

BIOLINERX LTD.

NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS

To be held on October 1, 2024

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 Tuesday, October 1, 2024, at 3:00 p.m. (Israel time), for the following purposes:

1. To approve the re-election of Dr. Avraham Molcho, Mr. Gal Cohen and Mr. Rami Dar as Class I directors, each to serve until the Company’s annual general meeting of shareholders to be held in 2027, and until their respective successors have been duly elected and qualified;
2. To approve the grant of options to purchase American Depositary Shares (“**ADSs**”), each representing 15 ordinary shares of the Company, to certain directors of the Company who shall serve in such capacity immediately following the Meeting;
3. To approve an increase in the Company’s authorized share capital, and to amend the Company’s Articles of Association accordingly; 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, 2024, 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 the Company’s financial statements for the year ended December 31, 2023.

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 ADSs at the close of business on Monday, August 26, 2024 (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 September 29, 2024, 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.

Beneficial owners who hold their 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 September 29, 2024; 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 Israeli Companies Law, 5759-1999, is August 26, 2024. 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 for listed company reports 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

August 19, 2024

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 October 1, 2024

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 15 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 October 1, 2024, at 3:00 p.m. Israel time, or at any adjournment 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 the Company's ordinary shares or ADSs at the close of business on Monday, August 26, 2024 (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. Avraham Molcho, Mr. Gal Cohen and Mr. Rami Dar as Class I directors, each to serve until the Company's annual general meeting of shareholders to be held in 2027, and until their respective successors have been duly elected and qualified;
2. The grant of options to purchase ADSs, each representing 15 Ordinary Shares, to certain directors of the Company who shall serve in such capacity immediately following the Meeting;
3. An increase in the Company's authorized share capital, and to amend the Company's Articles of Association accordingly; 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, 2024, 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 the Company's financial statements for the year ended December 31, 2023.

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 September 29, 2024, 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 September 29, 2024. 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 Depositary 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 Depositary, and the holders of the Company’s ADSs, the Depositary 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 Depositary. If no instructions are received by the Depositary 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 Depositary for such purpose, then the Depositary will deem the holder of the Ordinary Shares to have instructed the Depositary to give a discretionary proxy to a person designated by the Company with respect to the Ordinary Shares represented by such ADSs, and the Depositary will give such instruction.

Vote Required for Approval of the Proposals

Each outstanding Ordinary Share held by a shareholder is entitled to one vote.

Pursuant to the Israeli Companies Law, 1999 (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 tabulating the voting results for any particular proposal, shares that constitute broker non-votes and abstentions are not considered votes cast on that proposal and will have no effect on the vote.

Change or Revocation of Vote

- **Holders of Record of Ordinary Shares.** If you are a holder of record of Ordinary Shares, you may change your mind and cancel your proxy card (i) by filing a written notice of revocation with the Company, (ii) by completing and returning a duly executed proxy card bearing a later date, 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.

BENEFICIAL OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding the beneficial ownership of our outstanding Ordinary Shares as of July 31, 2024 (unless otherwise indicated below) by (i) each person known to us to beneficially own more than 5% of our outstanding Ordinary Shares, based on public filings or information provided to us; (ii) each of our directors and executive officers individually; and (iii) all of our directors and executive officers as a group. The percentages shown are based on 1,199,148,445 Ordinary Shares issued and outstanding as of July 31, 2024. Beneficial ownership is determined in accordance with the rules of the U.S. Securities and Exchange Commission (the “**SEC**”) and generally includes voting power or investment power with respect to securities. All ordinary shares subject to options currently exercisable or exercisable into ordinary shares within 60 days of July 31, 2024, and underlying

performance stock units (“PSUs”) that shall vest within 60 days of July 31, 2024, are deemed to be outstanding and beneficially owned by the shareholder holding such options or PSUs for the purpose of computing the number of shares beneficially owned by such shareholder. Such shares are also deemed outstanding for purposes of computing the percentage of ownership of the person holding the option or PSU. They are not, however, deemed to be outstanding and beneficially owned for the purpose of computing the percentage of ownership of any other shareholder.

	Number of Ordinary Shares Beneficially Held	Percent of Class
Principal Shareholders		
Hong Seng Technology Limited ⁽¹⁾	102,437,055	8.5%
Directors		
Aharon Schwartz ⁽²⁾	5,054,970	*
B.J. Bormann ⁽³⁾	1,349,970	*
Rami Dar ⁽⁴⁾	900,000	*
Raphael Hofstein ⁽⁵⁾	1,349,970	*
Avraham Molcho ⁽⁶⁾	1,349,970	*
Sandra Panem ⁽⁷⁾	1,349,970	*
Shaoyu Yan	-	
Gal Cohen	-	
Executive officers		
Philip A. Serlin ⁽⁸⁾	14,974,455	1.2%
Mali Zeevi ⁽⁹⁾	4,021,965	*
Ella Sorani ⁽¹⁰⁾	3,869,865	*
Holly May ⁽¹¹⁾	4,670,145	*
All directors and executive officers as a group (12 persons)⁽¹²⁾	38,891,280	2.2%

* Less than 1.0%.

- (1) Based on Schedule 13D filed with the SEC on October 26, 2023. According to the Schedule 13D, includes 6,829,137 ADS, representing 102,437,055 ordinary shares, held by Hong Seng Technology Limited. Lepu (Hong Kong) Co., Limited holds 66.67% equity interest of Hong Seng Technology Limited. Lepu Holdings Limited holds 99.5% equity interest of Lepu (Hong Kong) Co., Limited. Lepu Medical (Europe) Cooperatief U.A. holds 100% equity interest of Lepu Holdings Limited. Lepu Medical Technology (Beijing) Co., Ltd. holds 99.95% equity interest of Lepu Medical (Europe) Cooperatief U.A. Lepu Medical Technology (Beijing) Co., Ltd. is a company publicly listed on Shenzhen Stock Exchange in the PRC (300003.SZ).
- (2) Includes 3,705,000 Ordinary Shares and 1,349,970 Ordinary Shares issuable upon exercise of outstanding options currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 900,000 Ordinary Shares issuable upon exercise of outstanding options that are not exercisable within 60 days of July 31, 2024.
- (3) Includes 1,349,970 Ordinary Shares issuable upon exercise of outstanding options currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 900,000 Ordinary Shares issuable upon exercise of outstanding options that are not exercisable within 60 days of July 31, 2024.
- (4) Includes 900,000 Ordinary Shares issuable upon exercise of outstanding options currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 900,000 Ordinary Shares issuable upon exercise of outstanding options that are not exercisable within 60 days of July 31, 2024.

- (5) Includes 1,349,970 Ordinary Shares issuable upon exercise of outstanding options currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 900,000 Ordinary Shares issuable upon exercise of outstanding options that are not exercisable within 60 days of July 31, 2024.
- (6) Includes 1,349,970 Ordinary Shares issuable upon exercise of outstanding options currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 900,000 Ordinary Shares issuable upon exercise of outstanding options that are not exercisable within 60 days of July 31, 2024.
- (7) Includes 1,349,970 Ordinary Shares issuable upon exercise of outstanding options currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 900,000 Ordinary Shares issuable upon exercise of outstanding options that are not exercisable within 60 days of July 31, 2024.
- (8) Includes 171,900 Ordinary Shares and 14,802,555 Ordinary Shares issuable upon exercise of outstanding options and vested PSUs currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 9,142,965 Ordinary Shares issuable upon exercise of outstanding options and PSUs that are not exercisable within 60 days of July 31, 2024.
- (9) Includes 328,665 Ordinary Shares and 3,693,300 Ordinary Shares issuable upon exercise of outstanding options and vested PSUs currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 2,188,905 Ordinary Shares issuable upon exercise of outstanding options and PSUs that are not exercisable within 60 days of July 31, 2024.
- (10) Includes 66,150 Ordinary Shares and 3,803,715 Ordinary Shares issuable upon exercise of outstanding options and vested PSUs currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 2,188,905 Ordinary Shares issuable upon exercise of outstanding options and PSUs that are not exercisable within 60 days of July 31, 2024.
- (11) Includes 4,670,145 Ordinary Shares issuable upon exercise of outstanding options and vested PSUs currently exercisable or exercisable within 60 days of July 31, 2024. Does not include 5,950,365 Ordinary Shares issuable upon exercise of outstanding options and PSUs that are not exercisable within 60 days of July 31, 2024.
- (12) See footnotes (1)-(11) for certain information regarding beneficial ownership.

DIVERSITY OF THE BOARD OF DIRECTORS

Board Diversity Matrix (As of August 19, 2024)

Country of Principal Executive Offices	Israel			
Foreign Private Issuer	Yes			
Disclosure Prohibited under Home Country Law	No			
Total Number of Directors	8			
Part I: Gender Identity				
	<u>Female</u>	<u>Male</u>	<u>Non-Binary</u>	<u>Did Not Disclose Gender</u>
Directors	2	6	0	0
Part II: Demographic Background				
Underrepresented Individual in Home Country Jurisdiction			0	
LGBTQ+			0	
Did Not Disclose Demographic Background			0	

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, 2023, 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, 2023, which was filed with the SEC on March 26, 2024 (the “**2023 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 2023 Form 20-F. We encourage you to review those portions of our 2023 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, as amended at our annual general meeting of shareholders held in August 2023, 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 the Meeting;
- the Class II directors, consisting of Dr. B.J. Bormann and Dr. Raphael Hofstein, will hold office until our annual general meeting of shareholders to be held in 2025; 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 I directors, Dr. Avraham Molcho, Mr. Gal Cohen and Mr. Rami Dar, expires. Our Board of Directors has nominated each of Dr. Avraham Molcho, Mr. Gal Cohen and Mr. Rami Dar for re-election at the Meeting as Class I directors for an additional term to expire at the 2027 annual general meeting of our shareholders, and until his successor has been duly elected and qualified or until his 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.

We are not aware of any reason why the nominees, if elected, would be unable or unwilling to serve as directors. If any of such director nominees is unable to serve, the persons named in the proxy shall vote the Ordinary Shares for the election/re-election of such other nominee/director 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>
Avraham Molcho, M.D.	67	Dr. Molcho has served on our board of directors since 2010 (as an external director, within the meaning of the Companies Law, until March 25, 2024), on our Audit Committee since 2010 and on our Compensation Committee since 2012. Dr. Molcho is the co-founder of Biologic Design Ltd., a technology platform that encourages human antibody discovery. In 2012, Dr. Molcho became the co-founder of Ayana Pharma Ltd. (formerly DoxoCure), a privately held company engaged in the manufacturing of liposome-based therapeutics. Dr. Molcho served as Ayana's Chief Executive Officer and director until 2019. From 2006 through 2008, Dr. Molcho served as the Chief Executive Officer and Chairman of Neovasc Medical, a privately held Israeli medical device company. From 2006 until 2019, Dr. Molcho was a venture partner at Forbion Capital Partners, a Dutch life sciences venture capital firm. From 2001 through 2006, Dr. Molcho was a managing director and the head of life sciences of Giza Venture Capital and, in that capacity, was involved in the founding of our company. Dr. Molcho was also the Deputy Director General of Abarbanel Mental Health Center, the largest acute psychiatric hospital in Israel, from 1999 to 2001. Dr. Molcho holds an M.D. from Tel Aviv University School of Medicine and an MBA degree from Tel-Aviv University Recanati Business School.
Gal Cohen, MBA	51	Mr. Gal Cohen has served on our board of directors since December 2023 and on our Investment Monitoring Committee since May 2024. Mr. Cohen serves on the boards of directors of Ayana Pharma Ltd. and Silver Castle Holdings Ltd (TASE: SLCL) and from April 2020 to February 2024, served as Chairman of the board of directors and Chief Executive Officer of Quark Pharmaceuticals, Inc. From November 2006 to May 2019, Mr. Cohen served as President and Chief Executive Officer of MediWound Ltd., leading the development of their innovative biological drug for burn treatment up to marketing authorization and commercialization in numerous international markets, as well as their initial public offering on Nasdaq. Prior to that, from 2004 to 2006, Mr. Cohen served as Director of Strategic Business Planning and New Ventures at Teva Pharmaceuticals Ltd. From 2000 to 2004, Mr. Cohen served at Teva's Global Products Division as Project Manager for the launch of Copaxone® in Europe and numerous other countries, and from 1998 to 2000, he led projects at Teva's Corporate Industrial Engineering Department. Mr. Cohen holds a B.Sc. degree in Industrial Engineering and Management (<i>cum laude</i>) from the Technion-Israel Institute of Technology and an M.B.A. degree (<i>cum laude</i>) from Tel Aviv University.
Rami Dar, MBA	67	Mr. Rami Dar has served on our board of directors (as an external director, within the meaning of the Companies Law, until March 25, 2024) since July 2022 and as a member of our Audit Committee and Compensation Committee since such time and has served as a member of our Investment Monitoring Committee since July 2022. Mr. Dar has served as a board member of BetterSeeds Ltd. since November 2023 and served as a board member of Nordia Springs since March 2020. From 2018 to 2023, Mr. Dar served as chairman of Novolog Ltd. (TLV: NVLG). From 2002 to 2019, Mr. Dar served as Chief Executive Officer of Hazera Seeds Ltd. (formerly Hazera Genetics), a leading global seed company, and prior to that, from 1998 to 2002, served in various management positions at Teva Pharmaceuticals Ltd., including as Business Development Executive from 2001 to 2002, Chief Executive Officer of Teva Medical Ltd., from 1998 to 2001, and Chief Executive Officer of Teva Pharmaceuticals Israel Ltd. from 1995 to 1998. Mr. Dar holds a B.A. degree in economics and philosophy and an M.A. degree in economics, both from the Hebrew University of Jerusalem, Israel, and an Executive M.B.A. from Columbia University, New York, USA.

In accordance with the Companies Law, each of the director nominees has certified to us that he 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 duties as a director of our Company, taking into account the Company's size and special needs.

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, and in the case of the Chairman of the Board of Directors, such fees in amounts that are 50% higher than the foregoing fees, in each case 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. Avraham Molcho, Mr. Gal Cohen and Mr. Rami Dar as Class I directors for a term to expire at the 2027 annual general meeting of our shareholders, and until his successor has been duly elected and qualified, or until his 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 I director for a term to expire at the 2027 annual general meeting of shareholders, on the terms described in Proposal 1.

PROPOSAL 2

APPROVAL OF GRANT OF OPTIONS TO CERTAIN DIRECTORS

(Item 2 on the Proxy Card)

Background

Under the Companies Law, the payment of compensation, including equity-based compensation, to a director that is consistent with a company's compensation policy must be approved by the compensation committee, board of directors and shareholders, in that order.

Our Compensation Committee and Board of Directors approved, subject to shareholder approval, the grant to each of our directors who shall serve in such capacity immediately following the Meeting (other than Shaoyu Yan, a nominee of Hong Seng Technology Limited who was appointed to our board of directors in November 2023) of options to purchase 137,000 ADSs (representing 2,055,000 Ordinary Shares), at an exercise price of \$0.775 per ADS, which is equal to the closing price of the ADSs on the Nasdaq Stock Market on the date the grant of the options was approved by the Board of Directors. The options will vest over a period of three years, such that 8.33% of the options shall vest on each three-month anniversary of the date of grant during the three-year period, subject to the respective director's continued service in such capacity on each applicable vesting date. The options shall expire 10 years after

the date of grant. The options shall accelerate on the occurrence of both (a) a change of control (as such term shall be defined in the option agreement to be entered into with the directors) and (b) the termination of such director's membership on the Board of Directors following such change of control.

If approved at the Meeting, the options will be granted under and shall be subject to our Amended and Restated 2003 Share Incentive Plan (the "**Plan**") and the applicable award agreements to be entered into with each such director. The options to Israeli resident directors (namely, Aharon Schwartz, Rami Dar, Raphael Hofstein, Avraham Molcho and Gal Cohen), are intended to be granted pursuant to the capital gains track of Section 102 of the Israeli Income Tax Ordinance [New Version] 5721-1961. With respect to each of Dr. Avraham Molcho, Mr. Gal Cohen and Mr. Rami Dar, the option grant is subject to their respective individual election as a Class I director at the Meeting under Proposal 1 (such that if they are not so elected at the Meeting, they shall not be entitled to the options).

Each of our Compensation Committee and Board of Directors determined that the fair value of the options proposed to be granted to such directors and the terms of the proposed options are consistent with the Company's Compensation Policy for Executive Officers and Directors (the "**Compensation Policy**").

In considering the grant of the options, the Compensation Committee and Board of Directors considered the need to retain its current directors and attract additional, qualified directors, our compensation philosophies and the provisions of the Compensation Policy, as well as internal consistency and market trends. Our Compensation Committee and Board of Directors believe that the amount and terms of the proposed option grant are reasonable and appropriate and in the Company's best interest considering the directors' roles on the Board of Directors, taking into consideration the directors' respective qualifications and experience and their anticipated contributions to the advancement of the Company's activities. Our compensation philosophy encourages the grant of equity-based compensation to our officers and directors in order to further align their compensation with the long-term interests of our shareholders. For information regarding our directors' current beneficial ownership, see above "Beneficial Ownership of Directors and Officers."

Proposal

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

"RESOLVED, to approve the grant of options to purchase ADSs, each representing 15 Ordinary Shares, to certain directors of the Company who shall serve in such capacity immediately following the Meeting, with such terms and conditions as described in Proposal 2 of the Company's Proxy Statement for the Meeting."

Approval Required

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

Board Recommendation

Our Board of Directors recommends a vote "FOR" approval of the grant of options to certain directors of the Company.

PROPOSAL 3 APPROVAL OF AN INCREASE IN THE COMPANY'S AUTHORIZED SHARE CAPITAL AND TO AMEND THE ARTICLES OF ASSOCIATION ACCORDINGLY

(Item 3 on the Proxy Card)

Background

The Company's authorized share capital is currently NIS 250,000,000, divided into 2,500,000,000 ordinary shares, with a nominal value of NIS 0.10 each (equivalent to 166,666,667 ADSs). As of July 31, 2024, 1,199,148,445 Ordinary Shares (or 79,943,230 ADSs representing Ordinary Shares) were issued and outstanding. In addition, as of such date, an additional 152,404,575 Ordinary Shares (equivalent to 10,160,305 ADSs) were reserved for issuance under the Plan (including shares underlying outstanding options, restricted share units and PSUs) and 300,829,719 Ordinary Shares (equivalent to 20,055,315 ADSs) are reserved for issuance upon exercise of outstanding warrants.

Consequently, as of such date, 847,617,261 Ordinary Shares (equivalent to 56,507,818 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) public and private offerings of the Company's shares or ADSs in the ordinary course to fund operations, 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, and 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).

Accordingly, we are seeking approval of the shareholders to increase the Company's share capital from NIS 250,000,000, divided into 2,500,000,000 ordinary shares, with a nominal value of NIS 0.10 each, to NIS 500,000,000 divided into 5,000,000,000 ordinary shares, with a nominal value of NIS 0.10 each (equivalent to 333,333,333 ADSs), and to amend Article 4.1 of our Articles of Association accordingly.

Proposal

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

“RESOLVED, to approve an increase of the Company's authorized share capital from NIS 250,000,000, divided into 2,500,000,000 ordinary shares, with a nominal value of NIS 0.10 each, to NIS 500,000,000 divided into 5,000,000,000 ordinary shares, with a nominal value of NIS 0.10 each, 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 5
RE-APPOINTMENT OF INDEPENDENT PUBLIC AUDITOR
AND AUTHORIZATION OF THE AUDIT COMMITTEE TO FIX THEIR REMUNERATION
(Item 5 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, 2024. 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, 2024, 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,	
	2022	2023
	<i>(in thousands of U.S. dollars)</i>	
Audit Fees ⁽¹⁾	130	130
Audit-Related Fees ⁽²⁾	4	17
Tax Fees ⁽³⁾	18	52
All Other Fees	-	-
Total	152	199

- (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 compliance, planning and advice.

Proposal

It is therefore 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, 2024, 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, 2024, 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, 2023, will be presented. The Company’s audited consolidated financial statements for the fiscal year ended December 31, 2023, which form part of the 2023 Form 20-F, were filed with the SEC on March 26, 2024, 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 2023 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 2023 Annual Report filed with the SEC on March 26, 2024, 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

August 19, 2024