Exhibit 2

BIOLINERX LTD.

For the Annual General Meeting of Shareholders to be held on July 5, 2017

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 5, 2017 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 5, 2016

	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 ⊠								
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:	FOR	AGAINST	ABSTAIN					
	a. Aharon Schwartz								
	b. Michael Anghel								
	c. B.J. Bormann								
	d. Raphael Hofstein								
	e. Sandra Panem								
2(a).	TO APPROVE the general terms of the compensation of Philip Serlin, the	FOR	AGAINST	ABSTAIN					
	Company's Chief Executive Officer, as described in the Proxy Statement.								
	Do you have a "Personal Interest" (as defined in the Proxy Statement) with respect	YES	NO						
	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 2(a))								
2(b).	TO APPROVE the grant to Philip Serlin, the Company's Chief Executive Officer, of (i)	FOR	AGAINST	ABSTAIN					
	options to purchase 316,000 Ordinary Shares and (ii) 158,000 performance stock units, all as described in the Proxy Statement.								
	Do you have a "Personal Interest" (as defined in the Proxy Statement) with respect	YES	NO						
	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 2(b))								

3.	TO APPROVE an increase in the Company's	FOR	AGAINST	ABSTAIN	
	registered share capital from NIS 15,000,000 divided into 150,000,000 ordinary shares of a nominal value of NIS 0.10 each to NIS 25,000,000 divided into 250,000,000 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.	0			Name: Number of shares: Signature: Date:
4.	TO REAPPOINT Kesselman & Kesselman, a member of Pricewaterhouse-Coopers International Limited, as the independent registered public accounting firm of the Company for the year ending December 31, 2017 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	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.