

BIOLINERX LTD.

**For the Annual General Meeting of Shareholders
to be held on July 2, 2019**

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned shareholder of BioLineRx Ltd. (the “**Company**”) hereby appoints Norman Kotler 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 July 2, 2019 at 3:00 p.m. (local 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.

July 2, 2019

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS DIRECTED HEREIN.
 IF NO DIRECTION IS INDICATED, THIS PROXY WILL BE VOTED "FOR" THE PROPOSALS HEREIN.

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

- | | FOR | AGAINST | ABSTAIN |
|---|--------------------------|--------------------------|--------------------------|
| 1. TO RE-ELECT the following nominees to serve as directors of the Company for the coming year until the next annual general meeting of the Company's shareholders or until their respective successors are duly elected: | | | |
| a. Aharon Schwartz | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Michael Anghel | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. B.J. Bormann | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Raphael Hofstein | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Sandra Panem | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. TO APPROVE the grant of options to each of the director nominees as follows, subject to each such director's re-election as a member of the Board of Directors: | | | |
| a. Grants to Aharon Schwartz of options to purchase 360,000 Ordinary Shares as further described in the Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Grants to Michael Anghel of options to purchase 360,000 Ordinary Shares as further described in the Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Grants to B.J. Bormann of options to purchase 360,000 Ordinary Shares as further described in the Proxy Statement | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Grants to Sandra Panem of options to purchase 360,000 Ordinary Shares as further described in the Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3.	TO RE-ELECT Ms. Nurit Benjamini as an external director for a three-year term commencing on July 6, 2019, and to approve the grants to her of options to purchase 360,000 Ordinary Shares, all as described in the Proxy Statement.	FOR <input type="checkbox"/>	AGAINST <input type="checkbox"/>	ABSTAIN <input type="checkbox"/>	
	Do you have a "Personal Interest" (as defined in the Proxy Statement) with respect to the subject matter of this proposal? (Please note: if you do not mark either "Yes" or "No" your shares will not be voted on Proposal 3)	YES <input type="checkbox"/>	No <input type="checkbox"/>		
4.	TO RE-ELECT Dr. Avraham Molcho as an external director for a three-year term commencing on July 6, 2019, and to approve the grants to him of options to purchase 360,000 Ordinary Shares, all as described in the Proxy Statement.	FOR <input type="checkbox"/>	AGAINST <input type="checkbox"/>	ABSTAIN <input type="checkbox"/>	
	Do you have a "Personal Interest" (as defined in the Proxy Statement) with respect to the subject matter of this proposal? (Please note: if you do not mark either "Yes" or "No" your shares will not be voted on Proposal 4)	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
5.	TO APPROVE the grant to Philip Serlin, the Company's Chief Executive Officer, of (i) options to purchase 1,136,400 Ordinary Shares and (ii) 568,200 performance stock units, all as described in the Proxy Statement.	FOR <input type="checkbox"/>	AGAINST <input type="checkbox"/>	ABSTAIN <input type="checkbox"/>	
	Do you have a "Personal Interest" (as defined in the Proxy Statement) with respect to the subject matter of this proposal? (Please note: if you do not mark either "Yes" or "No" your shares will not be voted on Proposal 5)	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
6.	TO APPROVE the amended BioLineRx Ltd. Compensation Policy for Executives and Directors in the form attached as Annex A to the Proxy Statement.	FOR <input type="checkbox"/>	AGAINST <input type="checkbox"/>	ABSTAIN <input type="checkbox"/>	
	Do you have a "Personal Interest" (as defined in the Proxy Statement) with respect to the subject matter of this proposal? (Please note: if you do not mark either "Yes" or "No" your shares will not be voted on Proposal 6)	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
7.	TO APPROVE an increase in the Company's registered share capital from NIS 25,000,000 divided into 250,000,000 ordinary shares of a nominal value of NIS 0.10 each to NIS 50,000,000 divided into 500,000,000 ordinary shares of a nominal value of NIS 0.10 each, and a corresponding amendment to Article 4.1 of the Company's Articles of Association.	FOR <input type="checkbox"/>	AGAINST <input type="checkbox"/>	ABSTAIN <input type="checkbox"/>	Name: _____ Number of shares: _____ Signature: _____ Date: _____
8.	TO RE-APPOINT Kesselman & Kesselman, a member of PricewaterhouseCoopers International Limited, as the independent public auditors of the Company for the year ending December 31, 2019 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 <input type="checkbox"/>	AGAINST <input type="checkbox"/>	ABSTAIN <input type="checkbox"/>	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.