
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16 OF
THE SECURITIES EXCHANGE ACT OF 1934**

For the month of April 2015

BioLineRx Ltd.

(Translation of Registrant's name into English)

P.O. Box 45158

19 Hartum Street

Jerusalem 9777518, Israel

(Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F **Form 40-F**

Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934:

Yes **No**

The Registrant announces that it will hold an Extraordinary General Meeting of Shareholders on May 31, 2015 at 11:00 a.m. (Israel time) at the offices of Yigal Arnon & Co., 1 Azrieli Center, Tel Aviv, Israel. Attached hereto as Exhibits 1 and 2 are, respectively, the Notice of Extraordinary General Meeting and Proxy Statement, and Proxy Card.

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BioLineRx Ltd.

By: /s/ Philip Serlin

Philip Serlin

Chief Financial and Operating Officer

Dated: April 28, 2015

BIOLINERX LTD.

**NOTICE OF
EXTRAORDINARY GENERAL MEETING OF SHAREHOLDERS
ON
MAY 31, 2015**

Notice is hereby given that an Extraordinary General Meeting of the shareholders (the "**Meeting**") of BioLineRx Ltd. (the "**Company**") will be held at the offices of Yigal Arnon & Co., 1 Azrieli Center, Tel Aviv, Israel, on May 31, 2015 at 11:00 a.m. for the following purposes:

1. TO VOTE ON A PROPOSAL TO APPROVE a 1-for-10 reverse share split of the Company's ordinary shares and to amend the Articles of Association of the Company accordingly.
2. TO VOTE ON A PROPOSAL TO APPROVE an increase in the number of the Company's authorized ordinary shares and authorized share capital, and to amend the Articles of Association of the Company to reflect such increase.

Shareholders of record at the close of business on May 4, 2015 (the "**Record Date**") are entitled to notice of, and to vote at, the Meeting. All shareholders are cordially invited to attend the Meeting in person.

Whether or not you plan to attend the Meeting, you are urged to promptly complete, date and sign the enclosed proxy and to mail it in the enclosed envelope, which requires no postage if mailed in the United States. A proxy from the holder of ordinary shares must be received by the Company no later than the close of business on May 29, 2015 to be validly included in the tally of ordinary shares voted at the Meeting; a proxy from the holder of the Company's American Depositary Shares must be received by The Bank of New York Mellon as Depositary no later than 12:00 p.m. EDT on May 25, 2015 to be validly included in the tally of votes for 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.

Beneficial owners who hold their shares through members of the Tel Aviv Stock Exchange ("**TASE**") may either vote their shares in person at the Meeting by presenting a certificate signed by a member of the TASE which complies with the Israel Companies Regulations (Proof of Ownership for Voting in General Meetings), 5760-2000 as proof of ownership of the shares, or send such certificate along with a duly executed proxy to the Company at 19 Hartum St., Har Hotzvim, Jerusalem 9777518, Israel, Attention: General Counsel.

By Order of the Board of Directors,

BioLineRx Ltd.

April 28, 2015

PROXY STATEMENT

BIOLINERX LTD.
19 Hartum St.
Post Office Box 45158
Har Hotzvim, Jerusalem 9777518
Israel

EXTRAORDINARY GENERAL MEETING OF SHAREHOLDERS
ON
MAY 31, 2015

The enclosed proxy is being solicited by our Board of Directors (the “**Board**”) for use at our Extraordinary General Meeting of shareholders (the “**Meeting**”) to be held on May 31, 2015 at 11:00 a.m., or at any adjournment thereof, at the offices of Yigal Arnon & Co., 1 Azrieli Center, Tel Aviv, Israel. The record date for determining which of our shareholders is entitled to notice of, and to vote at, the Meeting is established as of the close of trading on May 4, 2015 (the “**Record Date**”). On the date hereof, we have outstanding and entitled to vote 534,900,507 of our ordinary shares, nominal value New Israeli Shekels (“**NIS**”) 0.01 each (the “**Ordinary Shares**”).

INFORMATION CONCERNING SOLICITATION AND VOTING

Record Date and Shares Outstanding

You are entitled to vote at the Meeting if you were a shareholder at the close of trading on the Record Date. Subject to the terms described herein, you are also entitled to vote at the Meeting if you held Ordinary Shares through a bank, broker or other nominee which was a shareholder of record of the Company at the close of trading on the Record Date or which appeared in the participant listing of a securities depository on that date.

Quorum, Voting, Solicitation and Revocation of Proxies.

At least two shareholders who attend the Meeting in person or by proxy who hold or represent together at least 25% of the voting rights of our issued share capital 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. Each outstanding Ordinary Share held by a shareholder is entitled to one vote.

Shareholders entitled to vote at the Meeting may attend the Meeting in person and vote thereat, or appoint a proxy. In accordance with the Company’s Articles of Association and as resolved by the Board, shareholders entitled to vote at the Meeting may not vote on the Proposals specified herein by letter of voting. A proxy from the holder of Ordinary Shares must be received by the Company no later than the close of business on May 29, 2015 to be validly included in the tally of Ordinary Shares voted at the Meeting; a proxy from the holder of the Company’s American Depositary Shares (“**ADSs**”) must be received by The Bank of New York Mellon as Depositary no later than 12:00 p.m. EDT on May 25, 2015 to be validly included in the tally of votes for the Meeting.

Each of the Proposals, pursuant to the Israeli Companies Law, 1999-5759 (the “**Companies Law**”), requires the affirmative vote of a simple majority of shares present at the Meeting, in person or by proxy, and voting thereon.

You may change your mind and cancel your proxy card by filing a written notice of revocation with the Company, by completing and returning a duly executed proxy card bearing a later date or by voting in person at the Meeting. Attendance at the Meeting will not in and of itself constitute revocation of proxy. Subject to the foregoing paragraph, shares represented by a valid proxy card will be voted in favor of the proposed resolution to be presented at the Meeting, unless you clearly vote against a specific resolution.

Under the terms of the Deposit Agreement among the Company, The Bank of New York 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 (as set forth above), 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.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information regarding the beneficial ownership of our outstanding Ordinary Shares as of April 28, 2015, by each person who we know beneficially owns 5.0% or more of the outstanding Ordinary Shares. Each of our shareholders has identical voting rights with respect to its shares. All of the information with respect to beneficial ownership of the Ordinary Shares is given to the best of our knowledge.

The beneficial ownership of Ordinary Shares is based on the 534,900,507 Ordinary Shares outstanding as of April 28, 2015, and is determined in accordance with the rules of the Securities and Exchange Commission (the “SEC”) and generally includes any Ordinary Shares over which a person exercises sole or shared voting or investment power. For the purposes of the table below, we deem shares subject to options or warrants that are currently exercisable or exercisable within 60 days of April 28, 2015, to be outstanding and to be beneficially owned by the person holding the options or warrants for the purposes of computing the percentage ownership of that person but we do not treat them as outstanding for the purpose of computing the percentage ownership of any other person. To our knowledge, none of our shareholders of record are U.S. holders. Our principal shareholders do not have different or special voting rights.

	Number of Shares Beneficially Held	Percent (%) of Class
Novartis Pharma AG ⁽¹⁾	50,000,000	9.3
Senvest Management, LLC ⁽²⁾	36,763,380	6.8
Pan Atlantic Bank and Trust Limited ⁽³⁾	34,803,965	6.4
Broadfin Healthcare Master Fund, Ltd. ⁽⁴⁾	31,000,000	5.8
OrbiMed Israel Partners Limited Partnership ⁽⁵⁾	27,350,000	5.0

- (1) Based upon information provided by the shareholder in its Schedule 13G filed with the SEC on December 22, 2014. Novartis AG is the parent of Novartis Pharma AG and as such is indicated as sharing voting and dispositive power with respect to the Ordinary Shares underlying the securities held by Novartis Pharma AG and is deemed to have beneficial ownership of such securities. The address of the principal business office of each of Novartis Pharma AG and Novartis AG is Lichtstrasse 35, 4056 Basel, Switzerland.
- (2) Includes 3,496,500 Ordinary Shares issuable upon exercise of outstanding warrants within 60 days of April 28, 2015. Based upon information provided by the shareholder in its Schedule 13G filed with the SEC on January 7, 2015 and on additional information available to us. In such filing, Richard Mashaal is indicated as having shared voting and dispositive power with respect to the Ordinary Shares held by Senvest Management, LLC and as having beneficial ownership of such securities. Mr. Mashaal disclaims beneficial ownership in the shares reported in the Schedule 13G except to the extent of his pecuniary interest therein. The address of the principal business office of Senvest Management, LLC is 540 Madison Avenue, 32nd Floor, New York, New York 10022.
- (3) Includes 7,000,000 Ordinary Shares issuable upon exercise of outstanding warrants within 60 days of April 28, 2015. Based upon information provided by the shareholder in its Schedule 13D/A filed with the SEC on March 10, 2014. Pan Atlantic Bank and Trust Limited is a wholly owned subsidiary of FCMI Financial Corporation (FCMI). All of the outstanding shares of FCMI are owned by Albert D. Friedberg, members of his family and trusts for the benefit of members of his family. Mr. Friedberg retains possession of the voting and dispositive power over the FCMI shares held by members of the Friedberg family and trusts for the benefit of members of his family and, as a result, controls and may be deemed the beneficial owner of 100% of the outstanding shares of and sole controlling person of FCMI. By virtue of his control of FCMI, Mr. Friedberg may be deemed to possess voting and dispositive power over the shares owned directly by its wholly-owned subsidiary, Pan Atlantic Bank and Trust Limited. The address of the principal business office of Pan Atlantic Bank and Trust Limited is “Whitepark House,” 1st Floor, Whitepark Road, St. Michael BB11135, Barbados, West Indies.
- (4) Based upon information provided by the shareholder in its Schedule 13G filed with the SEC on March 16, 2015. In such filing, Broadfin Capital, LLC (Broadfin Capital) and Kevin Kotler are indicated as having shared voting and dispositive power with respect to the Ordinary Shares underlying the securities held by Broadfin Healthcare Master Fund, Ltd. (Broadfin Fund) and as having beneficial ownership of such securities. Broadfin Capital and Mr. Kotler disclaim beneficial ownership in the shares reported in the Schedule 13G except to the extent of their pecuniary interest therein. The address of the principal business office of Broadfin Fund is 20 Genesis Close, Ansbacher House, Second Floor, P.O. Box 1344, Grand Cayman KY1-1108, Cayman Islands.
- (5) Includes 16,000,000 Ordinary Shares issuable upon exercise of outstanding options within 60 days of April 28, 2015. Based upon information provided by the shareholder in its Schedule 13G/A filed with the SEC on February 17, 2015. OrbiMed Israel GP Ltd. (“OrbiMed Israel”) is the general partner of OrbiMed Israel BioFund GP Limited Partnership (“OrbiMed BioFund”), which is the general partner of the shareholder, OrbiMed Israel Partners Limited Partnership, an Israel limited partnership (“OrbiMed Partners”). OrbiMed Israel, as the general partner of OrbiMed BioFund, and OrbiMed BioFund, as the general partner of OrbiMed Partners, may be deemed to share voting and investment power with respect to the Ordinary Shares underlying the securities held by OrbiMed Partners. The principal business office of each of the OrbiMed entities is 89 Medinat HaYehudim St., Building E, 11th Floor, Herzliya 46766, Israel.

PROPOSAL ONE

APPROVAL OF A 1-FOR-10 REVERSE SHARE SPLIT OF THE COMPANY'S ORDINARY SHARES EFFECTIVE ON THE DATE TO BE ANNOUNCED BY THE COMPANY AND CORRESPONDING AMENDMENT TO ARTICLE 4.1 OF THE COMPANY'S ARTICLES OF ASSOCIATION

The Company's ADSs, listed for trading on the Nasdaq Capital Market, currently represent 10 Ordinary Shares of the Company. We believe that a 1:1 equivalence between our ADSs and Ordinary Shares would make the Company's capital structure more understandable and thus make our securities more attractive to investors. Therefore, we seek the approval of the shareholders to effect a 1-for-10 ("1:10") reverse share split of the Company's Ordinary Shares and to amend the Articles of Association accordingly. If this proposal is approved, then the Board will have the authority to direct the Company's management to implement the reverse share split on such date and on such terms that management shall deem appropriate pursuant to this Proposal One, and the Company's Articles of Association shall be amended to effect the reverse share split. When the reverse share split is implemented, the number of issued and outstanding Ordinary Shares of the Company shall be divided by 10 in accordance with the 1:10 ratio, and since the total issued principal amount of the share capital remains the same after the reverse share split, the par value per share shall be increased from NIS 0.01 to NIS 0.10 per share. In addition, when the reverse share split is implemented, each ADS will represent one ordinary share, par value NIS 0.10, but there will be no effect on the number of ADSs held by any owner of ADSs.

The reverse stock split would be effected simultaneously for all of the Company's Ordinary Shares, and the exchange ratio would be the same for all Ordinary Shares. The reverse stock split would affect all of our shareholders uniformly and would not affect any shareholder's percentage ownership interests in the Company, relative voting rights or other rights, except to the extent that the reverse stock split results in fractional shares, in which case such fractional shares will be treated as detailed below. Ordinary shares issued pursuant to the reverse stock split would remain fully paid and non-assessable.

While our Board believes that the potential advantages of a reverse share split outweigh any actual or potential disadvantages, if the Company does effect a reverse share split there can be no assurance that:

- a) our ordinary shares and or ADSs will trade at a price in proportion to the decrease in the number of outstanding shares resulting from the share split;
- b) the liquidity of our ordinary shares and/or ADSs will not be adversely affected by the reduced number of shares that would be outstanding and available for trading after the reverse share split;
- c) engaging in a reverse share split will not be perceived in a negative manner by investors, analysts or other stock market participants; or
- d) the reverse share split will not result in some shareholders owning "odd-lots" of less than 100 ordinary Shares, potentially resulting in higher brokerage commissions and other transaction costs than the commissions and costs of transactions in "round-lots" of even multiples of 100 shares.

The exercise price and the number of shares issuable pursuant to outstanding options and warrants will be adjusted pursuant to the terms of such instruments in connection with such a reverse share split. Therefore, if the reverse share split is approved and the Board proceeds with the 1:10 split, then for every ten old Ordinary Shares previously issuable upon exercise of the options or warrants, the holders of ten options or warrants will, upon exercise thereof, receive one ordinary share par value NIS 0.10, for the same aggregate amount of consideration paid.

Fractional Shares

If the reverse share split results in shareholders having fractional shares and in order to avoid the expense and inconvenience of issuing fractional shares (or payment therefor) in connection with the reverse share split, the treatment of such fractional shares shall be coordinated with the TASE and the Company will act in accordance with the TASE's instructions. In the absence of instructions from the TASE, the following shall apply:

The Company shall round any fractional share that results from the reverse share split either up or down, to the nearest whole ordinary share, as applicable (i.e., fractions of 0.5 and below shall be rounded down and fractions higher than 0.5 shall be rounded up). The Company shall use the fractional shares rounded down (the "**Rounded Down Fractional Shares**") in order to consummate the rounding up of the relevant fractional shares and, to the extent the Rounded Down Fractional Shares are not sufficient to fully round up all fractional shares eligible to be round up, the Company shall issue new ordinary shares immediately prior to the reverse share split to such shareholders entitled to receive them in accordance with the rounding mechanism described above in the amount required to fully consummate the said rounding up. Such issuance shall be deemed to have been effected immediately prior to the reverse share split. If such issuance of additional shares by the Board is required, then the payment for such shares shall be made by the conversion of a sufficient portion of the Company's "share premium," as described in the Company's annual financial statements for the year ended December 31, 2014, into shareholder capital, so as to comply with the Israeli Companies Law, 1999.

The Board may, in its sole discretion, sell any remaining fractional shares to which no shareholder is entitled, and to donate the consideration received from such sale to any social cause the Board deems appropriate.

Fractional Shares Underlying Convertible Securities

Treatment of fractions in connection with the exercise of convertible securities of the Company (the “**Convertible Securities**”) shall be coordinated with the TASE and the Company will act in accordance with the TASE’s instructions. In the absence of instructions from the TASE, the following shall apply fractional shares underlying the Convertible Securities:

Holders of Convertible Securities will not be entitled to receive underlying fractional shares which may result from the exercise of their respective Convertible Securities following the reverse share split. Instead, to the extent applicable, the Company shall sell on the TASE, through a trustee, from time to time, the underlying fractional shares resulting from the exercise of the Convertible Securities, which add up to a whole number of ordinary shares, during the one month period from the date in which an acceptable amount of shares for sale on TASE was accumulated. The proceeds from such sale shall be distributed between the eligible holders of the sold underlying fractional shares (after deduction of sales commissions and the consideration the Company is entitled to for the exercise of the Convertible Securities) in such manner and on such dates as shall be determined by the Board or by management as authorized by the Board.

Certain U.S. Federal Income Tax Consequences

Generally, the reverse share split will not result in the recognition of gain or loss for U.S. federal income tax purposes. The total adjusted tax basis of the aggregate number of new ordinary shares and ADSs will be the same as the total adjusted basis of the aggregate number of Ordinary Shares and ADSs held by a shareholder immediately prior to the reverse share split and the holding period of the Ordinary Shares and ADSs after the reverse share split will include the holding period of the Ordinary Shares held prior to the reverse share split, to the extent applicable. No gain or loss will be recognized by the Company as a result of the reverse share split.

Certain Israeli Tax Consequences

The following discussion summarizing certain Israeli income tax consequences is based on the Israeli Income Tax Ordinance and the policy of the Israeli Tax Authority (“**ITA**”) as currently in place, and is for general information only. Shareholders are urged to consult their own tax advisors to determine the particular consequences to them.

Generally, a reverse share split will not be viewed for Israeli tax purposes as a sale of the Ordinary Shares held by each shareholder, subject to the fulfillment of all of the following terms: the reverse share split shall apply the same conversion ratio for all of the shareholders; there will be no change in the shareholders’ rights (whether in their voting rights or rights for profits) as a result of the reverse share split; the reverse share split shall not include any consideration or economic benefit (whether by cash or by cash equivalents) paid or accrued to the shareholders or to the company; the economic value of all of the issued shares shall not be affected by the reverse share split; and the reverse share split shall not result in any change excluding the amount of the issued shares.

Since the Company will implement a rounding up or down mechanism for fractional shares that result from the reverse share split either up or down, to the nearest whole ordinary share, the Company intends to apply to the ITA for a ruling that no gain or loss will be recognized with respect to ordinary shares issued as a result of such rounding up.

THE U.S. AND ISRAELI TAX CONSEQUENCES OF THE REVERSE SHARE SPLIT MAY DEPEND UPON THE PARTICULAR CIRCUMSTANCES OF EACH SHAREHOLDER. ACCORDINGLY, EACH SHAREHOLDER IS ADVISED TO CONSULT THE SHAREHOLDER’S TAX ADVISOR WITH RESPECT TO ALL OF THE POTENTIAL TAX CONSEQUENCES TO THE SHAREHOLDER OF A REVERSE SHARE SPLIT.

Implementation of the Reverse Share Split

The holders of our Ordinary Shares hold their shares electronically through the Bank Leumi Nominee Company, the Company's nominee company. As a result, these shareholders do not hold physical stock certificates evidencing their ownership of Ordinary Shares. After the reverse share split becomes effective, each holder of Ordinary Shares will receive notice regarding the implementation of the reverse split and the resulting number of ordinary shares owned by such holder as a result of the reverse split. It is not anticipated that any action on the part of holders of Ordinary Shares will be required in order to implement the reverse split.

The holders of the Company's ADSs will not receive any notice because the reverse share split will have no effect on the numbers of ADSs held, due to the simultaneous change in the ADS-Ordinary Share ratio of 1:10 to 1:1, as detailed above.

Our Board will present the following resolution for adoption at the Meeting:

“RESOLVED, to approve a 1-for-10 reverse share split of the Company's ordinary shares, effective on the date to be announced by the Company, and a corresponding amendment to the Articles of Association.”

The affirmative vote of the holders of a majority of the voting power of the Company represented at the Meeting in person or by proxy and voting thereon is necessary for approval of the reverse share split and to amend the Articles of Association accordingly.

The Board recommends that the shareholders vote “FOR” the approval of a reverse share split and the corresponding amendment to the Articles of Association as described.

The Company will carry out the reverse share split described in this Proposal One as soon as practicable following its approval by the shareholders of the Company, subject to receipt of any tax rulings and completion of any other conditions the Board determines are necessary.

PROPOSAL TWO

INCREASE IN THE COMPANY'S SHARE CAPITAL AND CORRESPONDING AMENDMENT TO ARTICLE 4.1 OF THE COMPANY'S ARTICLES OF ASSOCIATION

At the Meeting, we will propose that an increase in the share capital of the Company be approved.

Currently, the registered share capital of the Company is NIS 7,500,000, divided into 75,000,000 Ordinary Shares with a nominal value of NIS 0.10 each. Following the approval of Proposal One above, the registered share capital of the Company shall be NIS 7,500,000, divided into 75,000,000 ordinary shares with a nominal value of NIS 0.10 each. As of April 28, 2015, the Company had 534,900,507 Ordinary Shares issued and outstanding. As of the same date, the Company had an additional 80,303,004 Ordinary Shares reserved for purposes of our 2003 Share Incentive Plan and for the exercise of outstanding warrants and 104,000,000 Ordinary Shares reserved for purposes meeting our undertakings under the purchase agreement with Lincoln Park Capital Fund, LLC, dated May 2015, leaving only 30,796,489 authorized but unissued shares available for other purposes. Following the approval of Proposal One above, we will have only 3,079,649 authorized but unissued shares available for other purposes.

Under the Companies Law, a company may not issue shares in excess of its registered share capital. The Company wishes to have a sufficient reserve of authorized but unissued shares available for corporate purposes, including without limitation, offerings of its shares and additional grants of options to grantees eligible under its 2003 Share Incentive Plan or any other option plan which may be adopted by the Company in the future, and for potential strategic purposes.

Therefore, following the approval of Proposal One, we propose to increase the Company's share capital from NIS 7,500,000 divided into 75,000,000 ordinary shares of a nominal value of NIS 0.10 each to NIS 15,000,000 divided into 150,000,000 ordinary shares of nominal value NIS 0.10, effective immediately after the reverse share split becomes effective.

If the above proposed increase in the Company's share capital is approved by the shareholders of the Company following their approval of Proposal One above, then Article 4.1 of the Articles of Association of the Company shall be amended as of the effective date of the share split to read as follows:

"The registered capital of the Company is NIS 15,000,000 divided into 150,000,000 ordinary shares with a nominal value of NIS 0.10 each."

Our Board of Directors will present the following resolution for adoption at the Meeting:

"RESOLVED, that the Company's registered share capital be increased from NIS 7,500,000 divided into 75,000,000 ordinary shares of a nominal value of NIS 0.10 each to NIS 15,000,000 divided into 150,000,000 ordinary shares of a nominal value of NIS 0.10 each and that Article 4.1 of the Company's Articles of Association be amended accordingly."

The affirmative vote of the holders of a majority of the voting power of the Company represented at the Meeting in person or by proxy and voting thereon is necessary for approval of the reverse share split and to amend the Articles of Association accordingly.

The Board recommends that the shareholders vote "FOR" the approval of the proposed increase in registered share capital and corresponding amendment to the Company's Articles of Association.

WHERE TO FIND MORE INFORMATION

We are subject to the information reporting requirements of the U.S. Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), applicable to foreign private issuers and we fulfill the obligations with respect to those requirements by filing reports with the SEC. Our filings with the SEC may be inspected without charge at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available to the public from the SEC's website at www.sec.gov and the website of the Israel Securities Authority at www.magna.isa.gov.il. Shareholders may obtain information directly from the Company, whose registered office is at 19 Hartum St., Har Hotzvim, Jerusalem 9777518, Israel and whose telephone number is +972-2-548-9100.

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. Furthermore, our officers, directors and principal shareholders are exempt from the reporting and "short-swing" profit recovery provisions contained in Section 16 of the Exchange Act and the rules thereunder, with respect to their purchases and sales of securities. Lastly, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as United States companies whose securities are registered under the Exchange Act.

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN THIS PROXY STATEMENT OR THE INFORMATION FURNISHED TO YOU IN CONNECTION WITH THIS PROXY STATEMENT WHEN VOTING ON THE MATTERS SUBMITTED TO SHAREHOLDER APPROVAL HEREUNDER. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH INFORMATION THAT IS DIFFERENT FROM WHAT IS CONTAINED IN THIS DOCUMENT. THIS PROXY STATEMENT IS DATED APRIL 28, 2015. YOU SHOULD NOT ASSUME THAT THE INFORMATION CONTAINED IN THIS DOCUMENT IS ACCURATE AS OF ANY DATE OTHER THAN APRIL 28, 2015, AND THE MAILING OF THIS DOCUMENT TO SHAREHOLDERS SHOULD NOT CREATE ANY IMPLICATION TO THE CONTRARY.

Shareholders are urged to complete and return their proxies promptly in order to, among other things, ensure the presence of a quorum at the Meeting and to avoid the expense of additional solicitation. If the accompanying proxy is properly executed (including the indication of a vote on the proposed matters) and returned in time for voting, the shares represented thereby will be voted as indicated thereon. **IF NO SPECIFICATION IS MADE, AND EXCEPT AS OTHERWISE MENTIONED IN THIS PROXY STATEMENT, THE ORDINARY SHARES REPRESENTED BY THE PROXY WILL BE VOTED IN FAVOR OF THE PROPOSALS DESCRIBED IN THIS PROXY STATEMENT.**

By Order of the Board of Directors

BioLineRx Ltd.

April 28, 2015

BIOLINERX LTD.

**Proxy
for the Extraordinary General Meeting of Shareholders
to be held on May 31, 2015**

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 Extraordinary General Meeting of the shareholders of the Company which will be held at the offices of Yigal Arnon & Co., 1 Azrieli Center, Tel Aviv, Israel on May 31, 2015 at 11 a.m. (local time), and all adjournments and postponements thereof.

(CONTINUED AND TO BE SIGNED ON REVERSE SIDE)

SEE REVERSE SIDE

EXTRAORDINARY GENERAL MEETING OF SHAREHOLDERS OF

BIOLINERX LTD.

May 31, 2015

**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 as in this
example x**

1. TO APPROVE a 1-for-10 reverse share split of the Company's ordinary shares, effective on the date to be announced by the Company, and a corresponding amendment to the Articles of Association.

FOR	AGAINST	ABSTAIN	Name: _____
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Number of shares: _____
			Signature: _____
			Date: _____

2. TO APPROVE an increase in the Company's registered share capital from NIS 7,500,000 divided into 75,000,000 ordinary shares of a nominal value of NIS 0.10 each to NIS 15,000,000 divided into 150,000,000 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	AGAINST	ABSTAIN	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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.