

BIOLINERX LTD.

**For the Annual General Meeting of Shareholders
to be held on August 7, 2023**

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned shareholder of BioLineRx Ltd. (the “**Company**”) hereby appoints Mali Zeevi and/or Raziel Fried, and each or either of them, the true and lawful attorney, agent and proxy of the undersigned, with full power of substitution, to vote, as designated below, all of the ordinary shares of the Company which the undersigned is entitled in any capacity to vote at the Annual General Meeting of the shareholders of the Company which will be held at the offices of the Company at Modi’in Technology Park, 2 HaMa’ayan Street, Modi’in 7177871, Israel, on August 7, 2023 at 3:00 p.m. (Israel time), and all adjournments and postponements thereof.

(CONTINUED AND TO BE SIGNED ON REVERSE SIDE)

SEE
REVERSE
SIDE

ANNUAL GENERAL MEETING OF SHAREHOLDERS OF

BIOLINERX LTD.

August 7, 2023

**THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS DIRECTED HEREIN.
IF NO DIRECTION IS INDICATED, THIS PROXY WILL BE VOTED “FOR” THE ELECTION OF THE DIRECTORS
NAMED IN ITEM 1 AND “FOR” ALL OTHER PROPOSALS.**

**VOTES CAST FOR ITEM 2 WILL NOT BE COUNTED UNLESS “YES” OR “NO” HAS BEEN SPECIFIED AS TO
WHETHER THE SHAREHOLDER HAS A PERSONAL INTEREST (AS DEFINED IN THE PROXY STATEMENT) WITH
RESPECT TO SUCH PROPOSAL**

Please mark your vote for the following resolutions as in this example ☒

- | | FOR | AGAINST | ABSTAIN |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| 1. TO APPROVE the re-election of the following persons to the Board of Directors, each to serve until the next annual general meeting of shareholders and until their respective successors are duly elected and qualified, or each to serve for staggered terms ending at the 2024, 2025 and 2026 annual general meetings of shareholders, if Proposal 3 is approved: | | | |
| Aharon Schwartz | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Michael Anghel | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B.J. Bormann | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Raphael Hofstein | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sandra Panem | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. TO APPROVE the grant of equity compensation to Philip Serlin, the Company’s Chief Executive Officer, as described in Proposal 2 of the Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Do you have a “Personal Interest” (as defined in the Proxy Statement) with respect to the subject	YES	NO
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matter of Proposal 2? **(Please note: if you do not mark either “YES” or “NO” your shares will not be voted on Proposal 2)**

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3. TO APPROVE certain amendments to the Company’s Articles of Association relating to the appointment of directors of the Company, including to classify the Board of Directors (other than the external directors) into three classes with staggered three-year terms, as set forth on Appendix A to the Proxy Statement.

FOR AGAINST ABSTAIN

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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, 2023 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.

FOR AGAINST ABSTAIN

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Name:

Number of shares:

Signature:

Date:

NOTE: Please mark date and sign exactly as the name(s) appear on this proxy. If the signer is a corporation, please sign the full corporate name by a duly authorized officer. Executors, administrators, trustees, etc. should state their full title or capacity. Joint owners should each sign.