

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM S-8  
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

**BIOLINERX LTD.**

*(Exact Name of Registrant as Specified in its Charter)*

**State of Israel**  
*(State or other jurisdiction of  
incorporation or organization)*

**Not Applicable**  
*(I.R.S. Employer Identification No.)*

**BioLineRx Ltd.  
P.O. Box 45158  
19 Hartum Street  
Jerusalem 9777518, Israel  
(972) (2) 548-9100**  
*(Address of principal executive offices)*

**BioLineRx Ltd. 2003 Share Incentive Plan**  
*(Full title of the Plan)*

**Vcorp Services, LLC  
25 Robert Pitt Drive, Suite 204  
Monsey, New York 10952**

*(Name, Address, including zip code, and telephone number, including area code, of agent for service)*

Copies of all correspondence to:

**Anna T. Pinedo, Esq.  
James R. Tanenbaum, Esq.  
Morrison & Foerster LLP  
1290 Avenue of the Americas  
New York, New York 10104  
Tel: (212) 468-8000**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "large accelerated filer" and "accelerated filer" in Rule 12b-2 of the Exchange Act. (check one):

Large accelerated filer

Non-accelerated filer

(Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

## CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered <sup>(2)</sup>	Proposed maximum offering price per security	Proposed maximum aggregate offering price	Amount of registration fee
Ordinary Shares, par value NIS 0.01 per share, deposited as American Depositary Shares represented by American Depositary Receipts <sup>(1)</sup>	<u>16,000,000</u>	<u>\$ 0.17<sup>(3)</sup></u>	<u>\$ 2,720,000</u>	<u>\$ 317</u>

(1) American Depositary Shares (“ADSs”), evidenced by American Depositary Receipts (“ADRs”), issuable upon deposit of the ordinary shares registered hereby, par value NIS 0.01 per share (“Ordinary Shares”), of BioLineRx Ltd. (the “Company”) are registered on a separate registration statement on Form F-6 (File No. 333-175360). Each ADS represents ten (10) Ordinary Shares.

(2) Pursuant to Rule 416(a) and Rule 416(b) of the Securities Act of 1933, as amended, this registration statement also covers such indeterminate number of Ordinary Shares as may be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions pursuant to the terms of the BioLineRx Ltd. 2003 Share Incentive Plan (the “Plan”).

(3) Estimated pursuant to Rule 457(c) and 457(h) solely for purposes of calculating the aggregate offering price and the amount of the registration fee based upon the average of the high and low prices reported of the ADSs on The Nasdaq Capital Market on December 29, 2014, a date within five business days of the filing date.

## EXPLANATORY NOTE

BioLineRx Ltd. (the “Company”) previously filed a registration statement on Form S-8 (SEC File No. 333-176419) with the Securities and Exchange Commission (the “SEC”) in connection with the registration of an aggregate of 10,000,000 Ordinary Shares to be issued under the BioLineRx Ltd. 2003 Share Incentive Plan (the “Plan”). In September 2012, the Company filed another registration statement on Form S-8 (SEC File No. 333-183976) in connection with the registration of an additional 20,000,000 Ordinary Shares to be issued under the Plan. These previously-filed registration statements are referred to collectively herein as the “Prior Registration Statements.”

In accordance with General Instruction E to Form S-8, we are filing this registration statement on Form S-8 solely to register an additional 16,000,000 Ordinary Shares which may be issued upon exercise of options granted under the Plan over and above the number of Ordinary Shares issuable pursuant to the Plan that were registered under the Prior Registration Statements. Our Board of Directors approved the increase in the number of Ordinary Shares reserved for purposes of the Plan on November 10, 2014, and we then disclosed this increase in the Operating and Financial Review attached as Exhibit 3 to the Report on Form 6-K which we filed on November 10, 2014. Pursuant to General Instruction E to Form S-8, the contents of the Prior Registration Statements are hereby incorporated by reference in their entirety, with the exception of Items 3 and 8 of Part II of such Prior Registration Statements, each of which is amended and restated in its entirety herein.

The quantities of securities referred to in this registration statement refer to our Ordinary Shares. It should be noted that each of our ADSs which trade on the Nasdaq Capital Market is equivalent to 10 Ordinary Shares. For example, the additional 16,000,000 Ordinary Shares being registered pursuant to this registration statement are equivalent to 1,600,000 million ADSs.

## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### Item 3. Incorporation of Documents by Reference.

The SEC allows us to incorporate by reference our publicly filed reports into this prospectus, which means that information included in those reports is considered part of this prospectus. Information that we file with the SEC after the date of this prospectus will automatically update and supersede the information contained in this prospectus. We incorporate by reference the following documents filed with the SEC and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended:

- our Annual Report on Form 20-F filed with the SEC on March 17, 2014;
- our Reports of Foreign Issuer on Form 6-K filed on April 10, 2014; May 20 and 30, 2014; June 11, 16 and 23, 2014; July 16, 2014; August 6, 14 and 21, 2014; September 3, 17 and 22, 2014; October 31, 2014; November 3, 5 and 10, 2014; and December 8, 12, 16, 23 and 24, 2014; and
- the description of our ordinary shares set forth in our Registration Statement on Form 20-F, filed with the SEC on July 1, 2011.

All documents filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the filing of a post-effective amendment that indicates that all securities have been offered and sold or that deregisters all securities remaining unsold shall be deemed to be incorporated by reference in the registration statement and to be a part hereof from the date of filing of such documents (other than information that is furnished in such documents but deemed by the rules of the SEC not to have been filed). Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of the above documents, other than exhibits to such documents which are not specifically incorporated by reference therein. You should direct any requests for documents to:

BioLineRx Ltd.  
P.O. Box 45158, 19 Hartum Street  
Jerusalem 9777518, Israel  
Attention: Corporate Secretary  
Tel.: +972-2-548-9100  
e-mail: [info@BioLineRx.com](mailto:info@BioLineRx.com)

**Item 8. Exhibits.**

<b>Exhibit Number</b>	<b>Exhibit Description</b>	<b>Method of Filing</b>
3.1	Articles of Association of the Registrant, as amended.	Incorporated by reference to Exhibit 3.1 of the Registrant's Registration Statement on Form S-8 (No. 333-183976) filed on September 19, 2012.
3.2	Deposit Agreement dated as of July 21, 2011 among BioLineRx Ltd., The Bank of New York Mellon, as Depositary, and all Owners and Holders from time to time of American Depositary Shares issued thereunder.	Incorporated by reference to Exhibit 1 of the Registration Statement on Form F-6 (No. 333-175360) filed by the Bank of New York Mellon with respect to the Registrant's American Depositary Receipts.
3.3	Form of American Depositary Receipt; the Form is Exhibit A of the Form of Depositary Agreement.	Incorporated by reference to Exhibit 1 of the Registration Statement on Form F-6 (No. 333-175360) filed by the Bank of New York Mellon with respect to the Registrant's American Depositary Receipts.
4.1	BioLineRx Ltd. Amended and Restated 2003 Share Incentive Plan	Incorporated by reference to Exhibit 4.18 the Registrant's Annual Report on Form 20-F (No. 001-35223) filed on March 17, 2014.
5.1	Opinion of Yigal Arnon & Co., Jerusalem, Israel, as to the legality of the securities being registered	Filed herewith.
5.2	Opinion of Morrison & Foerster LLP, New York, New York, as to the legality of the securities being registered	Filed herewith.
23.1	Consent of Yigal Arnon & Co., Jerusalem, Israel (included in Exhibit 5.1)	Filed herewith.
23.2	Consent of Morrison & Foerster LLP, New York, New York (included in Exhibit 5.2)	Filed herewith.
23.3	Consent of Kesselman & Kesselman, Certified Public Accountants (Isr.), a member of PricewaterhouseCoopers International Limited, independent registered public accounting firm for the Registrant	Filed herewith.
24.1	Power of Attorney (included on signature page)	Filed herewith.

## Item 9. Undertakings.

The undersigned registrant hereby undertakes:

- (1) to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement;
- (i) to include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration statement (or most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the change in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and
- (iii) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

*provided, however*, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement;

- (2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Jerusalem, State of Israel, on December 31, 2014.

BIOLINERX LTD.

By:           /s/ Kinneret Savitsky            
Kinneret Savitsky, Ph.D.  
Chief Executive Officer

## POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each director and officer of BIOLINERX LTD. whose signature appears below hereby constitutes and appoints Kinneret Savitsky, Ph.D. and Philip Serlin, and each of them severally, acting alone and without the other, his/her true and lawful attorney-in-fact with full power of substitution or re-substitution, for such person and in such person's name, place and stead, in any and all capacities, to sign on such person's behalf, individually and in each capacity stated below, any and all amendments, including post-effective amendments to this Registration Statement, and to sign any and all additional registration statements relating to the same offering of securities of the Registration Statement that are filed pursuant to Rule 462(b) of the Securities Act of 1933 and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated:

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>          /s/ Kinneret Savitsky          </u> Kinneret Savitsky, Ph.D.	Chief Executive Officer (principal executive officer)	December 31, 2014
<u>          /s/ Philip Serlin          </u> Philip Serlin	Chief Financial and Operating Officer (principal financial officer and principal accounting officer)	December 31, 2014
<u>          /s/ Aharon Schwartz          </u> Aharon Schwartz, Ph.D.	Chairman of the Board	December 31, 2014
<u>          /s/ Michael J. Anghel          </u> Michael J. Anghel, Ph.D.	Director	December 31, 2014
<u>          /s/ Nurit Benjamini          </u> Nurit Benjamini	Director	December 31, 2014

<u>Name</u>	<u>Title</u>	<u>Date</u>
<hr/> <u>/s/ B.J. Bormann</u> B.J. Bormann, Ph.D.	Director	December 31, 2014
<hr/> <u>/s/ Raphael Hofstein</u> Raphael Hofstein, Ph.D.	Director	December 31, 2014
<hr/> <u>/s/ Avraham Molcho</u> Avraham Molcho, M.D.	Director	December 31, 2014
<hr/> <u>/s/ Sandra Panem</u> Sandra Panem, Ph.D.	Director	December 31, 2014
<hr/> <u>/s/ Miriam Katz</u> Vcorp Agent Services, Inc. Miriam Katz, Assistant Secretary	Authorized United States Representative	December 31, 2014

# YIGAL ARNON & Co.

L A W F I R M

Tel Aviv | December 31, 2014

BioLineRx Ltd.  
P.O. Box 45158  
19 Hartum Street  
Jerusalem 91450, Israel

Ladies and Gentlemen:

We have acted as Israeli counsel to BioLineRx Ltd. (the "Company"), a corporation organized under the laws of the State of Israel, in connection with the preparation of the Registration Statement on Form S-8 (the "Registration Statement"), to be filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act"), in connection with the registration under the Act of 16,000,000 ordinary shares, par value NIS 0.01 per share (the "Shares"), issuable under the BioLineRx Ltd. 2003 Share Incentive Plan (the "Plan"). The Shares may be represented by the Company's American Depositary Shares ("ADSs") under the Deposit Agreement dated as of July 21, 2011 (the "Deposit Agreement"), among the Company, The Bank of New York, as depositary, and the holders from time to time of the Company's ADSs.

In connection with this opinion, we have examined copies of the Articles of Association of the Company, as amended, and such corporate records, instruments, and other documents relating to the Company and such matters of Israeli law as we have considered necessary or appropriate for the purpose of rendering this opinion. In such examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity to authentic originals of all documents submitted to us as copies.

Based upon and subject to the foregoing, we are of the opinion that:

1. the Shares being registered pursuant to the Registration Statement have been duly authorized by the Company, and when issued in conformance with the terms and conditions of the Plan, will be validly issued, fully paid and non-assessable; and
2. the Deposit Agreement has been duly authorized, executed and delivered by the Company.

We are members of the Israeli bar, and the opinions expressed herein are limited to questions arising under the laws of the State of Israel. We express no opinion as to any matter relating to the laws of any jurisdiction other than the laws of Israel. This opinion is effective only as of its date, and we disclaim any obligation to advise of any subsequent change of law or fact.

Morrison & Foerster LLP may rely upon this opinion for the purpose of rendering their opinion dated December 31, 2014 with respect to certain matters concerning the Shares.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

/s/ Yigal Arnon & Co.

---

1 Azrieli Center, Tel Aviv 6702101, Israel | Tel: (+972) 3 608 7777 | Fax: (+972) 3 608 7724  
31 Hillel Street, Jerusalem 9458131, Israel | Tel: (+972) 2 623 9239 | Fax: (+972) 2 623 9233  
www.arnon.co.il | info@arnon.co.il

---



**MORRISON | FOERSTER**

250 WEST 55<sup>TH</sup> STREET  
NEW YORK, NY 10019-9601

TELEPHONE: 212.468.8000  
FACSIMILE: 212.468.7900

WWW.MOFO.COM

MORRISON & FOERSTER LLP  
NEW YORK, SAN FRANCISCO,  
LOS ANGELES, PALO ALTO,  
SACRAMENTO, SAN DIEGO,  
DENVER, NORTHERN VIRGINIA,  
WASHINGTON, D.C.  
TOKYO, LONDON, BRUSSELS,  
BEIJING, SHANGHAI, HONG KONG

December 31, 2014

BioLineRx Ltd.  
P.O. Box 45158  
19 Hartum Street  
Jerusalem 91450, Israel

Re: BioLineRx Ltd. — Offering of 16,000,000 Ordinary Shares

Ladies and Gentlemen:

We have acted as special U.S. counsel to BioLineRx Ltd. (the “Company”), a corporation organized under the laws of the State of Israel, in connection with the preparation of the Registration Statement on Form S-8 (the “Registration Statement”), to be filed with the Securities and Exchange Commission (“SEC”) under the Securities Act of 1933, as amended (the “Act”), in connection with the registration under the Act of 16,000,000 ordinary shares, par value NIS 0.01 per share (the “Shares”), issuable under the BioLineRx Ltd. 2003 Share Incentive Plan (the “Plan”). The Shares may be represented by the Company’s American Depositary Shares (“ADSs”) under the Deposit Agreement dated as of July 21, 2011 (the “Deposit Agreement”), among the Company, The Bank of New York, as depository, and the holders from time to time of the Company’s ADSs.

We have reviewed the Deposit Agreement and the American Depositary Receipts (“ADRs”) evidencing the ADSs and have considered such aspects of New York law as we have deemed relevant for purposes of the opinion set forth below. In connection with this opinion, we have examined such corporate records, documents, instruments, certificates of public officials and of the Company and such questions of law as we have deemed necessary for the purpose of rendering the opinions set forth herein.

In such examination, we have assumed the genuineness of all signatures and the authenticity of all items submitted to us as originals and the conformity with originals of all items submitted to us as copies.

Based on the foregoing, and subject to the further assumptions and qualifications set forth below, it is our opinion that:

1. Upon issuance by the Depository of the ADRs evidencing ADSs, against the deposit of the duly and validly issued Shares in accordance with the provisions of the Deposit Agreement, the ADRs will be duly and validly issued and the persons in whose names such ADRs are registered will be entitled to the rights specified therein and in the Deposit Agreement.
-

BioLineRx Ltd.  
December 31, 2014  
Page 2

2. The ADSs, when sold or delivered to the award holders in accordance with the Plan and the options or other awards granted thereunder, will entitle the holders of such ADSs to the rights specified in the Deposit Agreement.

Please note that we are opining only as to the matters expressly set forth herein, that no opinion should be inferred as to any other matter. We are opining herein as to the laws of the State of New York as in effect on the date hereof, and we express no opinion with respect to any other laws, rules or regulations. This opinion is based upon currently existing laws, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein. This opinion is being rendered solely in connection with the registration of the offering and sale of the Shares, as represented by ADSs, pursuant to the registration requirements of the Act.

We hereby consent to the use of this opinion as Exhibit 5.2 to the Registration Statement and to the reference to us under the caption "Legal Matters" in the prospectus included in the Registration Statement. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Act or the rules or regulations of the SEC thereunder.

Very truly yours,

/s/ Morrison & Foerster LLP  
Morrison & Foerster LLP

---



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 17, 2014, relating to the financial statements of BioLineRx Ltd., which appears in BioLineRx Ltd.'s Annual Report on Form 20-F for the year ended December 31, 2013.

Tel-Aviv, Israel  
December 31, 2014

/s/ Kesselman and Kesselman  
Kesselman & Kesselman  
Certified Public Accountants (Isr.)  
A member firm of PricewaterhouseCoopers International Limited

---

*Kesselman & Kesselman, Trade Tower, 25 Hamered Street, Tel-Aviv 68125, Israel,  
P.O Box 50005 Tel-Aviv 61500 Telephone: +972 -3- 7954555, Fax: +972 -3- 7954556, [www.pwc.com/il](http://www.pwc.com/il)*

---