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

THE SECURITIES EXCHANGE ACT OF 1934
For the month of June 2013
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 July 11, 2013 at 11:00 a.m. (Israel time) at the Registrant's office, 19 Hartum Street, Jerusalem, Israel to re-elect external directors and approve the grant of options to the external directors. 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: June 5, 2013

BIOLINERX LTD.

NOTICE OF EXTRAORDINARY GENERAL MEETING OF SHAREHOLDERS

July 11, 2013

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 the Company at 19 Hartum St., Har Hotzvim, Jerusalem, Israel, on July 11, 2013 at 11:00 a.m. for the following purposes:

To vote on the following proposals:

- 1. To re-elect Ms. Nurit Benjamini to serve on the Board of Directors of the Company for an additional three year term as external director, commencing as of July 6, 2013, and to approve the grant of options to her, as further described in the Proxy Statement.
- 2. To re-elect Dr. Avraham Molcho to serve on the Board of Directors of the Company for an additional three year term as external director, commencing as of July 6, 2013, and approve the grant of options to him, as further described in the Proxy Statement

Shareholders of record at the close of business on June 11, 2013 (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 close of business on July 9, 2013 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 5:00 p.m. EDT on July 3, 2013 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) -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, Israel, Attention: General Counsel.

By Order of the Board of Directors,

BioLineRx Ltd.

June 5, 2013

PROXY STATEMENT

BIOLINERX LTD. 19 Hartum St. Post Office Box 45158 Har Hotzvim, Jerusalem 9777518 Israel, 91450

EXTRAORDINARY GENERAL MEETING OF SHAREHOLDERS

July 11, 2013

The enclosed proxy is being solicited by our Board of Directors for use at an Extraordinary General Meeting of shareholders (the "Meeting") to be held on July 11, 2013 at 11:00 a.m., or at any adjournment thereof, at the offices of the Company at 19 Hartum St., Har Hotzvim, Jerusalem, 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 trade on June 11, 2013 (the "Record Date"). On the date hereof, we have outstanding and entitled to vote 227,144,838 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 trade 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 trade 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, appoint a proxy or vote by written ballot. A proxy from the holder of Ordinary Shares must be received by the Company no later than close of business on July 9, 2013 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 5:00 p.m. EDT on July 3, 2013 to be validly included in the tally of votes for the Meeting. Please follow the instructions on the proxy card.

Each of Proposals 1 and 2, pursuant to the Israeli Companies Law, 1999-5759 (the "Companies Law"), require the affirmative vote of a simple majority of shares present at the Meeting, in person or by proxy, and voting thereon, as long as either:

- the majority of shares that voted for the approval of the respective proposal includes at least majority of the shares held by non-controlling and non-interested shareholders voted at the meeting (excluding abstaining votes); or
- the total number of shares of non-controlling and non-interested shareholders that voted against the approval of the respective proposal does not exceed two percent of the aggregate voting rights in the company.

Shareholders are requested to notify us whether or not they have a "Personal Interest" in connection with Proposals 1 and 2 (please see the definition of the term "Personal Interest" with respect to each of these Proposals below under the description of such proposal). If any shareholder casting a vote in connection thereto does not notify us as to whether or not they have a Personal Interest with respect to Proposals 1 and 2, that shareholder's vote with respect to such proposal will be disqualified.

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 resolutions to be presented at the Meeting, unless you clearly vote against a specific resolution.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information regarding the beneficial ownership of our outstanding Ordinary Shares as of June 5, 2013, 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 227,144,838 Ordinary Shares outstanding as of June 5, 2013, and is determined in accordance with the rules of the SEC and generally includes any Ordinary Shares over which a person exercises sole or shared voting or investment power. For purposes of the table below, we deem shares subject to options or warrants that are currently exercisable or exercisable within 60 days of June 5, 3013, 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. Except where otherwise indicated, we believe, based on information furnished to us by such owners, that the beneficial owners of the Ordinary Shares listed below have sole investment and voting power with respect to such Ordinary Shares. 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	Class
Pan Atlantic Bank and Trust Limited(1)	28,703,966	12.3%
OrbiMed Israel Partners Limited Partnership(2)	26,666,670	12.2
Ayer Capital Management, LP(3)	15,734,270	6.8
Teva Pharmaceutical Industries Ltd.(4)	11,889,535	5.2

- (1) Based upon information provided by the shareholder in its Schedule 13D/A filed with the SEC on March 8, 2013. 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 principal executive offices of Pan Atlantic Bank and Trust Limited are at "Whitepark House," 1st Floor, Whitepark Road, St. Michael BB11135, Barbados, West Indies.
- (2) Based upon information provided by the shareholder in its Schedule 13G filed with the SEC on February 15, 2013. 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.
- (3) Includes the securities held by Ayer Capital Partners Master Fund, L.P., Ayer Capital Partners Kestrel Fund, LP and Epworth-Ayer Capital. Ayer Capital Management, LP is the investment manager of, and may be deemed to have beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended) of, the securities held by each of these entities. ACM Capital Partners, LLC and Jay Venkatesan each have voting control over Ayer Capital Management, LP. As a result, each of ACM Capital Partners, LLC and Jay Venkatesan, may be deemed to have beneficial ownership of the securities held by Ayer Capital Management, LP.
- (4) Based upon information provided by the shareholder in its Schedule 13G filed with the SEC on February 14, 2012. Teva is a publicly-traded Israeli company. Its principal executive offices are at 5 Basel Street, PO Box 3190, Petach Tikva 49131, Israel.

PROPOSAL 1

RE-ELECTION OF NURIT BENJAMINI AS ONE OF THE EXTERNAL DIRECTORS OF THE COMPANY, AND GRANT OF OPTIONS TO MS. BENJAMINI

Re-election as External Director

The Board of Directors has nominated Ms. Nurit Benjamini for re-election as one of the external directors of the Company, to serve for an additional term of three years commencing on July 6, 2013.

Under the Companies Law, Israeli companies whose shares have been offered to the public in or outside of Israel are required to appoint at least two external directors to serve on their board of directors for a three-year term. An external director must be elected by the shareholders. The initial term of office of an external director is three years and may be extend for two additional terms of three years each.

Each committee of the board of directors entitled to exercise any powers of the board is required to include at least one external director. The audit committee and the compensation committee must include all the external directors.

Under the Companies Law, a person may be appointed as an external director if he or she possesses "accounting and financial expertise" or "professional qualifications," and is otherwise qualified to serve as a director. At least one of the external directors of a company must possess "accounting and financial expertise." The conditions and criteria for possessing "accounting and financial expertise" or "professional qualifications" are determined under the Companies Law Regulations (Conditions and Criteria for Directors having Accounting and Financial Expertise and for Directors having Professional Qualifications) – 2005 (the "External Director Qualification Regulations")).

A person may not serve as an external director if he or she is a relative of a person controlling the Company, or if at the date of his or her appointment or within the prior two years, that person, or his or her relatives, partners, employers, or anyone to whom he or she reports directly or indirectly or entities under his or her control, are subject to, have or had any affiliation with the Company, with any entity or person controlling the Company or the time of appointment or within the prior two years is the Company or the person controlling the Company; and in a company, such as the Company, where there is no person or entity controlling it or a shareholder with a control block of at least 25% of the votes in a shareholders meeting, there is also no affiliation of the person with anyone whom, on the date of appointment, is either the chairperson of the board of directors of the company, the chief executive officer, a major shareholder who holds at least 5% of the issued and outstanding shares of the company or 5% of the votes at a shareholders meeting, or the most senior executive officer in the finance department of the company. Under the Companies Law, "affiliation" is defined in this context to include an employment relationship, a business or professional relationship maintained on a regular basis, control or service as an office holder. An office holder is defined in the Companies Law as any general manager, chief business manager, deputy general manager, vice general manager, or any manager assuming the responsibilities of any of these positions regardless of that person's title, as well as a director, or a manager directly subordinate to the general manager.

A person may not serve as an external director if that person's position or other activities create, or may create, a conflict of interest with the person's service as a director or may otherwise interfere with the person's ability to serve as an external director. Additionally, no person may serve as an external director if the person, the person's relative, spouse, employer or any entity controlling or controlled by the person, has a business or professional relationship with someone with whom affiliation is prohibited, even if such relationship is not maintained on a regular basis, excepting negligible relationships, or if such person received from the company any compensation as an external director in excess of what is permitted by the Companies Law. If at the time any external director is appointed, all members of the board who are not controlling shareholders or their relatives are of the same gender, then the external director to be appointed must be of the other gender.

<u>Term.</u> The first term of service of Ms. Benjamini is scheduled to expire on July 6, 2013. Following nomination by the Board of Directors, it is proposed to re-elect Ms. Benjamini as an external director pursuant to the Companies Law, to serve an additional three-year term until July 6, 2016.

Set forth below is certain information concerning the professional experience and qualifications of Ms. Benjamini:

Nurit Benjamini, MBA, has served as an external director on our Board of Directors and as the chairperson of our Audit Committee of our Board of Directors since 2010. In addition, Ms. Benjamini has served on our Investment Monitoring Committee since 2010 and on our Compensation Committee since 2012. From May 2011 to May 2013, Ms. Benjamini served as the Chief Financial Officer of Wixpress Ltd. Prior to that, from 2007 through 2011, she served as the Chief Financial Officer of CopperGate Communications Ltd. From 2000 through 2007, Ms. Benjamini served as the Chief Financial Officer of Coppugen Ltd. (Nasdaq: CGEN). Prior to that, from 1998 through 2000, Ms. Benjamini served as the Chief Financial Officer of Phone-Or Ltd. and from 1993 through 1998, Ms. Benjamini served as the Chief Financial Officer of Aladdin Knowledge Systems Ltd. Ms. Benjamini serves on the board of directors, and as chairperson of the audit committee, of Allot Communications Ltd. (Nasdaq:ALLT, TASE:ALLT). Ms. Benjamini holds a B.A. in Economics and Business and an M.B.A. in Finance, both from Bar Ilan University, Israel.

Ms. Benjamini has attested to the Board of Directors and the Company that she meets all the requirements in connection with the election of external directors of publicly traded companies under the Companies Law and the regulations promulgated thereunder.

The Board of Directors has reviewed the qualifications and expertise of Ms. Benjamini and has determined that Ms. Benjamini has the requisite "accounting and financial expertise" and the "professional qualifications" in accordance with the criteria set forth in the External Director Qualification Regulations.

If Ms. Benjamini should be unable to serve, the person named in the proxy shall vote the Ordinary Shares for the election of such other nominee as management may propose. The Company is not aware of any reason why Ms. Benjamini, if elected, should be unable to serve as director. The Company does not have any understanding or agreement with respect to the future election of Ms. Benjamini.

If re-elected pursuant to this Proposal 1, Ms. Benjamini 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 insurance coverage policy which provides coverage for all directors of the Company.

Grant of Options

Under the regulations promulgated under the Companies Law, where all or part of an external director's remuneration includes the grant of options, the number of options must be equal among the external directors and must be at least the same as the option grants made to other directors (who are neither controlling shareholders nor external directors). The grant of options to external directors requires the approval of the Compensation Committee, the Board of Directors and the shareholders.

Following approval by our Compensation Committee, our Board of Directors resolved, subject to shareholder approval, to grant Ms. Nurit Benjamini options to purchase 150,000 of the Company's Ordinary Shares (equivalent to 15,000 of the Company's ADSs). The options will vest in equal one-twelfth portions each quarter over the three-year period beginning July 6, 2013, provided Ms. Benjamini is still a director of the Company at the time of vesting. The exercise price will be NIS 0.61 (currently, approximately \$0.17 per share). The option grants will be made in accordance with terms of the Company's 2003 Share Incentive Plan. Ms. Benjamini is currently the beneficial owner of 50,000 of the Company's Ordinary Shares.

The Shareholders of the Company will be requested to adopt the following resolution at the Meeting:

"RESOLVED, to re-elect Ms. Nurit Benjamini as an external director for an additional three-year term commencing on July 6, 2013, and to grant her options to purchase 150,000 of the Company's Ordinary Shares (equivalent to 15,000 of the Company's ADSs) which shall have an exercise price of NIS 0.61 per share and which shall vest in equal one-twelfth portions over a three-year period commencing July 6, 2013 for so long as Ms. Benjamini continues to serve as an external director of the Company at the time of vesting."

Pursuant to the Companies Law, approval of this Proposal 1 requires the affirmative vote of a simple majority of shares present at the meeting, in person or by proxy, and voting thereon, as long as one of the following conditions is met:

- the majority of shares voted for the election of the external director includes at least a majority of the shares held by non-controlling and non-interested shareholders voted at the meeting, (excluding abstaining votes); or
- the total number of shares of non-controlling and non-interested shareholders voted against the election of the external director does not exceed two percent of the aggregate voting rights in the company.

As of the date hereof, the Company has no controlling shareholders within the meaning of the Companies Law.

Each shareholder voting at the meeting or prior thereto by means of the accompanying proxy card is requested to notify us if he, she or it has a Personal Interest in connection with this Proposal 1 as a condition for his or her vote to be counted with respect to this Proposal 1. If any shareholder casting a vote in connection hereto does not notify us if he, she or it has a Personal Interest with respect to this Proposal 1, his, her or its vote with respect to this Proposal 1 will be disqualified.

For this purpose, "Personal Interest" is defined as: (1) a shareholder's personal interest in the approval of an act or a transaction of the Company, including (i) the personal interest of his or her relative (which includes for these purposes any members of his/her (or his/her spouse's) immediate family); and (ii) a personal interest of a body corporate in which a shareholder or any of his/her aforementioned relatives serves as a director or the chief executive officer, owns at least 5% of its issued share capital or its voting rights or has the right to appoint a director or chief executive officer, but (2) excluding (i) a personal interest arising solely from the fact of holding shares in the Company or in a body corporate; or (ii) a personal interest that is not a result of connections with a controlling shareholder of the Company.

PROPOSAL 2

RE-ELECTION OF DR. AVRAHAM MOLCHO AS ONE OF THE EXTERNAL DIRECTORS OF THE COMPANY, AND GRANT OF OPTIONS TO DR. MOLCHO

Re-election as External Director

The Board of Directors has nominated Dr. Avraham Molcho for re-election as one of the external directors of the Company to serve for an additional term of three years commencing on July 6, 2013.

See Proposal 1 above for an overview of the requirements governing the appointment of external directors pursuant to the Companies Law.

If Dr. Molcho should be unable to serve, the person named in the proxy shall vote the Ordinary Shares for the election of such other nominee as management may propose. The Company is not aware of any reason why Dr. Molcho, if elected, should be unable to serve as director. The Company does not have any understanding or agreement with respect to the future election of Dr. Molcho.

<u>Term.</u> The first term of service of Dr. Molcho is scheduled to expire on July 6, 2013. Following nomination by the Board of Directors, it is proposed to re-elect Dr. Molcho as an external director pursuant to the Companies Law, to serve an additional three-year term until July 6, 2016.

Set forth below is certain information concerning the professional experience and qualifications of Dr. Molcho:

Avraham Molcho, M.D., MBA, has served as an external director on our Board of Directors and on our Audit Committee since 2010. In addition, Dr. Molcho has served on our Compensation Committee since 2012. Dr. Molcho is the Founder and Chairman of Biologic Design, a technology platform that encourages human antibody discoveries, and is a venture partner at Forbion Capital Partners, a Dutch life sciences venture capital firm. In 2012, he became the co-founder, CEO and director of DoxoCure, a privately-held company engaged in the manufacturing of liposome-based therapeutics. He currently serves on the board of directors of Circulite Inc. and NovoGI. 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 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. He 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 from Tel-Aviv University Recanati Business School.

Dr. Molcho has attested to the Board of Directors and the Company that he meets all the requirements in connection with the election of external directors of publicly traded companies under the Companies Law and the regulations promulgated thereunder.

The Board of Directors has reviewed the qualifications and expertise of Dr. Molcho and has determined that Dr. Molcho has the requisite "professional qualifications" in accordance with the criteria set forth in the External Director Qualification Regulations.

If re-elected pursuant to this Proposal 2, Dr. Molcho 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 insurance coverage policy which provides coverage for all directors of the Company.

Grant of Options

See Proposal 1 above for an overview of the requirements governing the granting of options to external directors pursuant to the Companies Law.

Following approval by our Compensation Committee, our Board of Directors resolved, subject to shareholder approval, to grant Dr. Avraham Molcho options to purchase 150,000 of the Company's Ordinary Shares (equivalent to 15,000 of the Company's ADSs). The options will vest in equal one-twelfth portions each quarter over the three-year period beginning July 6, 2013, provided Dr. Molcho is still a director of the Company at the time of vesting. The exercise price shall be NIS 0.61, (currently, approximately \$0.17 per share). The option grants will be made in accordance with terms of the Company's 2003 Share Incentive Plan. Dr. Molcho is currently the beneficial owner of 50,000 of the Company's Ordinary Shares.

The Shareholders of the Company will be requested to adopt the following resolution at the Meeting:

"RESOLVED, to re-elect Dr. Avraham Molcho as an external director for an additional three-year term commencing on July 6, 2103 and to grant him options to purchase 150,000 of the Company's Ordinary Shares (equivalent to 15,000 of the Company's ADSs) which shall have an exercise price of NIS 0.61 per share and which shall vest in equal one-twelfth portions over a three-year period commencing July 6, 2013 for so long as Dr. Molcho continues to serve as an external director of the Company at the time of vesting."

Pursuant to the Companies Law, approval of this Proposal 2 requires the affirmative vote of a simple majority of shares present at the meeting, in person or by proxy, and voting thereon, as long as one of the following conditions is met:

- the majority of shares voted for the election of the external director includes at least a majority of the shares held by non-controlling and non-interested shareholders voted at the meeting, (excluding abstaining votes); or
- the total number of shares of non-controlling and non-interested shareholders voted against the election of the external director does not exceed two percent of the aggregate voting rights in the company.

As of the date hereof, the Company has no controlling shareholders within the meaning of the Companies Law.

Each shareholder voting at the meeting or prior thereto by means of the accompanying proxy card is requested to notify us if he, she or it has a Personal Interest in connection with this Proposal 2 as a condition for his or her vote to be counted with respect to this Proposal 2. If any shareholder casting a vote in connection hereto does not notify us if he, she or it has a Personal Interest with respect to this Proposal 2, his, her or its vote with respect to this Proposal 2 will be disqualified.

For this purpose, "Personal Interest" is defined as: (1) a shareholder's personal interest in the approval of an act or a transaction of the Company, including (i) the personal interest of his or her relative (which includes for these purposes any members of his/her (or his/her spouse's) immediate family); and (ii) a personal interest of a body corporate in which a shareholder or any of his/her aforementioned relatives serves as a director or the chief executive officer, owns at least 5% of its issued share capital or its voting rights or has the right to appoint a director or chief executive officer, but (2) excluding (i) a personal interest arising solely from the fact of holding shares in the Company or in a body corporate; or (ii) a personal interest that is not a result of connections with a controlling shareholder of the Company.

Additional 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.

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 JUNE 5, 2013. YOU SHOULD NOT ASSUME THAT THE INFORMATION CONTAINED IN THIS DOCUMENT IS ACCURATE AS OF ANY DATE OTHER THAN JUNE 5, 2013, AND THE PROVISION 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.

June 5, 2013

Exhibit 2

BIOLINERX LTD.

Proxy
For an Extraordinary Meeting of Shareholders
To be held on July 11, 2013

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 the Company at 19 Hartum St., Har Hotzvim, Jerusalem, Israel, on July 11, 2013 at 11 a.m. (local time), and all adjournments and postponements thereof.

(CONTINUED AND TO BE SIGNED ON REVERSE SIDE)

SEE REVERSE SIDE

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. *IN ORDER FOR THIS PROXY TO BE VOTED, YOU MUST INDICATE WHETHER YOU HAVE A PERSONAL INTEREST UNDER EACH PROPOSAL* Please mark your vote as in this example FOR AGAINST ABSTAIN 1. To re-elect Ms. Nurit Benjamini to serve on the Board of Directors of the Company for an additional three year term as external director, commencing as of July 6, 2013, and to approve the grant to her of options to purchase 150,000 Ordinary Shares (equivalent to 15,000 ADSs), as further described in the Proxy Statement. Do you have a "personal interest" (as defined in the Proxy Statement)? ☐ Yes □ No Name: __ Number of shares: ____ 2. To re-elect Dr. Avraham Molcho to serve on the Board of Directors of the Company for an additional three year term as external director, commencing as of July 6, 2013, and Signature: _ approve the grant to him of options to purchase 150,000 Ordinary Shares (equivalent to 15,000 ADSs), as further Date: _ described in the Proxy Statement. Do you have a "personal interest" (as defined in the Proxy

Statement)?

□ Yes

 \square No

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.