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

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**FORM F-3**  
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

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**BIOLINERX LTD.**

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

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

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

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**BioLineRx Ltd.**  
**2 HaMa'ayan Street**  
**Modi'in 7177871, Israel**  
**(972) (8) 642-9100**  
*(Address and telephone number of Registrant's principal executive offices)*

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**Corporation Service Company**  
**1180 Avenue of the Americas, Suite 210**  
**New York, NY 10036**  
**(866) 403-5272**  
*(Name, Address, and telephone number of agent for service)*

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Copies of all correspondence to:

**Anna T. Pinedo, Esq.**  
**Brian Hirshberg, Esq.**  
**Mayer Brown LLP**  
**1221 Avenue of the Americas**  
**New York, NY 10020-1001**  
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**Barry Levenfeld, Adv.**  
**Adrian Daniels, Adv.**  
**Yigal Arnon & Co.**  
**22 Rivlin Street**  
**Jerusalem 94240, Israel**  
**Tel: (972) (2) 623-9220**

**Approximate date of commencement of proposed sale to the public:** From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.C. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or

additional classes of securities pursuant to Rule 413(b) of the Securities Act, check the following box.

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933:

Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2) (B) of the Securities Act.

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### CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount to be registered (2) | Proposed maximum aggregate price per share (3) | Proposed maximum aggregate offering price | Amount of registration fee |
|--|-----------------------------|--|---|----------------------------|
| Ordinary shares, par value NIS 0.10 per share (1)  | 957,549                     | \$ 0.46  | \$ 440,472.54                             | \$ 53.39                   |

- (1) American Depositary Shares issuable upon deposit of the ordinary shares registered hereby have been registered pursuant to a separate registration statement on Form F-6EF (File No. 333-218969). Each American Depositary Share represents one ordinary share.
- (2) The Registrant is registering for resale, from time to time, up to 957,549 American Depositary Shares relating to ordinary shares that may be acquired upon exercise of outstanding warrants issued to Kreos Capital V (Expert Fund) L.P.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) promulgated under the Securities Act, as amended, based on the average of the high and low sales prices of the ADSs on The Nasdaq Capital Market on December 20, 2018.

**The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the registration statement shall become effective on such date as the U.S. Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

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**The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale thereof is not permitted.**

**SUBJECT TO COMPLETION, DATED DECEMBER 26, 2018**



**957,549 American Depositary Shares Representing 957,549 Ordinary Shares**

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This prospectus relates to the resale by Kreos Capital V (Expert Fund) L.P., or the Selling Shareholder, of 957,549 American Depositary Shares, or ADSs, representing 957,549 of our ordinary shares, par value NIS 0.10 per share, or Ordinary Shares. The ADSs that may be offered for sale by the Selling Shareholder pursuant to this prospectus are issuable upon the exercise of a warrant issued to the Selling Shareholder on October 2, 2018, or the Warrant. Such registration does not mean that the Selling Shareholder will actually offer or sell the full number of the ADSs or any ADSs.

The Selling Shareholder may offer the ADSs pursuant to this prospectus for resale in a number of different ways in public or private transactions and at varying prices. The prices at which the Selling Shareholder may sell the ADSs will be determined by the prevailing market price for the ADSs or in privately negotiated transactions. See "Plan of Distribution" for more information about how the Selling Shareholder may sell the ADSs pursuant to this prospectus.

We will not receive any proceeds from the sale of the ADSs by the Selling Shareholder.

The ADSs are quoted on The Nasdaq Capital Market, or Nasdaq, under the symbol "BLRX." On December 20, 2018, the last reported sale price of the ADSs on the Nasdaq was US\$0.462 per ADS.

Our Ordinary Shares currently trade on the Tel Aviv Stock Exchange, or the TASE, under the symbol "BLRX." On December 25, 2018, the last reported sale price of our Ordinary Shares on the TASE was NIS 1.68, or \$0.45 per share (based on the exchange rate reported by the Bank of Israel on such date).

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**Investing in these securities involves a high degree of risk. See "Risk Factors" on page 3, as well as the "Risk Factors" from our most recent Annual Report on Form 20-F and other reports and information that we file with the U.S. Securities and Exchange Commission.**

**Neither the U.S. Securities and Exchange Commission, the Israel Securities Authority nor any state or other foreign securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

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**The date of this prospectus is December 26, 2018**

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Unless the context otherwise requires, all references to “BioLineRx,” “we,” “us,” “our,” the “Company” and similar designations refer to BioLineRx Ltd. and its consolidated subsidiaries.

You should rely only on the information contained in this prospectus and any free writing prospectus prepared by or on our behalf. We have not, and the Selling Shareholder has not, authorized anyone to provide you with information different from that contained in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. We are not offering to sell or solicit any security other than the ADSs offered by this prospectus. In addition, we are not offering to sell or solicit any securities to or from any person in any jurisdiction where it is unlawful to make this offer to or solicit an offer, nor is the Selling Shareholder seeking an offer to buy, from a person in that jurisdiction. The information contained in this prospectus is accurate as of the date on the front of this prospectus only, regardless of the time of delivery of this prospectus or of any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since that date.

We have obtained the statistical data, market data and other industry data and forecasts used throughout this prospectus from publicly available information and from reports we commissioned. We have not sought the consent of the sources to refer to the publicly available reports in this prospectus.

## SUMMARY

*This summary highlights selected information contained elsewhere in this prospectus and the documents incorporated by reference herein that we consider important. This summary does not contain all of the information you should consider before investing in the ADSs or our Ordinary Shares. You should read this summary together with the entire prospectus and the information incorporated by reference herein, including the risks related to our main therapeutic candidates, BL-8040 and AGI-134, our therapeutic product, BL-5010, our business, our industry, investing in the ADSs or our Ordinary Shares and our location in Israel, that we describe under "Risk Factors," and our consolidated financial statements and the related notes, which are incorporated by reference herein, before making an investment in the ADSs or our Ordinary Shares.*

### **Our Business**

We are a clinical stage biopharmaceutical development company focused on oncology and immunology. Our current development and commercialization pipeline consists of two clinical-stage therapeutic candidates – BL-8040, a novel peptide for the treatment of hematological malignancies, solid tumors and stem cell mobilization, and AGI-134, an immuno-oncology agent in development for solid tumors; and one therapeutic product – BL-5010. We generate our pipeline by systematically identifying, rigorously validating and in-licensing therapeutic candidates that we believe exhibit a high probability of therapeutic and commercial success. To date, except for BL-5010, none of our therapeutic candidates has been approved for marketing or sold commercially. Our strategy includes commercializing our therapeutic candidates through out-licensing arrangements with biotechnology and pharmaceutical companies. We also evaluate, on a case-by-case basis, co-development and similar arrangements and the commercialization of our therapeutic candidates independently.

In January 2016, we entered into a collaboration with MSD (a tradename of Merck & Co., Inc., Kenilworth, New Jersey), in the field of cancer immunotherapy and in September 2016, we entered into a collaboration with Genentech, Inc., a member of the Roche Group, in the field of cancer immunotherapy. In addition, since December 2014 we have been collaborating with Novartis for the co-development of selected Israeli-sourced novel drug candidates.

### **Our Product Development Approach**

We seek to develop a pipeline of promising therapeutic candidates that exhibit distinct advantages over currently available therapies or address unmet medical needs. Our resources are focused on advancing our therapeutic candidates through development and toward commercialization.

We have established close relationships with various universities, academic and research institutions and biotechnology companies that permit us to identify and select compounds at various stages of clinical and pre-clinical development. Our approach is consistent with our objective of proceeding only with therapeutic candidates that we believe exhibit a relatively high probability of therapeutic and commercial success.

### **Our Strategy**

Our objective is to become a leader in the development of novel therapeutics for the treatment of cancer. We have successfully advanced a number of therapeutic candidates into clinical development. We intend to commercialize our two clinical candidates, BL-8040 and AGI-134, and any future candidates through out-licensing or co-development arrangements with third parties who may perform any or all of the following tasks: completing development, securing regulatory approvals, securing reimbursement codes from insurance companies and Health Maintenance Organizations, manufacturing and/or marketing. If appropriate, we may also enter into co-development and similar arrangements with respect to any therapeutic candidate with third parties or commercialize a therapeutic candidate ourselves.

### **Our Corporate Information**

Our principal executive offices are located at 2 HaMa'ayan Street, Modi'in 7177871, Israel, and our telephone number is +972 (8) 642-9100. Our website is [www.biolinerx.com](http://www.biolinerx.com). Information contained in our website is not incorporated by reference into and does not constitute part of this prospectus.

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## FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference contains statements and information that involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms including “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “projects,” “should,” “will,” “would” and similar expressions intended to identify forward-looking statements, but these are not the only ways these statements are identified. Forward-looking statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. You should not put undue reliance on any forward-looking statements. Unless we are required to do so under U.S. federal securities laws or other applicable laws, we do not intend to update or revise any forward-looking statements. Readers are encouraged to consult the Company’s filings made on Form 6-K, which are periodically filed with or furnished to the U.S. Securities and Exchange Commission, or the SEC.

Factors that could cause our actual results to differ materially from those expressed or implied in such forward-looking statements include, but are not limited to:

- the initiation, timing, progress and results of our preclinical studies, clinical trials and other therapeutic candidate development efforts;
- our ability to advance our therapeutic candidates into clinical trials or to successfully complete our preclinical studies or clinical trials;
- our receipt of regulatory approvals for our therapeutic candidates, and the timing of other regulatory filings and approvals;
- the clinical development, commercialization and market acceptance of our therapeutic candidates;
- our ability to establish and maintain corporate collaborations;
- our ability to integrate new therapeutic candidates and new personnel;
- the interpretation of the properties and characteristics of our therapeutic candidates and of the results obtained with our therapeutic candidates in preclinical studies or clinical trials;
- the implementation of our business model and strategic plans for our business and therapeutic candidates;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our therapeutic candidates and our ability to operate our business without infringing the intellectual property rights of others;
- estimates of our expenses, future revenues, capital requirements and our needs for additional financing;
- risks related to changes in healthcare laws, rules and regulations in the United States or elsewhere;
- competitive companies, technologies and our industry; and
- statements as to the impact of the political and security situation in Israel on our business.

## **RISK FACTORS**

Investing in our Ordinary Shares or ADSs involves a high degree of risk. You should carefully consider the risk factors incorporated by reference to our most recent Annual Report on Form 20-F, our subsequent Current Reports on Form 6-K and the other information contained in this prospectus, as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the risk factors and other information contained in any accompanying prospectus supplement. See the section of this prospectus entitled “Where You Can Find More Information.” Any of the risks we describe in our documents incorporated by reference could cause our business, financial condition or operating results to suffer. The market price of our Ordinary Shares and ADSs could decline if one or more of these risks and uncertainties develop into actual events. You could lose all or part of your investment.

#### **USE OF PROCEEDS**

The Selling Shareholder will receive all of the proceeds from the sale of the ADSs offered by this prospectus. We will not receive any proceeds from the sale of the ADSs offered by this prospectus.

## SELLING SHAREHOLDER

On October 2, 2018, we entered into an agreement (the “Loan Agreement”) with the Selling Shareholder, as lender, to provide us with a loan in the amount of \$10 million. In connection with entering into the Loan Agreement, the Selling Shareholder received a Warrant to purchase 957,549 ADSs at an exercise price of \$0.9399 per ADS, subject to typical adjustments. The Warrant is exercisable for a period of ten years from the date of issuance. This prospectus relates to the possible resale by the Selling Shareholder of ADSs that have been or may be issued to the Selling Shareholder pursuant to the Warrant.

Up to 957,549 of the ADSs are being offered by this prospectus, all of which are being offered for resale by the Selling Shareholder. The Selling Shareholder, may, from time to time, offer and sell pursuant to this prospectus any or all of the ADSs being registered. The Selling Shareholder may sell some, all or none of its ADSs. We do not know how long the Selling Shareholder will hold the ADSs before selling them, and we currently have no agreements, arrangements or understandings with the Selling Shareholder regarding the sale of any of the ADSs.

The following table presents information regarding the Selling Shareholder and the number of Ordinary Shares underlying ADSs that it may offer and sell from time to time under this prospectus. The table is prepared based on information supplied to us by the Selling Shareholder, and reflects its holdings as of December 26, 2018. Neither the Selling Shareholder nor any of its affiliates has held a position or office, or had any other material relationship, with us or any of our predecessors or affiliates. Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Exchange Act. The percentage of Ordinary Shares underlying ADSs beneficially owned prior to the offering is based on 114,930,636 Ordinary Shares actually outstanding as of December 26, 2018.

| <u>Selling Shareholder</u>                        | <u>Beneficial Ownership Prior to this Offering</u> |                   | <u>Ordinary Shares to be Sold in this Offering</u> | <u>Beneficial Ownership After this Offering</u> |                   |
|---|--|-------------------|--|---|-------------------|
|   | <u>Ordinary Shares Owned</u>                       | <u>Percentage</u> |  | <u>Ordinary Shares Owned</u>                    | <u>Percentage</u> |
| Kreos Capital V (Expert Fund) L.P. <sup>(1)</sup> | 0  | 0%                | 957,549  | 957,549   | 0.83%             |

(1) The address of Kreos Capital V (Expert Fund) L.P., which is organized under the laws of Jersey, is 47 Esplanade, St Helier, Jersey.

## PLAN OF DISTRIBUTION

The Selling Shareholder may sell the ADSs being offered from time to time in one or more transactions:

- in the over-the-counter market;
- in negotiated transactions;
- through broker-dealers, who may act as agents or principals;
- through one or more underwriters on a firm commitment or best efforts basis;
- through the writing of options on shares, whether the options are listed on an options exchange or otherwise; or
- a combination of such methods of sale.

The Selling Shareholder may sell the ADSs at market prices prevailing at the time of sale, at prices related to those market prices or at negotiated prices. The Selling Shareholder may effect transactions by selling the ADSs directly to purchasers or to or through broker-dealers. The broker-dealers may act as agents or principals. The broker-dealers may receive compensation in the form of discounts, concessions or commissions from the Selling Shareholder or the purchasers of the ADSs. The compensation of any particular broker-dealer may be in excess of customary commissions. Because the Selling Shareholder and broker-dealers that participate with the Selling Shareholder in the distribution of the ADSs may be deemed to be “underwriters” within the meaning of Section 2(a)(11) of the Securities Act, the Selling Shareholder will be subject to the prospectus delivery requirements of the Securities Act. Any commissions received by them and any profit on the resale of ADSs may be deemed to be underwriting compensation.

The Selling Shareholder has advised us that it has not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of its securities.

The ADSs will be sold through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states the ADSs may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

We will bear all costs, expenses and fees in connection with the registration of the ADSs.

Upon notification to us by the Selling Shareholder that any material arrangement has been entered into with broker-dealers for the sale or purchase of ADSs, we will file a supplement to this prospectus, if required, disclosing:

- the name of the participating broker-dealers;
- the number of ADSs involved;
- the price at which such ADSs were sold;
- the commissions paid or discounts or concessions allowed to such broker-dealers, where applicable;
- that such broker-dealers did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus; and
- other facts material to the transaction.

## TAXATION

The material Israeli and U.S. federal income tax consequences relating to the purchase, ownership and disposition of any of the securities offered by this prospectus are incorporated by reference from our Annual Report on Form 20-F or other public filings we make with the SEC.

## DOCUMENTS INCORPORATED 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.

This prospectus incorporates by reference the documents listed below, all of which have been previously filed with the SEC:

- our Annual Report on Form 20-F for the year ended December 31, 2017, filed on March 6, 2018; and
- our Current Reports on Form 6-K filed on January 17, 2018, January 19, 2018, January 23, 2018, February 27, 2018, March 6, 2018, March 12, 2018, March 26, 2018, April 16, 2018, April 24, 2018, May 16, 2018, May 17, 2018, May 22, 2018, June 18, 2018, July 30, 2018, August 1, 2018, August 7, 2018, August 13, 2018, October 3, 2018, October 11, 2018, October 19, 2018, October 22, 2018, November 8, 2018, November 20, 2018, December 4, 2018 and December 11, 2018.

We also incorporate by reference into this prospectus additional documents that we may file with the SEC under sections 13(a), 13(c), 14 or 15(d) of the Exchange Act from the date of this prospectus until we have sold all of the securities to which this prospectus relates or the offering is otherwise terminated.

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.  
Modi'in Technology Park  
2 HaMa'ayan Street  
Modi'in 7177871, Israel  
Attention: Corporate Secretary  
Tel.: +972-8-642-9100  
e-mail: info@BioLineRx.com

The information relating to us contained in this prospectus is not comprehensive and should be read together with the information contained in the incorporated documents. Descriptions contained in the incorporated documents as to the contents of any contract or other document may not contain all of the information which is of interest to you. You should refer to the copy of such contract or other document filed as an exhibit to our filings.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form F-3 under the Securities Act, relating to this offering of securities. This prospectus does not contain all of the information contained in the registration statement. The rules and regulations of the SEC allow us to omit certain information from this prospectus that is included in the registration statement. Statements made in this prospectus concerning the contents of any contract, agreement or other document are summaries of all material information about the documents summarized, but are not complete descriptions of all terms of these documents. If we filed any of these documents as an exhibit to the registration statement, you may read the document itself for a complete description of its terms.

In addition, we file reports with, and furnish information to, the SEC. You may read and copy the registration statement and any other documents we have filed at the SEC, including any exhibits and schedules, at the SEC's public reference room at 100 F Street N.E., Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for further information on this public reference room. As a foreign private issuer, all documents which were filed after September 24, 2010 on the SEC's EDGAR system are available for retrieval on the SEC's website at [www.sec.gov](http://www.sec.gov). These SEC filings are also available to the public on the Israel Securities Authority's, or ISA, Magna website at [www.magna.isa.gov.il](http://www.magna.isa.gov.il) and from commercial document retrieval services. We also generally make available on our own web site ([www.biolinerx.com](http://www.biolinerx.com)) our quarterly and year-end financial statements as well as other information.

In addition, since our Ordinary Shares are traded on the TASE, in the past we filed Hebrew language periodic and immediate reports with, and furnished information to, the TASE and the ISA, as required under Chapter Six of the Israel Securities Law, 1968. On August 31, 2011, our shareholders approved a transition solely to U.S. reporting standards after listing the ADSs on Nasdaq, in accordance with an applicable exemption under the Israel Securities Law. Copies of our SEC filings and submissions are now submitted to the ISA and the TASE. Such copies can be retrieved electronically through the MAGNA distribution site of the ISA ([www.magna.isa.gov.il](http://www.magna.isa.gov.il)) and the TASE website ([maya.tase.co.il](http://maya.tase.co.il)).

We maintain a corporate website at [www.biolinerx.com](http://www.biolinerx.com). Information contained on, or that can be accessed through, our website does not constitute a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

## **EXPERTS**

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 20-F for the year December 31, 2017 have been so incorporated in reliance on the report of Kesselman and Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

## **LEGAL MATTERS**

Certain matters concerning this offering will be passed upon for us by Mayer Brown LLP, New York, New York. The validity of the securities being offered by this prospectus and other legal matters concerning this offering relating to Israeli law will be passed upon for us by Yigal Amon & Co., Jerusalem, Israel.

## ENFORCEABILITY OF CIVIL LIABILITIES

We are incorporated under the laws of the State of Israel. Service of process upon us and upon our directors and officers and the Israeli experts named in this registration statement, substantially all of whom reside outside of the United States, may be difficult to obtain within the United States. Furthermore, because substantially all of our assets and substantially all of our directors and officers are located outside the United States, any judgment obtained in the United States against us or any of our directors and officers may not be collectible within the United States.

We have been informed by our legal counsel in Israel, Yigal Amon & Co., that it may be difficult to assert U.S. securities law claims in original actions instituted in Israel. Israeli courts may refuse to hear a claim based on a violation of U.S. securities laws because Israel is not the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law.

Subject to specified time limitations and legal procedures, Israeli courts may enforce a United States judgment in a civil matter which, subject to certain exceptions, is non-appealable, including judgments based upon the civil liability provisions of the Securities Act and the Exchange Act and including a monetary or compensatory judgment in a non-civil matter, provided that among other things:

- the judgments are obtained after due process before a court of competent jurisdiction, according to the laws of the state in which the judgment is given and the rules of private international law currently prevailing in Israel;
  - the prevailing law of the foreign state in which the judgments were rendered allows for the enforcement of judgments of Israeli courts;
  - adequate service of process has been effected and the defendant has had a reasonable opportunity to be heard and to present his or her evidence;
  - the judgments are not contrary to public policy of Israel, and the enforcement of the civil liabilities set forth in the judgment is not likely to impair the security or sovereignty of Israel;
  - the judgments were not obtained by fraud and do not conflict with any other valid judgments in the same matter between the same parties;
- an action between the same parties in the same matter is not pending in any Israeli court at the time the lawsuit is instituted in the foreign court; and
- the judgment is enforceable according to the laws of Israel and according to the law of the foreign state in which the relief was granted.

Generally, an Israeli court will not enforce a foreign judgment if the motion for enforcement was filed more than five years after the date of its award in the United States, unless Israel and the United States have agreed otherwise on a different period, or if an Israeli court finds exceptional reasons justifying the delay.

If a foreign judgment is enforced by an Israeli court, it generally will be payable in Israeli currency, which can then be converted into non-Israeli currency and transferred out of Israel. Under existing Israeli law, a foreign judgment payable in foreign currency may be paid in Israeli currency at the rate of exchange in force on the date of the payment. A judgment debtor may also make payment in foreign currency. Pending collection, the amount of the judgment of an Israeli court stated in Israeli currency ordinarily will be linked to the Israeli consumer price index plus interest at the annual statutory rate set by Israeli regulations prevailing at the time. Judgment creditors must bear the risk of unfavorable exchange rates.



December 26, 2018

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**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 8. Indemnification of Directors, Officers and Employees**

An Israeli company may indemnify an office holder in respect of certain liabilities either in advance of an event or following an event provided that a provision authorizing such indemnification is inserted in its articles of association. Our Articles of Association contain such a provision. An undertaking provided in advance by an Israeli company to indemnify an office holder with respect to a financial liability imposed on him or her in favor of another person pursuant to a judgment, settlement or arbitrator's award approved by a court must be limited to events that, in the opinion of the Board of Directors, can be foreseen based on the company's activities when the undertaking to indemnify is given, and to an amount or a criteria determined by the Board of Directors as reasonable under the circumstances, and such undertaking must detail the abovementioned events and amount or criteria.

In addition, a company may indemnify an office holder against the following liabilities incurred for acts performed as an office holder:

- reasonable litigation expenses, including attorneys' fees, incurred by the office holder as a result of an investigation or proceeding instituted against him or her by an authority authorized to conduct such investigation or proceeding, provided that (i) no indictment was filed against such office holder as a result of such investigation or proceeding; and (ii) no financial liability, such as a criminal penalty, was imposed upon him or her as a substitute for the criminal proceeding as a result of such investigation or proceeding, or, if such financial liability was imposed, it was imposed with respect to an offense that does not require proof of criminal intent; and
- reasonable litigation expenses, including attorneys' fees, incurred by the office holder or imposed by a court in proceedings instituted against him or her by the company, on its behalf or by a third party or in connection with criminal proceedings in which the office holder was acquitted or as a result of a conviction for a crime that does not require proof of criminal intent.

An Israeli company may insure a director or officer against the following liabilities incurred for acts performed as a director or officer:

- a breach of duty of care to the company or to a third party, including a breach arising out of the negligent conduct of an office holder;
- a breach of duty of loyalty to the company, provided the director or officer acted in good faith and had a reasonable basis to believe that the act would not prejudice the interests of the company; and
- financial liabilities imposed on the office holder for the benefit of a third party.

An Israeli company may not indemnify or insure an office holder against any of the following:

- a breach of duty of loyalty, except to the extent that the office holder acted in good faith and had a reasonable basis to believe that the act would not prejudice the company;
  - a breach of duty of care committed intentionally or recklessly, excluding a breach arising out of the negligent conduct of the office holder;
  - an act or omission committed with intent to derive illegal personal benefit;
  - a fine levied against the office holder; or
  - against liabilities incurred by the office holder under an administrative proceeding initiated by the ISA under Chapters VIII-3, VIII-4 or IX-1 of the Israeli Securities Law (excluding indemnification or insurance for payment imposed on the office holder in favor of an injured party under such administrative procedure or expenses that the office holder incurred in connection with such administrative procedure).
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Under the Companies Law, indemnification and insurance of office holders must be approved by our compensation committee and our Board of Directors and, in respect of our directors and/or our chief executive officer, by our shareholders. Our directors and officers are currently covered by a directors and officers' liability insurance policy with respect to specified claims. To date, no claims for liability have been filed under this policy. In addition, we have entered into indemnification agreements with each of our directors and officers and the directors and officers of our subsidiaries providing them with indemnification for liabilities or expenses incurred as a result of acts performed by them in their capacity as our or our subsidiaries' directors and officers. This indemnification is limited both in terms of amount and coverage. In the opinion of the SEC, however, indemnification of directors and office holders for liabilities arising under the Securities Act is against public policy and therefore unenforceable.

#### **Item 9. Exhibits and Financial Statement Schedules**

(a) ***Exhibits***

See Exhibit Index.

The agreements included as exhibits to this registration statement contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties were made solely for the benefit of the other parties to the applicable agreement and (i) were not intended to be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate; (ii) may have been qualified in such agreement by disclosures that were made to the other party in connection with the negotiation of the applicable agreement; (iii) may apply contract standards of "materiality" that are different from "materiality" under the applicable securities laws; and (iv) were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement.

The registrant acknowledges that, notwithstanding the inclusion of the foregoing cautionary statements, the registrant is responsible for considering whether additional specific disclosures of material information regarding material contractual provisions are required to make the statements in this registration statement not misleading.

(b) ***Financial Statement Schedules***

All schedules have been omitted because either they are not required, are not applicable or the information is otherwise set forth in the consolidated financial statements and related notes thereto.

#### **Item 10. Undertakings**

(a) 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 provisions described in Item 8 hereof, 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.

(b) 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 the most recent post-effective amendment thereof) that, 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

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**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 F-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Modi'in, State of Israel on this 26 day of December, 2018.

BIOLINERX LTD.

By: /s/ Philip A. Serlin  
Philip A. Serlin  
Chief Executive Officer

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## POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTED, that each director and officer of BIOLINERX LTD. whose signature appears below hereby appoints Philip A. Serlin and Mali Zeevi, 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 U.S. 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 by the following persons in the capacities and on the dates indicated:

| Name   | Title  | Date              |
|--|--|-------------------|
| <u>/s/ Philip A. Serlin</u><br>Philip A. Serlin  | Chief Executive Officer<br>(principal executive officer)                                     | December 26, 2018 |
| <u>/s/ Mali Zeevi</u><br>Mali Zeevi  | Chief Financial Officer<br>(principal financial officer and principal<br>accounting officer) | December 26, 2018 |
| <u>/s/ Aharon Schwartz</u><br>Aharon Schwartz, Ph.D.                                   | Chairman of the Board  | December 26, 2018 |
| <u>/s/ Michael J. Anghel</u><br>Michael J. Anghel, Ph.D.                               | Director   | December 26, 2018 |
| <u>/s/ Nurit Benjamini</u><br>Nurit Benjamini  | Director   | December 26, 2018 |
| <u>B.J. Bormann, Ph.D.</u>   | Director   |                   |
| <u>/s/ Raphael Hofstein</u><br>Raphael Hofstein, Ph.D.                                 | Director   | December 26, 2018 |
| <u>/s/ Avraham Molcho</u><br>Avraham Molcho, M.D.                                      | Director   | December 26, 2018 |
| <u>/s/ Sandra Panem</u><br>Sandra Panem, Ph.D.   | Director   | December 26, 2018 |
| <u>/s/ Dwight Coots</u><br>Corporation Service Company<br>Dwight Coots, Vice President | Authorized United States Representative  | December 26, 2018 |

## EXHIBIT INDEX

| <b>Exhibit<br/>Number</b> | <b>Exhibit Description</b>   |
|---------------------------|--|
| <a href="#">2.1</a>       | <a href="#">Articles of Association of the Registrant, as amended July 5, 2017; incorporated by reference from Exhibit 2.1 of the Registration Statement on Form F-3 (No. 333-222332) filed by the Registrant on December 28, 2017.</a>  |
| <a href="#">2.2</a>       | <a href="#">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 from Exhibit 1 of the Registration Statement on Form F-6EF (No. 333-218969) filed by The Bank of New York Mellon.</a> |
| <a href="#">2.3</a>       | <a href="#">Form of American Depositary Receipt; incorporated by reference from Exhibit A of the form of Deposit Agreement filed as Exhibit 1 of the Registration Statement on Form F-6EF (No. 333-218969) filed by The Bank of New York Mellon.</a>   |
| <a href="#">5.1</a>       | <a href="#">Opinion of Yigal Amon &amp; Co., Israeli counsel to the Registrant.</a>  |
| <a href="#">5.2</a>       | <a href="#">Opinion of Mayer Brown LLP, U.S. counsel to the Registrant.</a>  |
| <a href="#">10.1</a>      | <a href="#">Warrant Agreement between BioLineRx Ltd. and Kreos Capital V (Expert Fund) L.P.; incorporated by reference from the Registrant's Form 6-K filed on October 3, 2018.</a>  |
| <a href="#">23.1</a>      | <a href="#">Consent of Kesselman &amp; Kesselman, Certified Public Accountant (Isr.), a member of PricewaterhouseCoopers International Limited, independent registered public accounting firm for the Registrant.</a>  |
| <a href="#">23.2</a>      | <a href="#">Consent of Opinion of Yigal Amon and Co., Israeli counsel to the Registrant (included in Exhibit 5.1).</a>   |
| <a href="#">23.3</a>      | <a href="#">Consent of Opinion of Mayer Brown LLP, U.S. counsel to the Registrant (included in Exhibit 5.2).</a>   |

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**YIGAL ARNON & Co.**  
LAW FIRM



|                                |                    |                     |                    |                        |                           |
|--------------------------------|--------------------|---------------------|--------------------|------------------------|---------------------------|
| <b>Yigal Arnon (1929-2014)</b> | Yarom Romem        | Hila Roth           | Rinat Michael      | Eti Elbaz              | Avraham Schoen            |
| Dror Vigdor                    | Adam Spruch        | Neta Goshen         | Adi Attar          | Elad Morgenstern       | Or Lev                    |
| Amalia Meshi                   | Yuval Bargil       | Roy Masuri          | Ivor Krumholtz     | Ron Ashkenazi          | Or Karabaki               |
| Amnon Lorch                    | Eliran Furman      | Daphna Livneh       | Daniella Milner    | Dafna Raz              | Elan Loshinsky            |
| Hagai Shmueli                  | Eran Lempert       | Tamar Gilboa        | Harel Sinai        | Sara Haber             | Eyal Sharf                |
| Barry Levenfeld                | Ofir Levy          | Yael Hoefler        | Amos Oseasohn      | Ilan Akouka            | Ron Shaham                |
| David H. Schapiro              | Daniel Green       | Sagi Schiff         | Guy Kortany        | Shlomit Bukaya         | Ariel Even                |
| Hagit Bavly                    | Hanital Belinson   | Lilach Grimberg     | Goor Koren         | Yehonatan Cohen        | Daniel Gazit              |
| Orna Sasson                    | Yoheved Novogroder | Adi Samuel          | Adi Daniel         | David Shmulevitz       | Josh Hauser               |
| Barak Tal                      | Oren Roth          | Netanella Treistman | Miriam Friedmann   | Tair Cherbakovsky      | Ron Jacoby                |
| Shiri Shaham                   | Dror Varsano       | Daniel Damboritz    | Itamar Lippner     | Ophir Dagan            | Eitan Cohen               |
| Doron Tamir                    | Odelia Sidi        | Shlomi Schneider    | Roni Osborne       | Yael Meretyk Hanan     | Itai Guttel               |
| Daniel Abarbanel               | Shira Lahat        | Alona Toledano      | Ortal Zanzuri      | Nataly Damary          |                           |
| David Osborne                  | Ido Chitman        | Elad Offek          | Reut Sasson        | Shiran Glitman         |                           |
| Gil Oren                       | Aner Hefetz        | Yuval Shamir        | Roey Sasson        | Michael Rosenblit      |                           |
| Ronit Amir                     | David Akrish       | Dana Heller         | Shir Eshkol        | Dani Weissberg         |                           |
| Orly Tsioni                    | Nir Rosner         | Yulia Lazbin        | Nir Rodnizky       | Lareine Khoury         |                           |
| Mordehai Baicz                 | Assaf Mesica       | Joshua Lieberman    | Noa Slavin         | Nohar Hadar            |                           |
| Barak Platt                    | Liron Hacohen      | Liat Pillersdorf    | Guy Fatal          | Shirley Youser         |                           |
| Benjamin Horef                 | Guy Fuhrer         | Orly Rottenberg     | Shani Lorch        | Nitzan Kahana          |                           |
| Yoran Gill                     | Ezra Gross         | Avi Anouchi         | Ira Evental        | Yahel Kaplan           |                           |
| Asaf Eylon                     | David Roness       | Shay Fahima         | Itamar Cohen       | Tali Har-Oz            |                           |
| Daniel Marcovici               | Eli Greenbaum      | Sivan Gilron Dotan  | Shai Margalit      | Liad Kalderon          |                           |
| Adrian Daniels                 | Lee Maor           | Tomer Bar-Nathan    | Ofir Schwartz      | Natalie Korenfeld      |                           |
| Yuval Shalheveth               | Nimrod Vromen      | Evan Schendler      | Meital Singer      | Moshe Pasker           |                           |
| Jacob Ben Chitrit              | Guy Sagiv          | Lihi Katzenelson    | Yonatan Whitefield | Mazi Ohayon            | Rebecca Hazan Of Counsel  |
| Peter Sugarman                 | Micha Tollman      | Eyal Aichel         | Moshe Lankry       | Nitzan Fisher-Conforti | Roy Keidar Of Counsel     |
| Ben Sandler                    | Shani Rapoport     | Shahar Uzieli       | Shira Teger        | Victoria Savu          |                           |
| Boaz Fiel                      | Lior Gelbard       | Edan Regev          | Rachel Lerman      | Derora Tropp           | Paul H. Baris (1934-2010) |
| Joeri Kreisberg                | Keren Tal          | Yehudit Biton       | Ravid Saar         | Amos Shiffman          | Rami Kook                 |
| Simon Weintraub                | Naftali Nir        | Gitit Ramot-Adler   | Debbie Shalit      | Hila Amiel             | Nira Kuritzky             |
| Ruth Lovén                     | Michal Sagmon      | Omri Schnaider      | Sophie Blackston   | Maytal Spivak          | Eran Ilan                 |

Tel Aviv | December 26, 2018

BioLineRx Ltd.  
2 Hamayan Street  
Modi'in Technology Park  
Modi'in 7177871  
Israel

Re: **BioLineRx Ltd. — 957,549 American Depository Shares Representing 957,549 Ordinary Shares**

Dear Sir and Madam:

We have acted as Israeli counsel to BioLineRx, Ltd., (the "Company") in connection with the issuance to Kreos Capital V (Expert Fund) L.P., of a warrant (the "Warrant") to purchase up to an aggregate of 957,549 American Depository Shares (the "ADSS"), each representing one ordinary share, NIS 0.10 par value per share of the Company (the "Ordinary Shares"), which Warrant was issued on October 2, 2018. The ADSS issuable upon exercise of the Warrant are being registered under a registration statement on Form F-3 (Registration Statement No. 333-\_\_\_\_\_) (the "Registration Statement") filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), and any related prospectus or prospectuses, if any.

As counsel to the Company in Israel, we have examined copies of the Memorandum of Association and the Articles of Association, as amended, of the Company and such corporate records, instruments, and other documents relating to the Company and such matters of 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.

1 Azrieli Center, Tel Aviv, 6702101 | Phone: +972-3-6087777 | Fax: +972-3-6087724  
31 Hillel Street, Jerusalem, 9458131 | Phone: +972-2-6239239 | Fax: +972-2-6239233  
www.amon.co.il | info@amon.co.il





Based on the foregoing, we advise you that in our opinion, the Warrant was duly issued, and the Ordinary Shares underlying the ADSs are duly authorized, legally issued, fully-paid and non-assessable.

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, and we disclaim any opinion whatsoever with respect to matters governed by the laws of any other jurisdiction.

Mayer Brown LLP may rely upon this opinion for the purpose of rendering their opinion dated December [X], 2018, with respect to certain matters concerning the ADSs.

We hereby consent to the use of this opinion as Exhibit 5.1 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 in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Sincerely,  
/s/ Yigal Amon & Co.  
Yigal Amon & Co.

1 Azrieli Center, Tel Aviv, 6702101 | Phone: +972-3-6087777 | Fax: +972-3-6087724  
31 Hillel Street, Jerusalem, 9458131 | Phone: +972-2-6239239 | Fax: +972-2-6239233  
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**MAYER • BROWN**

December 26, 2018

Mayer Brown LLP  
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**Anna T. Pinedo**  
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Direct Fax +1 212 849 5767  
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BioLineRx Ltd.  
Modi'in Technology Park  
2 HaMa'ayan Street  
Modi'in 7177871, Israel

Re: BioLineRx Ltd. – Shelf Registration Statement on Form F-3

Ladies and Gentlemen:

We have acted as special U.S. counsel to BioLineRx Ltd., a corporation organized under the laws of the State of Israel (the “Company”), in connection with the preparation and filing by the Company with the Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended (the “Securities Act”), of a registration statement on Form F-3 (the “Registration Statement”) relating to the offering from time to time, together or separately and in one or more series (if applicable), of up to 957,549 of the Company’s American Depositary Shares (the “ADSs”), each representing one (1) ordinary share, par value NIS 0.10 per share, of the Company (the “Ordinary Shares”). The ADSs being registered under the Registration Statement will be offered by the Company on a continuous or delayed basis pursuant to the provisions of Rule 415 under the Securities Act in amounts, prices, and on terms to be set forth in one or more supplements to the final prospectus (the “Prospectus”) included in the Registration Statement at the time it becomes effective.

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. We also have examined the Registration Statement, substantially in the form in which it was transmitted to the Commission.

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. We have also assumed that the Registration Statement will be effective under the Securities Act before any ADSs are sold pursuant thereto.

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BioLineRx Ltd.  
December 26, 2018  
Page Two

The opinions hereinafter expressed are subject to the following qualifications and exceptions:

(i) the effect of bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws relating to or affecting the rights of creditors generally, including, without limitation, laws relating to fraudulent transfers or conveyances, preferences and equitable subordination;

(ii) limitations imposed by general principles of equity upon the availability of equitable remedies or the enforcement of provisions of any Securities, and the effect of judicial decisions which have held that certain provisions are unenforceable where their enforcement would violate the implied covenant of good faith and fair dealing, or would be commercially unreasonable, or where their breach is not material; and

(iii) our opinion is based upon current statutes, rules, regulations, cases and official interpretive opinions, and it covers certain items that are not directly or definitively addressed by such authorities.

Based on the foregoing, and subject to the further assumptions and qualifications set forth below, it is our opinion that, when the ADSs are issued in accordance with the deposit agreement, dated as of July 21, 2011, among the Company, The Bank of New York Mellon, as depositary, and all owners and holders of ADSs of the Company issued thereunder, against the deposit of duly authorized, validly issued, fully paid and non-assessable Ordinary Shares, such ADSs will be duly and validly issued and will entitle the holders thereof to the rights specified therein.

We express no opinion as to matters governed by laws of any jurisdiction other than the laws of the State of New York and the federal laws of the United States of America, as in effect on the date hereof. In rendering the foregoing opinions, we have relied, for matters involving Israeli law, solely on the opinion of Yigal Aron & Co., Tel-Aviv, Israel.

We hereby consent to the use of our name under the heading "Legal Matters" in the Registration Statement to be filed by the Company with the Commission. We further consent to your filing a copy of this opinion as Exhibit 5.2 to 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 Securities Act or the rules and regulations of the Commission thereunder. We disclaim any undertaking to advise you of any subsequent changes of the facts stated or assumed herein or any subsequent changes in applicable law.

Very truly yours,

/s/ Mayer Brown LLP

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form F-3 of our report dated March 6, 2018 relating to the financial statements and effectiveness of internal control over financial reporting, which appears in BioLineRx Ltd.'s Annual Report on Form 20-F for the year ended December 31, 2017. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

Tel-Aviv, Israel  
December 26, 2018

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

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*Kesselman & Kesselman, Trade Tower, 25 Hamered Street, Tel-Aviv 6812508, Israel,  
P.O Box 50005 Tel-Aviv 6150001 Telephone: +972 -3- 7954555, Fax: +972 -3- 7954556, www.pwc.com/il*

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