

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 August 2014

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 the 2014 Annual General Meeting of Shareholders on September 21, 2014 at 11:00 a.m. (Israel time) at the Registrant's office, 19 Hartum Street, Jerusalem, Israel. Attached hereto as Exhibits 1 and 2 are, respectively, the Notice of Annual 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: August 14, 2014

BIOLINERX LTD.

**NOTICE OF
2014 ANNUAL GENERAL MEETING OF SHAREHOLDERS**

September 21, 2014

Notice is hereby given that the Annual 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 September 21, 2014 at 11:00 a.m. for the following purposes:

1. TO VOTE ON THE PROPOSAL TO RE-ELECT five directors to serve until the next Annual General Meeting of shareholders.
2. TO VOTE ON THE PROPOSAL TO APPROVE an initial grant of options to Dr. Sandra Panem, a member of the Board of Directors, as further described in the Proxy Statement.
3. TO VOTE ON THE PROPOSAL TO APPROVE the grant of options to all the directors, other than the external directors, as further described in the Proxy Statement.
4. TO VOTE ON THE PROPOSAL TO APPROVE an amendment to the Company’s Executive Compensation Policy with respect to directors’ and officers’ liability insurance, as further described in the Proxy Statement.
5. TO VOTE ON THE PROPOSAL TO RE-APPOINT Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, as the independent public auditors of the Company for the year ending December 31, 2014 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.
6. TO REVIEW the Company’s Annual Report and financial statements for the year ended December 31, 2013, and to transact such other business as may properly come before the Meeting.

Shareholders of record at the close of business on August 19, 2014 (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 September 19, 2014 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 September 17, 2014 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.

August 14, 2014

PROXY STATEMENT

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

2014 ANNUAL GENERAL MEETING OF SHAREHOLDERS

September 21, 2014

The enclosed proxy is being solicited by our Board of Directors for use at our Annual General Meeting of shareholders (the “**Meeting**”) to be held on September 21, 2014 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 August 19, 2014 (the “**Record Date**”). On the date hereof, we have outstanding and entitled to vote 341,150,507 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 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 September 19, 2014 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 September 17, 2014 to be validly included in the tally of votes for the Meeting.

Each of the Proposals 1, 2, 3 and 5, 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.

Pursuant to the Companies Law, Proposal 4 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 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 Proposal 4 (please see the definition of the term “Personal Interest” under Proposal 4). If any shareholder casting a vote in connection with Proposal 4 does not notify us as to whether or not he, she or it a Personal Interest with respect to with Proposal 4, 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 resolution 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 August 14, 2014, 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 341,150,507 Ordinary Shares outstanding as of August 14, 2014, 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 purposes of the table below, we deem shares subject to options or warrants that are currently exercisable or exercisable within 60 days of August 14, 2014, 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	Percent of Class
Pan Atlantic Bank and Trust Limited ⁽¹⁾	34,803,965	10.0%
OrbiMed Israel Partners Limited Partnership ⁽²⁾	27,350,000	7.7
Sabby Healthcare Volatility Master Fund, Ltd. ⁽³⁾	17,000,000	5.0

- (1) Includes 7,000,000 Ordinary Shares issuable upon exercise of outstanding warrants within 60 days of August 14, 2014. 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 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) Includes 16,000,000 Ordinary Shares issuable upon exercise of outstanding options within 60 days of August 14, 2014. Based upon information provided by the shareholder in its Schedule 13G/A filed with the SEC on February 13, 2014. 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) Based upon information provided by the shareholder in its Schedule 13G filed with the SEC on March 14, 2014. Sabby Healthcare Volatility Master Fund, Ltd. beneficially owns 17,000,000 of our Ordinary Shares; and Sabby Management, LLC and Hal Mintz each beneficially own 17,000,000 Ordinary Shares. Sabby Management, LLC and Hal Mintz do not directly own any Ordinary Shares, but each indirectly owns 17,000,000 ADS. Sabby Management, LLC, a Delaware limited liability company, indirectly owns 17,000,000 Ordinary Shares because it serves as the investment manager of Sabby Healthcare Volatility Master Fund, Ltd. Mr. Mintz indirectly owns 17,000,000 Ordinary Shares in his capacity as manager of Sabby Management, LLC.

COMPENSATION OF OFFICERS

Our compensation for our executive officers is derived from employment agreements and each executive officer's personal contribution to our management, operations and our success, and will be determined in accordance with our Executive Compensation Policy (the "**Compensation Policy**"), which was approved by our shareholders at our extraordinary general meeting of shareholders on December 19, 2013.

In accordance with the Companies Law and regulations promulgated thereunder, the following table presents information regarding compensation actually received by our five most highly paid executive officers during the year ended December 31, 2013.

Name and Position	Salary	Social benefits ⁽¹⁾	Bonuses	Value of Options Granted ⁽²⁾	All Other Compensation ⁽³⁾	Total
				<i>(in thousands of U.S. dollars)</i>		
Kinneret Savitsky, Chief Executive Officer	249	50	0	107	24	430
Philip Serlin, Chief Financial and Operating Officer	180	50	0	78	27	335
Moshe Phillip, Vice President of Medical Affairs	190	51	0	52	22	315
David Malek, Vice President of Business Development	152	39	0	40	61	292
Leah Klapper, Chief Scientific Officer	166	40	0	54	21	281

- (1) "Social Benefits" include payments to the National Insurance Institute, advanced education funds, managers' insurance and pension funds; vacation pay; and recuperation pay as mandated by Israeli law.
- (2) Consists of amounts recognized as share-based compensation expense on the Company's statement of comprehensive loss for the year ended December 31, 2013.
- (3) "All Other Compensation" includes automobile-related expenses pursuant to the Company's automobile leasing program, telephone, basic health insurance and holiday presents. In Mr. Malek's case, the amount includes the benefit of the Company forgiving the balance of a relocation loan, including accrued interest, in accordance with the terms of Mr. Malek's employment agreement.

PROPOSAL ONE RE-ELECTION OF DIRECTORS

Our Board of Directors has designated the persons named below for election to serve until the next Annual General Meeting of our shareholders. In the absence of instructions to the contrary, the persons named in the enclosed proxy will vote the Ordinary Shares represented thereby "For" the election of the directors listed below as a group. If any of such directors is unable to serve, the persons named in the proxy shall vote the Ordinary Shares for the election/re-election of such other nominee/director as the Board of Directors may propose. The following nominees have advised the Company that they will serve as directors upon election.

The following provides certain relevant information concerning the directors, including their principal occupations during at least the past five years.

<u>Director</u>	<u>Age</u>	<u>Principal Occupation</u>
Aharon Schwartz, Ph.D.	71	Dr. Schwartz has served as the Chairman of our Board of Directors since 2004. He served in a number of positions in Teva from 1975 through 2011, the most recent being Vice President, Head of Teva Innovative Ventures from 2008. Dr. Schwartz is currently chairman of the boards of numerous life science companies, including Yissum, DPharm Ltd., BioCancell Ltd., CureTech Ltd. and Biomas Ltd. Dr. Schwartz also serves as a consultant to Clal Biotechnology Industries Ltd. Dr. Schwartz received his Ph.D. in organic chemistry from the Weizmann Institute, his M.Sc. in organic chemistry from the Technion and a B.Sc. in chemistry and physics from the Hebrew University of Jerusalem. Dr. Schwartz recently received a second Ph.D. from the Hebrew University of Jerusalem in the history and philosophy of science.
Michael Anghel, Ph.D.	74	Dr. Anghel has served on our Board of Directors since 2010 and on our Investment Monitoring Committee since 2010. From 1977 to 1999, he led the Discount Investment Corporation Ltd. (of the IDB Group) activities in the fields of technology and communications. Dr. Anghel was instrumental in founding Tevel, one of the first Israeli cable television operators and later in founding Cellcom Israel Ltd. (NYSE:CEL), the second Israeli cellular operator. In 1999, he founded CAP Ventures, an advanced technology investment company. From 2004 to 2005, Dr. Anghel served as CEO of DCM, the investment banking arm of the Israel Discount Bank (TASE:DSCT). He has been involved in various technology enterprises and has served on the Boards of Directors of various major Israeli corporations and financial institutions including Elron Electronic Industries Ltd. (TASE:ELRN), Elbit Systems Ltd. (Nasdaq:ESLT, TASE:ESLT), Nice Systems (Nasdaq:NICE), Gilat Satellite Networks Ltd. (Nasdaq:GILT), American Israeli Paper Mills (now Hadera Paper Ltd. (AMEX:AIP)), Maalot (the Israeli affiliate of Standard and Poor's) and Hapoalim Capital Markets. He currently serves on the Boards of Directors of Partner Communications Company, Ltd. (Nasdaq:PTNR, TASE:PTNR), Syneron Medical Ltd. (Nasdaq:ELOS), Evogene Ltd. (Nasdaq:EVGN, TASE:EVGN), Dan Hotels Ltd. (TASE:DANH), Orbotech Ltd. (Nasdaq:ORBK, GSM:ORBK) and the Strauss Group Ltd. (TASE:STRS). He is also the chairman of the Center for Educational Technology. Prior to launching his business career, Dr. Anghel served as a full-time member of the Recanati Graduate School of Business Administration of the Tel Aviv University, where he taught finance and corporate strategy. He currently serves as Chairman of the Tel Aviv University's Executive Program. Dr. Anghel holds a B.A. (Economics) from the Hebrew University in Jerusalem and an MBA and Ph.D. (Finance) from Columbia University, New York.
B.J. Bormann, Ph.D.	55	Dr. Bormann has served on our Board of Directors since August 2013. Dr. Bormann currently serves as the CEO of Harbour Antibodies BV, a Netherlands based company that licenses transgenic mice that generate human antibodies. Dr. Bormann also serves as the Chief Business Advisor for NanoMedical Systems, Inc. of Austin, Texas that licenses a unique implantable drug delivery device. Prior to these current engagements, Dr. Bormann was Senior Vice President responsible for world-wide alliances, licensing and business development at Boehringer Ingelheim Pharmaceuticals, Inc. from 2007 to 2013. From 1996 to 2007, she served in a number of positions at Pfizer, Inc., the last one being Vice President of Pfizer Global Research and Development and world-wide Head of Strategic Alliances. Dr. Bormann serves on the board of directors of various companies, including Supportive Therapeutics, LLC, Harbour Antibodies and the Institute for Pediatric Innovation. Dr. Bormann received her Ph.D. in biomedical science from the University of Connecticut Health Center and her B.Sc. from Fairfield University in biology. Dr. Bormann completed postdoctoral training at Yale Medical School in the department of pathology.

Raphael Hofstein, Ph.D.

65 Dr. Hofstein has served on our Board of Directors since 2003, our Audit Committee since 2007 and our Compensation Committee since 2012. Dr. Hofstein has served as the President and Chief Executive Officer of MaRS Innovation (a commercialization company of the University of Toronto and 10 affiliated hospitals) since June 2009. From 2000 through June 2009, Dr. Hofstein was the President and Chief Executive Officer of Hadasit Ltd., or Hadasit, the technology transfer company of Hadassah Hospital. He has served as chairman of the board of directors of Hadasit since 2006. Prior to joining Hadasit, Dr. Hofstein was the President of Mindsense Biosystems Ltd. and the Business Unit Director of Ecogen Inc. and has held a variety of other positions, including manager of R&D and chief of immunochemistry at the International Genetic Science Partnership. Dr. Hofstein serves on the board of directors of numerous companies, including Hadasit Bio-Holdings Ltd. (TASE:HDST). Dr. Hofstein received his Ph.D. and M.Sc. from the Weizmann Institute of Science, and his B.Sc. in chemistry and physics from the Hebrew University of Jerusalem. Dr. Hofstein completed postdoctoral training at Harvard Medical School in both the departments of biological chemistry and neurobiology.

Sandra Panem, Ph.D.

68 Dr. Panem has served on our Board of Directors since February 2014. She is currently a managing partner at Cross Atlantic Partners, which she joined in 2000. From 1994 to 1999, Dr. Panem was President of Vector Fund Management, the then asset management affiliate of Vector Securities International. Prior thereto, Dr. Panem served as Vice President and Portfolio Manager for the Oppenheimer Global BioTech Fund, a mutual fund that invested in public and private biotechnology companies. Previously, she was Vice President at Salomon Brothers Venture Capital, a fund focused on early and later-stage life sciences and technology investments. Dr. Panem was also a Science and Public Policy Fellow in economic studies at the Brookings Institution, and an Assistant Professor of Pathology at the University of Chicago. Dr. Panem currently serves on the boards of directors of Acorda Therapeutics, Inc. (NASDAQ:ACOR), Labcyte, Inc., GenomeQuest, Inc. and MDx Medical, Inc. Previously, Dr. Panem served on numerous boards of public and private companies, including Martek Biosciences (Nasdaq:MATK), IBAH Pharmaceuticals (Nasdaq:IBAH), Confluent Surgical and Molecular Informatics. Dr. Panem received a B.S. in biochemistry and a Ph.D. in microbiology from the University of Chicago.

Our Articles of Association specify that the number of directors will be at least five but not more than ten. The current Board of Directors consists of seven members.

If re-elected, each of the directors listed above will continue to be party to an indemnification agreement with the Company in the form of indemnification letter approved by the shareholders in November, 2011 to be entered into by the Company with directors serving from time to time in such capacity, and will continue to be insured under the Company's directors and officers insurance coverage which provides coverage for all directors of the Company.

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

“RESOLVED, to re-elect Aharon Schwartz, Michael Anghel, B.J. Bormann, Raphael Hofstein and Sandra Panem as directors of the Company until the next Annual General Meeting of Shareholders.”

The affirmative vote of the holders of a majority of the voting power represented at the Meeting is necessary for the approval of the foregoing resolution.

PROPOSAL TWO
APPROVAL OF INITIAL GRANT OF OPTIONS TO DR. SANDRA PANEM

Pursuant to the Companies Law, our shareholders approved the Compensation Policy for our directors and officers in December 2013. A copy of the Compensation Policy is attached to our proxy statement for that meeting, which was filed as Exhibit 1 to our Report on Form 6-K furnished to the SEC on November 13, 2013. The Compensation Policy permits the grant of options to our directors, and any such grant requires the prior approval of our Compensation Committee, Board of Directors and shareholders, in that order.

Dr. Sandra Panem was first appointed to our Board of Directors on February 21, 2014 and, as described in Proposal 1, has been nominated to continue serving on the Board of Directors until the next Annual General Meeting. Following approval by our Compensation Committee, our Board of Directors resolved, subject to shareholder approval, to approve the grant to Dr. Panem of options to purchase 150,000 of our Ordinary Shares (equivalent to 15,000 of the Company's ADSs) (the "Options"). The exercise price of the Options will be equal to 100% of the closing price of the Ordinary Shares on the TASE on the date of the Meeting. The Options will vest in equal one-twelfth portions each quarter over the three-year period beginning on the date of February 21, 2014, provided in each case that Dr. Panem is still a director of the Company at the time of vesting. The option grant will be made in accordance with terms of the Company's 2003 Share Incentive Plan. The Compensation Committee and the Board of Directors determined that the proposed grant is (i) reasonable and appropriate as an initial grant of options to a new director, (ii) in accordance with the Compensation Policy and (iii) in the best interest of the Company and its shareholders, in light of Dr. Panem's qualifications and experience and her anticipated contributions to the advancement of the Company's activities.

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

"RESOLVED, to authorize the Board of Directors to grant Dr. Sandra Panem, a Director of the Company, options to purchase 150,000 Ordinary Shares (equivalent to 15,000 of the Company's ADSs) which shall have an exercise price equal to 100% of the closing price of the Ordinary Shares on the TASE on the date of the Meeting and which shall vest in equal one-twelfth portions over a three-year period commencing on February 21, 2014 for so long as Dr. Panem continues to serve as a director of the Company at the time of vesting."

Pursuant to the Companies Law, approval of the foregoing resolution requires the affirmative vote of a simple majority of shares present at the meeting, in person or by proxy, and voting thereon.

Our Board of Directors, with the exception of Dr. Panem who expresses no recommendation as to the vote on the above proposal, recommends a vote "FOR" approval of the proposed grant of options to Dr. Panem.

PROPOSAL THREE
APPROVAL OF GRANT OF OPTIONS TO ALL DIRECTORS OTHER THAN
THE EXTERNAL DIRECTORS

As stated in Proposal 2 above, our Compensation Policy permits the grant of options to our directors, and any such grant requires the prior approval of our Compensation Committee, Board of Directors and shareholders, in that order.

Following approval by our Compensation Committee, our Board of Directors resolved, subject to shareholder approval, to approve the option grants described below. The Compensation Committee and the Board of Directors are of the view that the activities of each of the directors on the Board and its committees bring value to the Company and contribute greatly to the Company and its activities. The Compensation Committee and the Board of Directors determined that the proposed grants are (i) reasonable and appropriate, (ii) in accordance with the Compensation Policy and (iii) in the best interest of the Company and its shareholders, in light of each director's role on the Board of Directors, his or her qualifications and experience and his or her past and anticipated contributions to the advancement of the Company's activities.

Shareholders are now being asked to approve such option grants as follows:

- Subject to his re-election as a member of the Board of Directors under Proposal 1, a grant to Aharon Schwartz of options to purchase 100,000 of the Company's Ordinary Shares (equivalent to 10,000 of the Company's ADSs);

- Subject to his re-election as a member of the Board of Directors under Proposal 1, a grant to Michael Anghel of options to purchase 100,000 of the Company's Ordinary Shares (equivalent to 10,000 of the Company's ADSs);
- Subject to her re-election as a member of the Board of Directors under Proposal 1, a grant to B.J. Bormann of options to purchase 100,000 of the Company's Ordinary Shares (equivalent to 10,000 of the Company's ADSs);
- Subject to his re-election as a member of the Board of Directors under Proposal 1, a grant to Raphael Hofstein of options to purchase 100,000 of the Company's Ordinary Shares (equivalent to 10,000 of the Company's ADSs); and
- Subject to her re-election as a member of the Board of Directors under Proposal 1, a grant to Sandra Panem of options to purchase 75,000 of the Company's Ordinary Shares (equivalent to 7,500 of the Company's ADSs);

With regard to each grant, the options will vest in equal one-twelfth portions each quarter over the three-year period beginning on the date of approval by the shareholders, provided in each case that the grantee is still a director of the Company at the time of vesting. The exercise price will be equal to 100% of the closing price of the Ordinary Shares on the TASE on the date of the Meeting. The option grants will be made in accordance with terms of the Company's 2003 Share Incentive Plan.

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

“RESOLVED, subject to his re-election as a member of the Board of Directors, to approve the grant of options under the Company's 2003 Share Incentive Plan to Aharon Schwartz to purchase 100,000 of the Company's Ordinary Shares (equivalent to 10,000 of the Company's ADSs) which shall have an exercise price equal to 100% of the closing price of the Ordinary Shares on the TASE on the date of the Meeting and which shall vest in equal one-twelfth portions over a three-year period commencing on the date of adoption of this resolution for so long as Dr. Schwartz continues to serve as a director of the Company at the time of vesting.

“RESOLVED, subject to his re-election as a member of the Board of Directors, to approve the grant of options under the Company's 2003 Share Incentive Plan to Michael Anghel to purchase 100,000 of the Company's Ordinary Shares (equivalent to 10,000 of the Company's ADSs) which shall have an exercise price equal to 100% of the closing price of the Ordinary Shares on the TASE on the date of the Meeting and which shall vest in equal one-twelfth portions over a three-year period commencing on the date of adoption of this resolution for so long as Dr. Anghel continues to serve as a director of the Company at the time of vesting.

“RESOLVED, subject to her re-election as a member of the Board of Directors, to approve the grant of options under the Company's 2003 Share Incentive Plan to B. J. Bormann to purchase 100,000 of the Company's Ordinary Shares (equivalent to 10,000 of the Company's ADSs) which shall have an exercise price equal to 100% of the closing price of the Ordinary Shares on the TASE on the date of the Meeting and which shall vest in equal one-twelfth portions over a three-year period commencing on the date of adoption of this resolution for so long as Dr. Bormann continues to serve as a director of the Company at the time of vesting.

“RESOLVED, subject to his re-election as a member of the Board of Directors, to approve the grant of options under the Company's 2003 Share Incentive Plan to Raphael Hofstein to purchase 100,000 of the Company's Ordinary Shares (equivalent to 10,000 of the Company's ADSs) which shall have an exercise price equal to 100% of the closing price of the Ordinary Shares on the TASE on the date of the Meeting and which shall vest in equal one-twelfth portions over a three-year period commencing on the date of adoption of this resolution for so long as Dr. Hofstein continues to serve as a director of the Company at the time of vesting.

“RESOLVED, subject to her re-election as a member of the Board of Directors, to approve the grant of options under the Company’s 2003 Share Incentive Plan to Sandra Panem to purchase 75,000 Ordinary Shares (equivalent to 7,500 of the Company’s ADSs) which shall have an exercise price equal to 100% of the closing price of the Ordinary Shares on the TASE on the date of the Meeting and which shall vest in equal one-twelfth portions over a three-year period commencing on the date of adoption of this resolution for so long as Dr. Panem continues to serve as a director of the Company at the time of vesting.”

Pursuant to the Companies Law, approval of the foregoing resolution requires the affirmative vote of a simple majority of shares present at the meeting, in person or by proxy, and voting thereon.

**PROPOSAL FOUR
APPROVAL OF AN AMENDMENT TO
THE COMPANY’S EXECUTIVE COMPENSATION POLICY**

Our Compensation Policy provides that the Compensation Committee review the Policy annually and propose amendments as deemed necessary. In light of our experience in administering the Compensation Policy, our Board of Directors, on recommendation of the Compensation Committee, proposes that the Policy be amended to clarify the procedure for approving the purchase of directors’ and officers’ liability insurance. It is proposed that the Compensation Policy be amended to expressly authorize the Company to purchase insurance policies (including run-off policies) to cover the liability of directors and officers that are currently in office and that shall be in office from time to time, including directors and officers that may have a controlling interest in the Company (if such becomes applicable in the future), within the following limits: (a) the premium for each policy period shall be not more than \$250,000; (b) the maximum aggregate limit of liability pursuant to the policies shall be not more than \$20 million for each insurance period; and (c) the maximum deductible shall be not more than \$250,000. Our Compensation Committee shall be authorized to increase the coverage purchased, and/or the premium paid for such policies, by up to 20% in any year, as compared to the previous year, or cumulatively for a number of years, without an additional shareholders’ approval to the extent permitted under the Companies Law.

The form of the proposed amendment to the Compensation Policy is set forth in **Annex A** to this proxy statement.

As required by Companies Law, our Compensation Committee recommended the approval of the foregoing amendment. Following the recommendation of the Compensation Committee, our Board of Directors approved the amendment and recommended that it be adopted by the shareholders.

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

“RESOLVED, to approve the amendment of the BioLineRx Ltd. Executive Compensation Policy in the form attached as Annex A to the Company’s proxy statement dated August 14, 2014.”

Pursuant to the Companies Law, approval of this Proposal 4 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 proposal 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 proposal 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 4 as a condition for the vote to be counted with respect to this Proposal 4. 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 4, the vote with respect to this Proposal 4 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 or the spouses of any such members of his or 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 a personal interest arising solely from the fact of holding shares in the Company or in a body corporate. Under the Companies Law, in the case of a person voting by proxy for another person, "Personal Interest" includes a personal interest of either of the proxy holder or the shareholder granting the proxy, whether or not the proxy holder has discretion how to vote. If you do not have a Personal Interest in the above matter being presented to the shareholders, you may assume that using the form of proxy enclosed herewith will not create a Personal Interest.

Our Board of Directors recommends a vote "FOR" approval of the Company's proposed amendment to the Compensation Policy.

The Companies Law allows our Board of Directors to approve the amendment to the Compensation Policy even if it was not approved by our shareholders; provided that our Compensation Committee and thereafter the Board of Directors have determined, based on detailed reasoning, and after having re-examined the Compensation Policy, that the approval of the amendment to the Compensation Policy, in spite of the objection of the Company's shareholders, is for the benefit of the Company.

PROPOSAL FIVE APPOINTMENT OF INDEPENDENT PUBLIC AUDITOR

Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Limited, have audited the Company's financial statements beginning with the financial statements for the year ended December 31, 2003. Except as the Company's auditors, there is no other affiliation between such firm and the Company.

The Companies Law requires shareholder approval of the appointment of the Company's independent public accountants for the fiscal year ending December 31, 2014. Our Board of Directors recommended and upon such recommendation, at the last Annual General Meeting, the Company's shareholders appointed the accounting firm of Kesselman & Kesselman, a member firm of PricewaterhouseCoopers International Limited, as our independent registered public accounting firm to perform the audit of our consolidated financial statements for the fiscal year ending December 31, 2013. The Board of Directors believes that the appointment of Kesselman & Kesselman as the Company's independent registered public accounting firm to perform the audit of the Company's consolidated financial statements for the fiscal year ending December 31, 2014 is appropriate and in the interests of the Company and its shareholders. Subject to the approval of this proposal, the Audit Committee of the Board of Directors will fix the compensation of Kesselman & Kesselman in accordance with the scope and nature of their services to the Company.

In compliance with the Companies Law, our Board of Directors will present the following resolution for adoption at the Meeting:

"RESOLVED, to appoint Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, as the independent public auditors of the Company for the year ending December 31, 2014 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."

The affirmative vote of the holders of a majority of the voting power represented at the Meeting is necessary for the approval of the foregoing resolution.

Our Board of Directors recommends a vote "FOR" approval of the proposed appointment of Kesselman & Kesselman as the independent public auditors of the Company for the year ending December 31, 2014 and the authorization of the Audit Committee of the Board of Directors to fix their compensation.

ITEM SIX
REVIEW OF THE COMPANY'S ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE
YEAR ENDED DECEMBER 31, 2013, AND TRANSACTION OF SUCH OTHER BUSINESS AS MAY
PROPERLY COME BEFORE THE MEETING

The audited financial statements of the Company for the fiscal year ended December 31, 2013 were filed together with the Company's Annual Report on Form 20-F, which was filed on March 17, 2014 with the SEC and is available at its website, www.sec.gov, and at the Magna website of the Israel Securities Authority ("ISA") at www.magna.isa.gov.il. The Company will hold a discussion with respect to the Annual Report and financial statements at the Meeting. This item will not involve a vote by the shareholders.

The Company's management is not aware of any other business to be transacted at the Meeting. However, if any other matters are properly presented to the Meeting, the persons named as proxies in the enclosed form of proxy will vote upon such matters in accordance with their best judgment.

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 ISA's website 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 AUGUST 14, 2014. YOU SHOULD NOT ASSUME THAT THE INFORMATION CONTAINED IN THIS DOCUMENT IS ACCURATE AS OF ANY DATE OTHER THAN AUGUST 14, 2014, 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.

August 14, 2014

ANNEX A

**PROPOSED AMENDMENT TO THE
BIOLINERX LTD.
EXECUTIVE COMPENSATION POLICY
(the "Compensation Policy")**

On page 16 of the Compensation Policy, the paragraph beginning "In addition, the Company has purchased an insurance policy..." shall be deleted in its entirety and replaced with the following:

"The Company is authorized to purchase insurance policies (including run-off policies) to cover the liability of directors and officers that are currently in office and that shall be in office from time to time, including directors and officers that may have a controlling interest in the Company (if such becomes applicable in the future), within the following limits: (a) the premium for each policy period shall be not more than \$250,000; (b) the maximum aggregate limit of liability pursuant to the policies shall be not more than \$20 million for each insurance period; and (c) the maximum deductible shall be not more than \$250,000. The Compensation Committee shall be authorized to increase the coverage purchased, and/or the premium paid for such policies, by up to 20% in any year, as compared to the previous year, or cumulatively for a number of years, without an additional shareholders' approval to the extent permitted under the Companies Law."

BIOLINERX LTD.

**For the Annual General Meeting of Shareholders
to be held on September 21, 2014**

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 Raziell 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 19 Hartum St., Har Hotzvim, Jerusalem, Israel, on September 21, 2014 at 11 a.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.

September 21, 2014

**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

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:

FOR AGAINST ABSTAIN

- | | | | |
|---------------------|--------------------------|--------------------------|--------------------------|
| 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 an initial grant to Sandra Panem of options to purchase 150,000 Ordinary Shares (equivalent to 15,000 ADSs), as further described in the Proxy Statement.

FOR AGAINST ABSTAIN

- | | | |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|

3. TO APPROVE the grant of options to each of the director nominees as follows:

FOR AGAINST ABSTAIN

- | | | | |
|---|--------------------------|--------------------------|--------------------------|
| a. A grant to Aharon Schwartz of options to purchase 100,000 Ordinary Shares (equivalent to 10,000 ADSs), as further described in the Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. A grant to Michael Anghel of options to purchase 100,000 Ordinary Shares (equivalent to 10,000 ADSs), as further described in the Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. A grant to B.J. Bormann of options to purchase 100,000 Ordinary Shares (equivalent to 10,000 ADSs), as further described in the Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. A grant to Raphael Hofstein of options to purchase 100,000 Ordinary Shares (equivalent to 10,000 ADSs), as further described in the Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. A grant to Sandra Panem of options to purchase 75,000 Ordinary Shares (equivalent to 7,500 ADSs), as further described in the Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



4. To approve the amendment of the BioLineRx Ltd. Executive Compensation Policy in the form attached as Annex A to the Company's proxy statement dated August 14, 2014.

FOR **AGAINST** **ABSTAIN**

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 **NO**

Name: _____

Number of shares: _____

5. 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, 2014 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**

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.