly elected and qualified or until his or her office is vacated in accordance with our Articles of Association and the Companies Law. Subject to shareholder approval of the re-election of the above director nominees, our Board of Directors will consist of eight members, seven of whom satisfy the independence requirements of the Nasdaq Listing Rules.

In accordance with the Companies Law, each of the director nominees has certified to us that he or she meets all the requirements of the Companies Law for election as a director of a public company and possesses the necessary qualifications and has sufficient time to fulfill his or her duties as a director of our Company, taking into account the Company's size and special needs.

We are not aware of any reason why the nominees, if elected, would be unable or unwilling to serve as directors. If either of the director nominees is unable to serve, the persons named in the proxy shall vote the Ordinary Shares for the election of such other director nominees as the Board of Directors may propose. The following nominees have advised the Company that they will serve as directors upon election.

The following provides certain relevant information concerning the director nominees, including their principal occupations during at least the past five years.

<u>Director</u>	<u>Age</u>	<u>Principal Occupation</u>
BJ Bormann, Ph.D.	66	Dr. Bormann has served on our board of directors since August 2013 and on our Compensation Committee since 2022. Dr. Bormann previously served as the Vice President of Translational Science and Network Alliances at The Jackson Laboratory, a non-profit organization focused on the genetic basis of disease. Dr. Bormann was previously the Chief Executive Officer of Supportive Therapeutics, LLC, a Boston-based company that is developing two molecules for use in the supportive care of oncology patients. In the past several years, Dr. Bormann has held executive positions in several biotechnology companies including NanoMedical Systems (Austin, Texas), Harbour Antibodies (Rotterdam, The Netherlands) and Pivot Pharmaceuticals (PVTF: OTC listed). Prior to these engagements, Dr. Bormann was Senior Vice President responsible for world-wide alliances, licensing and business development at Boehringer Ingelheim Pharmaceuticals, Inc. from 2007 to 2013. From 1996 to 2007, Dr. Bormann served in a number of positions at Pfizer, Inc., the last one being Vice President of Pfizer Global Research and Development and world-wide Head of Strategic Alliances. Dr. Bormann serves on the board of directors of various companies, including Xeris BioPharma, Inc (Nasdaq: XERS) and NanoMedical Systems (private). Dr. Bormann received her Ph.D. in biomedical science from the University of Connecticut Health Center and her B.Sc. degree from Fairfield University in biology. Dr. Bormann completed postdoctoral training at Yale Medical School in the department of pathology.
Raphael Hofstein, Ph.D.	75	Dr. Hofstein has served on our board of directors since 2003, our Audit Committee since 2007 and our Compensation Committee since 2012. Dr. Hofstein served as the President and Chief Executive Officer of MaRS Innovation (a commercialization company for 15 of Toronto's universities, institutions and research institutes plus the MaRS Discovery District) from June 2009 to March 2020. From 2000 through June 2009, Dr. Hofstein was the President and Chief Executive Officer of Hadasit Medical Research Services and Development Ltd. (" Hadasit "), the technology transfer company of Hadassah University Hospitals. Dr. Hofstein has served as chairman of the board of directors of Hadasit since 2006. Prior to joining Hadasit, Dr. Hofstein was the President of Mindsense Biosystems Ltd. and the Business Unit Director of Ecogen Inc. and has held a variety of other positions, including manager of R&D and chief of immunochemistry at the International Genetic Science Partnership. Dr. Hofstein serves on the board of directors of numerous companies. Dr. Hofstein received his Ph.D. and M.Sc. degree from the Weizmann Institute of Science, and his B.Sc. degree in chemistry and physics from the Hebrew University of Jerusalem. Dr. Hofstein completed postdoctoral training at Harvard Medical School in both the departments of biological chemistry and neurobiology.

If re-elected at the Meeting, each of the director nominees shall continue to be entitled to the same cash compensation approved by the shareholders at our annual general meeting held in 2022, of \$30,000 per annum, \$1,200 for each board or committee meeting attended in person, \$720 for each board or committee meeting attended via telephone or videoconference, \$600 for participation by written consent and \$3,000 for membership of each committee of the Board of Directors, provided that such fees do not exceed the maximum amounts payable to external directors from time to time by us under the Israeli Companies Regulations (Rules Regarding Compensation and Expense Reimbursement of External Directors), 2000 and the Israeli Companies Regulations (Relief for Companies who Securities are Listed for Trading Outside of Israel), 2000. In addition, if re-elected at this Meeting, each director will continue to be party to an indemnification agreement with the Company in the form of indemnification letter previously approved by the shareholders on November 17, 2011 to be entered into by the Company with directors serving from time to time in such capacity and shall continue to be insured under the Company's directors' and officers' liability insurance coverage policy, as in effect from time to time, which provides coverage for all directors of the Company.

Proposal

The shareholders are being asked to re-elect each of Dr. B.J. Bormann and Dr. Raphael Hofstein as Class II directors for a term to expire at the 2028 annual general meeting of our shareholders, and until his or her successor has been duly elected and qualified, or until his or her office is vacated in accordance with our Articles of Association or the Companies Law. Each director nominee shall be voted on separately.

Approval Required

See “Vote Required for Approval of the Proposals” above.

Board Recommendation

Our Board of Directors recommends a vote “FOR” the re-election of each director nominee named above as a Class II director for a term to expire at the 2028 annual general meeting of shareholders, on the terms described in Proposal 1.

PROPOSAL 2 APPROVAL OF AN INCREASE IN THE COMPANY’S AUTHORIZED SHARE CAPITAL AND TO AMEND THE ARTICLES OF ASSOCIATION ACCORDINGLY

(Item 2 on the Proxy Card)

Background

The Company’s authorized share capital is currently NIS 500,000,000, divided into 5,000,000,000 ordinary shares, with a nominal value of NIS 0.10 each (equivalent to 8,333,333 ADSs). As of May 15, 2025, 2,232,601,990 Ordinary Shares (or 3,721,003 ADSs representing Ordinary Shares) were issued and outstanding. In addition, as of such date, an additional 118,061,400 Ordinary Shares (equivalent to 196,769 ADSs) were reserved for issuance under the Amended and Restated 2003 Share Incentive Plan (the “**Plan**”) (including shares underlying outstanding options and PSUs) and 1,261,279,929 Ordinary Shares (equivalent to 2,102,133 ADSs) are reserved for issuance upon exercise of outstanding warrants. Consequently, as of such date, 1,388,056,681 authorized Ordinary Shares (equivalent to 2,313,428 ADSs) remain unissued and unreserved and available for future issuances.

Under the Companies Law, a company may not issue shares in excess of its authorized share capital. The Company wishes to have sufficient authorized share capital available for corporate purposes and to meet its future business needs as they arise including (without limitation) for potential future strategic transactions (such as licensing agreements, acquisitions of other companies or assets or other transactions that may involve issuances of shares or ADSs), public and private offerings of the Company’s shares or ADSs in the ordinary course to fund operations, and additional grants of equity-based compensation under the Plan or any other equity-based incentive plan that may be adopted by the Company in the future.

Accordingly, we are seeking approval of the shareholders to increase the Company’s share capital from NIS 500,000,000, divided into 5,000,000,000 ordinary shares, with a nominal value of NIS 0.10 each, to NIS 2,000,000,000 divided into 20,000,000,000 ordinary shares, with a nominal value of NIS 0.10 each (equivalent to 33,333,333 ADSs), and to amend Article 4.1 of our Articles of Association accordingly.

The possible future issuance of equity securities consisting of Ordinary Shares, ADSs or securities exercisable or convertible into Ordinary Shares or ADSs could affect our current shareholders in a number of ways, including the following: (i) diluting the voting power of the current holders of Ordinary Shares or ADSs; (ii) diluting the market price of the Ordinary Shares or ADSs, to the extent that the new Ordinary Shares or ADSs are issued and sold at prices below current trading prices of the existing Ordinary Shares or ADSs, or if the issuance consists of equity securities exercisable or convertible into Ordinary Shares or ADSs, to the extent that the securities provide for the exercise or conversion into Ordinary Shares or ADSs at prices that could be below current trading prices of the Ordinary Shares or ADSs; and (iii) diluting the book value per share of the outstanding Ordinary Shares or ADSs.

Proposal

It is proposed that the following resolution be adopted at the Meeting:

RESOLVED, to approve an increase of the Company's authorized share capital from NIS 500,000,000, divided into 5,000,000,000 ordinary shares, with a nominal value of NIS 0.10 each, to 2,000,000,000 divided into 20,000,000,000, with a nominal value of NIS 0.10 each (equivalent to 33,333,333 ADSs), and to amend Article 4.1 of our Articles of Association accordingly.

Approval Required

See "Vote Required for Approval of the Proposals" above.

Board Recommendation

Our Board of Directors recommends a vote "FOR" approval of the increase in the Company's authorized share capital and to amend our Articles of Association accordingly.

PROPOSAL 3
APPROVAL OF RENEWED COMPENSATION POLICY FOR EXECUTIVE OFFICERS AND
DIRECTORS
(Item 3 on the Proxy Card)

Background

Under the Companies Law, an Israeli public company is required to adopt a compensation policy that sets forth the terms of service and employment of office holders (within the meaning of the Companies Law), including the grant of any benefit, payment or undertaking to provide payment, any exemption from liability, insurance or indemnification, and any severance payment or benefit.

The compensation policy must be determined and later reevaluated according to certain factors, including: (i) the advancement of a company's objectives, business plan and its long-term strategy; (ii) the creation of appropriate incentives for executives, while considering (among other things) the company's risk management policy; (iii) the size and the nature of the company's operations; and (iv) with respect to variable compensation, the contribution of the office holder towards the achievement of the company's long-term goals and the maximization of its profits, all with a long-term objective and in accordance with the position of the office holder. The compensation policy must include certain principles and provisions set forth in the Companies Law.

The board of directors is required to periodically examine the compensation policy, as well as the need to adjust the policy in the event of a material change in the circumstances from the time of the adoption of the compensation policy or for other reasons. In addition, the compensation policy must be approved at least once every three years by the board of directors, after considering the recommendations of the compensation committee, and by the shareholders by the Special Majority for Compensation (see above "Vote Required for Approval of the Proposals").

Our current Compensation Policy for Executives and Directors (the "**Compensation Policy**") was adopted by our shareholders at our annual general meeting of shareholders held in 2022. Accordingly, in accordance with Israeli law requirements that mandate a compensation policy be reviewed and readopted at least once every three years, our Compensation Committee and Board of Directors conducted a comprehensive review of our current Compensation Policy. Based on that review and evaluation, the Compensation Committee and the Board of Directors have determined that it would be appropriate to maintain the current Compensation Policy for an additional three years, other than certain non-material technical revisions, which do not alter the fundamental principles or structure of our compensation framework and do not change the limits on fixed and variable compensation or the ratio between the variable and the total compensation. This decision reflects the belief that the current Compensation Policy provides an appropriate framework to promote our objectives and long-term strategy, while creating appropriate incentives for our executive officers and directors, taking into consideration the size and nature of our operations, and aligns the

interests of our officers and directors with our long-term performance and consequently, with the interests of the Company and our shareholders.

A copy of the renewed Compensation Policy is attached as Appendix A to this Proxy Statement. We strongly encourage shareholders to review Appendix A in its entirety for the complete text of the renewed Compensation Policy before casting your vote.

If the renewed Compensation Policy is approved by our shareholders (by the Special Majority for Compensation) at the Meeting, it shall become effective as of the date of the Meeting and may remain in effect for up to three years, and shall be subject to periodic assessments by our Compensation Committee and Board of Directors in accordance with the Companies Law. If the shareholders do not approve the renewed Compensation Policy at the Meeting, under the Companies Law, the Board of Directors may nonetheless approve the renewed Compensation Policy, provided that the Compensation Committee and thereafter the Board of Directors decide that the approval of the renewed Compensation Policy, despite the objection of the shareholders, is in the best interests of the Company.

Proposal

It is proposed that the following resolution be adopted at the Meeting:

RESOLVED, to approve the adoption of the renewed Compensation Policy for Executive Officers and Directors, in the form attached as Appendix A to the Proxy Statement for the Meeting, for a three-year period.

Approval Required

See “Vote Required for Approval of the Proposals” above.

Board Recommendation

The Board of Directors recommends a vote “FOR” the approval of the adoption of the renewed Compensation Policy for executive officers and directors for a three-year period.

PROPOSAL 4
RE-APPOINTMENT OF INDEPENDENT PUBLIC AUDITOR
AND AUTHORIZATION OF THE AUDIT COMMITTEE TO FIX THEIR REMUNERATION
(Item 4 on the Proxy Card)

Background

Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Limited, have audited the Company’s financial statements beginning with the financial statements for the year ended December 31, 2003. Except as the Company’s auditors, and, from time to time and to a limited extent, as tax consultants and providers of some audit-related and other services, there is no other affiliation between such firm and the Company.

The Companies Law requires shareholder approval of the appointment of the Company’s independent public accountants for the fiscal year ending December 31, 2025. Our Board of Directors recommended, pursuant to the recommendation of our Audit Committee, the re-appointment of the accounting firm of Kesselman & Kesselman as our independent registered public accounting firm to perform the audit of our consolidated financial statements for the fiscal year ending December 31, 2025, and for such additional period until the next annual general meeting. In addition, our shareholders are being asked to authorize the Audit Committee of the Board of Directors to fix the compensation of Kesselman & Kesselman in accordance with the scope and nature of its services to the Company.

The following table sets forth, for each of the years indicated, the fees billed by Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Ltd., our independent registered public accounting firm.

Services Rendered	Year Ended December	
	31,	
	2023	2024
	<i>(in thousands of U.S. dollars)</i>	
Audit Fees ⁽¹⁾	130	160
Audit-Related Fees ⁽²⁾	17	40
Tax Fees ⁽³⁾	52	41
Total	199	241

- (1) Audit fees consist of services that would normally be provided in connection with statutory and regulatory filings or engagements, including services that generally only the independent accountant can reasonably provide.
- (2) Audit-related services relate to reports to the Israel Innovation Authority and work regarding a public listing or offering.
- (3) Tax fees relate to tax reports for BioLineRx USA, Inc., tax compliance, planning and advice.

Proposal

It is proposed that the following resolution be adopted at the Meeting:

RESOLVED, to reappoint Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, as the independent registered public accounting firm of the Company for the year ending December 31, 2025, and for such additional period until the next annual general meeting, and to authorize the Audit Committee of the Board of Directors to fix the compensation of said auditors in accordance with the scope and nature of their services.

Approval Required

See “Vote Required for Approval of the Proposals” above.

Board Recommendation

Our Board of Directors recommends a vote “FOR” approval of the re-appointment of Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Limited, as the independent public auditors of the Company for the year ending December 31, 2025, and for such additional period until the next annual general meeting, and the authorization of the Audit Committee of the Board of Directors to fix their compensation.

PRESENTATION AND DISCUSSION OF THE COMPANY’S AUDITED FINANCIAL STATEMENTS

At the Meeting, our audited consolidated financial statements for the fiscal year ended December 31, 2024, will be presented. The Company’s audited consolidated financial statements for the fiscal year ended December 31, 2024, which form part of the 2024 Form 20-F, were filed with the SEC on March 31, 2025, and are available for viewing and downloading on the SEC’s website at www.sec.gov and on the Magna website of the ISA at www.magna.isa.gov.il, as well as on the *Investors* portion of our website at <https://biolinerx.com>. None of the audited financial statements, the 2024 Form 20-F nor the contents of our website form part of the proxy solicitation material. This item does not involve a vote of the shareholders.

OTHER BUSINESS

The Board of Directors is not aware of any other matters that may be presented at the Meeting other than those described in this Proxy Statement. If any other matters do properly come before the Meeting, it is intended that the persons named as proxies will vote, pursuant to their discretionary authority, according to their best judgment in the interest of the Company.

ADDITIONAL INFORMATION

The 2024 Annual Report filed with the SEC on March 31, 2025, is available for viewing and downloading on the SEC's website at www.sec.gov and on the Magna website of the ISA at www.magna.isa.gov.il, as well as on the *Investors* portion of our website at <https://biolinerx.com>.

We are subject to the information reporting requirements of the U.S. Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), as applicable to foreign private issuers, and we fulfill the obligations with respect to those requirements by filing reports with the SEC. Our SEC filings are available to the public on the SEC's website at www.sec.gov and the ISA's website at www.magna.isa.gov.

As a foreign private issuer, we are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements. The circulation of this proxy statement and related notice should not be taken as an admission that we are subject to those proxy rules.

By Order of the Board of Directors

Dr. Aharon Schwartz
Chairman of the Board of Directors

May 23, 2025