UNITED STATES
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 February 2013

BioLineRx Ltd.

(Translation of Registrant's name into English)

P.O. Box 45158
19 Hartum Street
Jerusalem 91450, 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 o

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 o No ☑

Item 1.01. Entry into a Material Definitive Agreement

On February 6, 2013, BioLineRx Ltd. (the "Company") issued a press release announcing that it has entered into a definitive agreement with leading healthcare investor OrbiMed Israel Partners Limited Partnership, an affiliate of OrbiMed Advisors LLC ("OrbiMed"), pursuant to which OrbiMed has agreed to purchase 2,666,667 American Depositary Shares ("ADSs"), each representing ten (10) of its Ordinary Shares, and 1,600,000 warrants to purchase an additional 1,600,000 ADSs, at a unit price of $3.00. The warrants have an exercise price of $3.94 per warrant and are exercisable starting from the issuance date for a term of five years. The securities were offered pursuant to a prospectus as a direct placement. Copies of the press release announcing the transaction, the Subscription Agreement and the Form of Warrant are attached hereto as Exhibits 99.1, 99.2 and 99.3, respectively, and are incorporated herein by reference.

Exhibit Index

Exhibit 99.1	Press Release issued on February 6, 2013
Exhibit 99.2	Subscription Agreement dated February 6, 2013, between BioLineRx Ltd. and OrbiMed Israel Partners Limited Partnership
Exhibit 99.3	Form of Warrant to purchase American Depositary Shares

SIGNATURES

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

Date: February 6, 2013

Exhibit 99.1

BioLineRx Announces Offering of American Depositary Shares

Jerusalem, Israel, February 6, 2013 - BioLineRx Ltd. (NASDAQ: BLRX, TASE: BLRX), a biopharmaceutical development company, announced today that it has entered into a definitive agreement with leading healthcare investor OrbiMed Israel Partners Limited Partnership, an affiliate of OrbiMed Advisors LLC ("OrbiMed"), pursuant to which OrbiMed has agreed to purchase 2,666,667 American Depositary Shares ("ADSs"), each representing ten (10) of its Ordinary Shares, and 1,600,000 warrants to purchase an additional 1,600,000 ADSs, at a unit price of $3.00. The warrants have an exercise price of $3.94 per warrant and are exercisable for a term of five years.

The Company will receive proceeds of approximately $8,000,000, before deducting customary offering expenses, which it expects to use to fund clinical trials and for working capital and general corporate purposes.

The offering is expected to close on or about February 11, 2013, subject to satisfaction of customary closing conditions.

"We are extremely pleased to welcome OrbiMed, one of the world's leading healthcare investment firms, as an investor in BioLineRx," said Dr. Kinneret Savitsky, Chief Executive Officer of BioLineRx. "The capital raised will help us to continue with the accelerated development of our clinical and pre-clinical stage therapeutic assets."

The offering is being made pursuant to an effective shelf registration statement on Form F-3 (File No. 333-182997) previously filed with, and declared effective by, the Securities and Exchange Commission (SEC). A prospectus supplement and an accompanying prospectus will be filed with the SEC in connection with the offering. Before you invest, you should read the base prospectus in such shelf registration statement, the prospectus supplement, and other documents the Company has filed with the SEC, for more complete information about the Company and this offering. The offering may be made only by means of a prospectus supplement and the accompanying prospectus, copies of which may be obtained for free by visiting EDGAR on the SEC website at www.sec.gov or by sending a request to the offices of the Company, P.O. Box 45158, 19 Hartum Street, Jerusalem 91450, Israel, or by telephone at + 972-2-548-9100, or email: info@BioLineRx.com.

This press release shall not constitute an offer to sell, or the solicitation of an offer to buy, any of the ADSs, Ordinary Shares, or Warrants of the Company, nor shall there be any sale of these ADSs, Ordinary Shares or Warrants of the Company, in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction.

About BioLineRx

BioLineRx is a publicly-traded biopharmaceutical development company. BioLineRx is dedicated to building a portfolio of products for unmet medical needs or with advantages over currently available therapies. BioLineRx's current portfolio consists of six clinical stage candidates: BL-1020 for schizophrenia is currently undergoing a Phase II/III study; BL-1040, for prevention of pathological cardiac remodeling following a myocardial infarction, which has been out-licensed to Ikaria Inc., is currently undergoing a pivotal CE-Mark registration trial; BL-5010 for non-surgical removal of skin lesions has completed a Phase I/II study; BL-1021 for neuropathic pain is in Phase I development, BL-7040 for treating inflammatory bowel disease (IBD) is currently undergoing a Phase II trial, and BL-8040 for treating acute myeloid leukemia (AML) and other hematological cancers has completed Phase I. In addition, BioLineRx has eight products in various pre-clinical development stages for a variety of indications, including central nervous system diseases, infectious diseases, cardiovascular and autoimmune diseases.

BioLineRx's business model is based on acquiring molecules mainly from biotechnological incubators and academic institutions. The Company performs feasibility assessment studies and development through pre-clinical and clinical stages, with partial funding from the Israeli Government's Office of the Chief Scientist (OCS). The final stage includes partnering with medium and large pharmaceutical companies for advanced clinical development (Phase III) and commercialization. For more information on BioLineRx, please visit www.biolinerx.com, the content of which does not form a part of this press release.

Various statements in this release concerning BioLineRx's future expectations constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include words such as "may," "expects," "anticipates," "believes," and "intends," and describe opinions about future events. These forward-looking statements involve known and unknown risks and uncertainties that may cause the actual results, performance or achievements of BioLineRx to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Some of these risks are: risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions related to the proposed offering. These and other factors are more fully discussed in the "Risk Factors" section of BioLineRx's most recent annual report on Form 20-F filed with the Securities and Exchange Commission on March 22, 2012. In addition, any forward-looking statements represent BioLineRx's views only as of the date of this release and should not be relied upon as representing its views as of any subsequent date. BioLineRx does not assume any obligation to update any forward-looking statements unless required by law.

Contacts:
Garth Russell / Todd Fromer
KCSA Strategic Communications
1 212-896-1250 / 1 212-896-1215
grussell@kcsa.com / tfromer@kcsa.com

Tsipi Haitovsky
Public Relations
+972-52-598-9892
tsipih@netvision.net.il

Exhibit 99.2

Subscription Agreement

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

Ladies and Gentlemen:

Pursuant to the terms and conditions of this Subscription Agreement (this "Agreement"), the undersigned (the "Investor") hereby confirms and agrees with BioLineRx Ltd., a corporation organized under the laws of the State of Israel (the "Company"), as follows:

1. At the Closing (as defined below) and subject to the terms and conditions hereof, the Investor will purchase from the Company and the Company will issue and sell to the Investor (i) 2,666,667 American Depositary Shares ("ADSs"), each representing ten Ordinary Shares, par value NIS 0.01, of the Company (the "Ordinary Shares") at a price equal to $3.00 per ADS and (ii) 1,600,000 five-year warrants, substantially in the form of Exhibit A hereto (the "Warrants" and, together with the ADSs, the "Offered Securities"), to purchase ADSs (the "Warrant ADSs"), at an exercise price equal to $3.94.

2. The closing (the "Closing") is expected to occur on or about February 11, 2013 (the "Closing Date"), subject to the satisfaction of certain closing conditions set forth herein. The Company is hereby deemed to make the representations and warranties set forth in the Annex hereto to the Investor, which shall be true and correct in all material respects as of the date hereof and on the Closing Date.

3. The offer and sale of the Offered Securities (the "Offering") is being made pursuant to (i) an effective registration statement (the "Registration Statement") on Form F-3 (File No. 333-182997), including the prospectus contained therein (the "Base Prospectus"), filed with the Securities and Exchange Commission (the "Commission") on August 1, 2012, and (ii) a final prospectus supplement (the "Prospectus Supplement" and together with the Base Prospectus, the "Prospectus") containing certain supplemental information regarding the Offered Securities and terms of the Offering that has been delivered to the Investor on or prior to the date hereof and will be filed with the Commission in accordance with applicable securities laws. The Prospectus, together with the documents incorporated by reference therein is also referred to herein as the "General Disclosure Package."

4. On the Closing Date, the Company shall (i) cause the Bank of New York Mellon, as depositary for the ADSs (the "Depositary"), to deliver to Investor the ADSs via the Depository Trust Company's ("DTC") Deposit or Withdrawal at Custodian system via the DTC instructions to be provided in writing by Investor to the Company no later than two business days prior the Closing Date and (ii) deliver to the Investor one or more certificates representing the Warrants, registered in such name(s) as the Investor shall provide to the Company in writing no later than two business days prior the Closing Date. The Offered Securities shall be unlegended and free of any resale restrictions.

5. The Company's obligation to issue and sell the Offered Securities to the Investor shall be subject to consent of the Tel Aviv Stock Exchange (the "TASE") to the issuance of the Offered Securities, the receipt by the Company of the purchase price for the Offered Securities being purchased hereunder as set forth on the Signature Page and the accuracy of the representations and warranties made by the Investor herein and the fulfillment of those undertakings herein of the Investor to be fulfilled prior to the Closing Date. The Investor's obligation to purchase the Offered Securities shall be subject to the consent of the TASE to the issuance of the Offered Securities, the accuracy in all material respects of the representations and warranties made by the Company (except for those representations and warranties that are by their terms qualified as to materiality, which shall be accurate in all respects) and the fulfillment of those undertakings of the Company to be fulfilled prior to the Closing.

6. The Investor represents that (i) it has had full access to the General Disclosure Package prior to or in connection with its receipt of this Agreement; and (ii) it is acquiring the Offered Securities for its own account, or an account over which it has investment discretion, and does not have any agreement or understanding, directly or indirectly, with any person or entity to distribute any of the Offered Securities. The Investor represents that it has had an opportunity to ask questions of and receive answers from the officers of the Company concerning the financial condition and business of the Company and others matters related to an investment in the Offered Securities. Neither such inquiries nor any other due diligence investigations conducted by the Investor or its representatives shall modify, amend or affect the Investor's right to rely on the Company's representations and warranties contained in Annex A below.

7. The Investor has the requisite power and authority to enter into this Agreement and to consummate the transactions contemplated hereby.

8. The Investor represents that, (i) it has had no material relationship within the past three years with the Company or persons known to it to be affiliates of the Company, (ii) it is not a, and it has no direct or indirect affiliation or association with any, FINRA member or an Associated Person (as such term is defined under FINRA Membership and Registration Rules Section 1011(b)) as of the date hereof, and (iii) neither it nor any group of investors (as identified in a public filing made with the Commission) of which it is a member, acquired, or obtained the right to acquire, 20% or more of the Ordinary Shares (or securities convertible or exercisable for Ordinary Shares) or the voting power of the Company on a post-transaction basis.

9. The Investor represents that neither the Investor nor any person acting on behalf of, or pursuant to any understanding with or based upon any information received from, the Investor has, directly or indirectly, as of the date of this Agreement, engaged in any transactions in the securities of the Company or has violated its obligations of confidentiality with respect to the Offering since the time that the Investor and the Company were first in contact with respect to the transactions contemplated hereby. The Investor covenants that neither it, nor any person acting on behalf of, or pursuant to any understanding with or based upon any information received from, the Investor will engage in any transactions in the securities of the Company prior to the time that the transactions contemplated by this Agreement are publicly disclosed.

10. This Agreement will involve no obligation or commitment of any kind until this Agreement is accepted and countersigned by or on behalf of the Company. The Investor acknowledges and agrees that the Investor's receipt of the Company's counterpart to this Agreement shall constitute written confirmation of the Company's sale of the Offered Securities to the Investor.

11. The Company shall by 9:30 a.m. (New York City time) on the business day immediately following the date hereof, issue a press release disclosing the material terms of the transactions contemplated hereby, and file a Report on Form 6-K, including this Agreement and any exhibits hereto, with the Commission. The Company and the Investor shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor the Investor shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any press release of the Investor, or without the prior consent of the Investor, with respect to any press release of the Company, which consent shall not unreasonably be withheld or delayed, except if such press release is required by law or regulation, in which case the releasing party shall promptly provide the other party or parties with prior notice, if allowed by law or regulation, of such press release.

12. On or prior to the Closing, the Company shall deliver or cause to be delivered to the Investor the following:

(i) this Agreement duly executed by the Company;

(ii) the Warrants duly executed by the Company;

(iii) the opinions of the Company's Israeli and U.S. legal counsels, respectively, in each case reasonably satisfactory to counsel to the Investor, dated as of the Closing Date;

(iv) a certificate executed by the chief executive officer and the chief financial or accounting officer of the Company, dated as of the Closing, to the effect that the representations and warranties of the Company set forth herein are true and correct as of the date of this Agreement and as of the Closing Date and that the Company has complied with all the agreements and satisfied all the conditions herein on its part to be performed or satisfied on or prior to the Closing; and

(v) the Prospectus and Prospectus Supplement (which may be delivered in accordance with Rule 172 under the Securities Act) of 1933, as amended (the "Securities Act")).

13. Indemnification.

(i) The Company agrees to indemnify and hold harmless the Investor and any affiliate of the Investor, including a transferee who is an affiliate of the Investor, and any person who controls the Investor or any affiliate of the Investor within the meaning of Section 15 of the Securities Act or Section 20 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (collectively, "Investor/Affiliate"), against any losses, claims, damages, liabilities or expenses, joint or several, to which the Investor or Investor/Affiliates may become subject, under the Securities Act, the Exchange Act, or any other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages, liabilities or expenses (or actions in respect thereof as contemplated below) arise out of or are based upon (a) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, including the Prospectus, financial statements and schedules, and all other documents or information filed as or deemed to be a part thereof, at the time of the Closing, or the omission or alleged omission to state in any of them a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances under which they were made, or (b) in whole or in part any inaccuracy in the representations or warranties of the Company contained in this Agreement, or any failure of the Company to perform its obligations hereunder or under law, and will promptly reimburse each Investor and each Investor/Affiliate for any legal and other expenses as such expenses are reasonably incurred by such Investor or such Investor/Affiliate in connection with investigating, defending or preparing to defend, settling, compromising or paying any such loss, claim, damage, liability, expense or action; provided, however, that the Company will not be liable for amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, and the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or expense arises out of or is based upon the inaccuracy of any representation or warranty made by the Investor herein.

(ii) Promptly after receipt by an indemnified party under this Section 13 of notice of the threat or commencement of any action, the Investor or Investor/Affiliates will, if a claim in respect thereof is to be made against the Company under this Section 13, promptly notify the Company in writing thereof, but the omission to notify the Company will not relieve it from any liability that it may have to any indemnified party for contribution or otherwise under the indemnity agreement contained in this Section 13 to the extent it is not prejudiced as a result of such failure. In case any such action is brought against the Investor or Investor/Affiliates and such party seeks or intends to seek indemnity from the Company, the Company will be entitled to participate in, and, to the extent that it may wish, to assume the defense thereof with counsel reasonably satisfactory to such indemnified party; provided, however, if the defendants in any such action include both the indemnified party, and the Company and the indemnified party shall have reasonably concluded, based on an opinion of counsel reasonably satisfactory to the Company, that there may be a conflict of interest between the positions of the Company and the indemnified party in conducting the defense of any such action or that there may be legal defenses available to it and/or other indemnified parties that are different from or additional to those available to the Company, the indemnified party or parties shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action on behalf of such indemnified party or parties. Upon receipt of notice from the indemnifying party to the Company of its election to assume the defense of such action and approval by the indemnified party of counsel, the Company will not be liable to such indemnified party under this Section 13 for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof unless (a) the indemnified party shall have employed such counsel in connection with the assumption of legal defenses in accordance with the proviso to the preceding sentence (it being understood, however, that the Company shall not be liable for the expenses of more than one separate counsel, reasonably satisfactory to the Company, representing all of the indemnified parties who are parties to such action) or (b) the Company shall not have employed counsel reasonably satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of commencement of action, in each of which cases the reasonable fees and expenses of counsel shall be at the expense of the Company. The Company shall not be liable for any settlement of any action without its written consent. In no event shall the Company be liable in respect of any amounts paid in settlement of any action unless the Company shall have approved in writing the terms of such settlement; provided that such consent shall not be unreasonably withheld. The Company shall not, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnification could have been sought hereunder by such indemnified party from all liability on claims that are the subject matter of such proceeding.

(iii) If the indemnification provided for in this Section 13 is required by its terms but is for any reason held to be unavailable to or otherwise insufficient to hold harmless an indemnified party under paragraphs (i) or (ii) of this Section 13 in respect to any losses, claims, damages, liabilities or expenses referred to herein, then the Company shall contribute to the amount paid or payable by such indemnified party as a result of any losses, claims, damages, liabilities or expenses referred to herein (a) in such proportion as is appropriate to reflect the relative benefits received by the Company and such indemnified party from the transactions contemplated hereby or (b) if the allocation provided by clause (a) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (a) above but the relative fault of the Company and the indemnified party in connection with the statements or omissions or inaccuracies in the representations and warranties in this Agreement and/or the Registration Statement that resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The amount paid or payable by a party as a result of the losses, claims, damages, liabilities and expenses referred to above shall be deemed to include, subject to the limitations set forth in paragraph (ii) of this Section 13, any legal or other fees or expenses reasonably incurred by such party in connection with investigating or defending any action or claim. The provisions set forth in paragraph (ii) of this Section 13 with respect to the notice of the threat or commencement of any threat or action shall apply if a claim for contribution is to be made under this paragraph (iii); provided, however, that no additional notice shall be required with respect to any threat or action for which notice has been given under paragraph (ii) for purposes of indemnification.

14. The Company agrees, from and after the Closing Date, to use its best efforts to maintain (i) a depositary for the ADSs, (ii) the listing of ADSs for trading on a National Securities Exchange (as defined in the Exchange Act), (iii) the listing of the Ordinary Shares for trading on the TASE and (iv) a transfer agent and, if necessary under the jurisdiction of incorporation of the Company, a registrar for the Ordinary Shares. The Company shall comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules and regulations of the National Securities Exchange(s) on which the ADSs are listed for trading and the TASE. Neither the Company nor any of its subsidiaries shall take any action that would reasonably be expected to result in the delisting or suspension of the ADSs on the National Securities Exchange(s) on which the ADSs are listed for trading or the Ordinary Shares on the TASE.

15. The Company has determined that the Investor will not be an "affiliate" (as such term is defined in Rule 405 promulgated under the Securities Act) of the Company following the consummation of the transactions contemplated by this Agreement and the Company hereby agrees that it will not take any action inconsistent with the foregoing.

16. The Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Offered Securities for purposes of the rules and regulations of the NASDAQ Capital Market such that it would require shareholder approval prior to the closing of such other transaction unless shareholder approval is obtained before the closing of such subsequent transaction.

17. During the period beginning from the date hereof and continuing to and including the date 90 days after the date of the Prospectus (the "Lock-Up Period"), the Investor agrees not to offer, sell, contract to sell or otherwise dispose of, pledge, grant any option to purchase, make any short sale or otherwise dispose of ("Transfer") any securities of the Company, including but not limited to any securities that are convertible into or exchangeable for, or that represent the right to receive, ADSs, Ordinary Shares or any such substantially similar securities, without the prior written consent of the Company. The foregoing restriction is expressly agreed to preclude the Investor from engaging in any hedging or other transaction which is designed to or which reasonably could be expected to lead to or result in a sale or disposition of the Offered Securities even if such Offered Securities would be disposed of by someone other than the Investor. Notwithstanding the foregoing, the Investor may Transfer (i) up to 50% of the ADSs purchased by Investor hereunder during the Lock-up Period and (ii) any securities of the Company to its affiliates or limited partners, provided however, that such transferee agrees with the Company in writing to be bound by the provisions of this paragraph.

18. Notwithstanding any investigation made by any party to this Agreement, all covenants and agreements made by the Company and the Investor herein shall survive the execution of this Agreement, the delivery to the Investor of the Offered Securities being purchased and the payment therefor. All representations and warranties made by the Company and the Investor herein shall survive for a period of one year following the later of the execution of this Agreement, the delivery to the Investor of the Offered Securities being purchased and the payment therefor.

19. The Company agrees to reimburse the Investor for all out-of-pocket expenses reasonably incurred by Investor in connection with entering into the transactions contemplated hereunder, including the reasonable fees and disbursements of legal counsel, up to the aggregate amount of $100,000.

20. All notices, requests, consents and other communications hereunder shall be in writing, shall be mailed (A) if within the United States by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, or by facsimile, or (B) if delivered from outside the United States, by International Federal Express or facsimile, and shall be deemed given (i) if delivered by first-class registered or certified domestic mail, three business days after so mailed, (ii) if delivered by a nationally recognized overnight carrier, one business day after so mailed, (iii) if delivered by International Federal Express, two business days after so mailed, or (iv) if delivered by facsimile, upon electronic confirmation of receipt and shall be delivered as addressed as follows:

if to the Company, to:

BioLineRx Ltd.
P.O. Box 45158
19 Hartum Street
Jerusalem, Israel
+972 (2) 548-9100
Attention: Philip Serlin, Chief Financial & Operating Officer
Facsimile: +972 (2) 548-9101
E-mail: phils@biolinerx.com

with a copy to:

Morrison & Foerster LLP
1290 Avenue of the Americas
New York, New York 10104
+1 (212) 468-8000
Attention: James Tanenbaum
Facsimile: +1 (212) 468-7900
E-mail: jtanenbaum@mofo.com

if to the Investor, to:

OrbiMed Israel Partners Limited Partnership
89 Medinat HaYehudim St.
Build E, 11th Floor
Herzliya, Israel 46766

with a copy to:

Greenberg Traurig, P.A.
333 SE 2nd Avenue
Suite 4400
Miami, FL 33131
+1 (305) 579-0756
Attention: Robert Grossman
Facsimile: +1 (305) 961-5756
E-mail: grossmanb@gtlaw.com

21. This Agreement is to be construed in accordance with and governed by the federal law of the United States of America and the internal laws of the State of New York without giving effect to any choice of law rule that would cause the application of the laws of any jurisdiction other than the internal laws of the State of New York to the rights and duties of the parties. Each of the Company and the Investor submits to the nonexclusive jurisdiction of the United States District Court for the Southern District of New York and of any New York State court sitting in New York City for purposes of all legal proceedings arising out of or relating to this Agreement and the transactions contemplated hereby. Each of the Company and the Investor irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of the venue of any such proceeding brought in such a court and any claim that any such proceeding brought in such a court has been brought in an inconvenient forum.

22. This Agreement may be terminated by the Investor, as to Investor's obligations hereunder only and without effect whatsoever on the obligations of the Company, by notice to the Company, if Closing has not occurred and the Offered Securities have not been delivered to the Investor by the close of trading on the Nasdaq Capital Market on February 15, 2013; provided, however, that no such termination will affect the right of any party to sue for any breach by the other party.

23. This Agreement and the instruments referenced herein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor the Investor makes any representation, warranty, covenant or undertaking with respect to such matters. Each party expressly represents and warrants that it is not relying on any oral or written representations, warranties, covenants or agreements outside of this Agreement.

24. This Agreement may not be modified or amended except pursuant to an instrument in writing signed by the Company and the Investor. This Agreement may be executed in one or more counterparts, each of which will constitute an original, but all of which, when taken together, will constitute but one instrument, and signatures may be delivered by facsimile or by e-mail delivery of a ".pdf" format data file. In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

[Signature page follows]

SUBSCRIPTION AGREEMENT

Agreed and Accepted February 6, 2013:

BIOLINERX LTD.

By: /s/ Philip Serlin
Name: Philip Serlin
Title: Chief Financial and Operating Officer

ORBIMED ISRAEL PARTNERS LIMITED PARTNERSHIP

By: OrbiMed Israel BioFund GP Limited Partnership,
its General Partner

By: OrbiMed Israel GP Ltd.
its General Partner

By: /s/ Nissim Darvish
Name: Nissim Darvish
Title: Director

By: /s/ Erez Chimovits
Name: Erez Chimovits

Aggregate Purchase Price: $8,000,001

Sale of the Offered Securities purchased hereunder is made pursuant to the Registration Statement.

Company Representations and Warranties

The Company hereby represents and warrants to, and covenants with, the Investor as follows:

1. Incorporation and Good Standing of the Company and Its Subsidiaries. The Company has been duly organized and is validly existing under the laws of the State of Israel and has the corporate power and authority to lease and operate its properties and to conduct its business as described in the Registration Statement and the General Disclosure Package, and to enter into and perform its obligations under this Agreement. Each of the Company's subsidiaries (each, a "Subsidiary," and collectively, the "Subsidiaries") has been duly organized and is validly existing, in good standing, where applicable, under the laws of its jurisdiction of organization and has the requisite power and authority to lease and operate its properties and to conduct its business as described in the Registration Statement and the General Disclosure Package. The Company and each of its Subsidiaries is duly qualified as a foreign corporation or other business entity to transact business and is in good standing, where applicable, in each jurisdiction in which such qualification is required, whether by reason of the leasing of property or the conduct of business, except for such jurisdictions where the failure to so qualify or to be in good standing would not reasonably be expected to, individually or in the aggregate, result in any material adverse change, or any development involving a material adverse change, in or affecting the business, financial position, stockholders' equity, or results of operations of the Company and its Subsidiaries taken as a whole or the Company's ability to perform in any material respect on a timely basis its obligations under this Agreement (a "Material Adverse Change"). All of the issued and outstanding capital stock of each Subsidiary has been duly authorized and validly issued, is fully paid and non-assessable and is owned by the Company, directly or through Subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, or claim, except for such security interests, mortgages, pledges, liens, encumbrances and claims that would not reasonably be expected to result in a Material Adverse Change.

2. Reporting Company; Form F-3. The Company meets the requirements for use of Form F-3 under the Securities Act. The Registration Statement has become effective; no stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose are pending before or, to the best of the Company's knowledge, threatened by the Commission. At the respective times the Registration Statement and each amendment thereto became effective, such Registration Statement, as amended, complied in all material respects with the requirements of the Securities Act did not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "SEC Reports") on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company has never been an issuer subject to Rule 144(i) under the Securities Act.

3. Capitalization and Other Capital Stock Matters. The Ordinary Shares, the ADSs and the Warrants conform in all material respects to the description thereof contained in the Registration Statement and the General Disclosure Package. All of the issued and outstanding Ordinary Shares have been duly authorized and validly issued, are fully paid and non-assessable and have been issued in compliance with applicable Israeli, federal and state securities laws. None of the outstanding Ordinary Shares were issued in violation of any preemptive rights, rights of first refusal, or other similar rights to subscribe for or purchase securities of the Company. Other than as described in the Registration Statement or the General Disclosure Package: (i) there are no authorized or outstanding options, warrants, preemptive rights, rights of first refusal, or other rights to purchase, or equity or debt securities convertible into, exchangeable or exercisable for, any share capital of the Company or any of its Subsidiaries other than those described in the Registration Statement or the General Disclosure Package, (ii) there are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of their respective securities under the Securities Act, (iii) there are no outstanding securities or instruments of the Company or any of its Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to redeem a security of the Company or any of its Subsidiaries, (iv) there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Offered Securities and (v) the Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement. The description of the Company's stock option, stock bonus, and other stock plans or arrangements, and the options or other rights granted thereunder, set forth in the Registration Statement or the General Disclosure Package, accurately and fairly presents the information required to be shown with respect to such plans, arrangements, options, and rights.

4. Authorization of the Offered Securities. The Offered Securities and Ordinary Shares represented thereby have been duly authorized for issuance and sale pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement and, with respect to the Warrant ADSs, upon payment of the exercise price pursuant to the terms of the Warrants, will be validly issued, fully paid, and non-assessable and free and clear of all liens, encumbrances, preemptive rights and other claims. The Company has reserved from its duly authorized capital stock the maximum number of Ordinary Shares issuable in connection with the Warrant ADSs.

5. Due Execution, Delivery and Performance of the Agreements. The Company has full legal right, corporate power and authority to execute this Agreement and the Warrants and to perform the transactions contemplated hereby and thereby. This Agreement has been duly authorized, executed and delivered by the Company. The Warrants have been duly authorized by the Company. This Agreement and the Warrants each constitutes a legal, valid and binding agreement of the Company, enforceable against the Company in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other laws of general application relating to or affecting the enforcement of creditors' rights and the application of equitable principles relating to the availability of remedies, and except as rights to indemnity or contribution, may be limited by federal or state securities law or the public policy underlying such laws.

6. No Violation. The Company's execution, delivery, and performance of this Agreement and the Warrants and consummation of the transactions contemplated hereby and thereby and by the Prospectus have been duly authorized by all necessary corporate action and (i) will not result in any violation of the provisions of the Articles of Association, charter or by laws of the Company or any Subsidiary, (ii) will not conflict with or constitute a breach of, or a violation or default (or, with the giving of notice or lapse of time would be in a default, a "Default") under, or result in the creation or imposition of any lien, charge, or encumbrance upon any property or assets of the Company or any of its Subsidiaries pursuant to, or require the consent of any other party to any indenture, mortgage, deed of trust or other agreement or instrument to which the Company or any of its Subsidiaries is a party, except for such conflicts, breaches, Defaults, liens, charges, or encumbrances as would not reasonably be expected to, individually or in the aggregate, result in a Material Adverse Change, or (iii) will not result in any violation of any applicable law, administrative regulation, or administrative or court decree applicable to the Company or any Subsidiary, except for such violations which would not reasonably be expected to, individually or in the aggregate, result in a Material Adverse Change.

7. No Further Government Authorizations or Approvals Required. No consent, approval, authorization or other order of, or registration or filing with, any court or other governmental or regulatory authority or agency, is required for the Company's execution, delivery, and performance of this Agreement and the Warrants and consummation of the transactions contemplated hereby and thereby and by the Prospectus.

8. Independent Accountants. Kesselman & Kesselman, a member of PricewaterhouseCoopers International Ltd. ("Kesselman"), which has certified certain financial statements of the Company and its Subsidiaries and delivered its report with respect to the audited consolidated financial statements (the "Financial Statements") and schedules included in the Company's Annual Report on Form 20-F for the year ended December 31, 2011 (the "20-F", is an independent registered public accounting firm with respect to the Company and its Subsidiaries as required by the Securities Act and the Exchange Act.

9. No Defaults or Consents. Neither the execution, delivery and performance of this Agreement or the Warrants by the Company nor the consummation of any of the transactions contemplated hereby and thereby (including, without limitation, the issuance and sale by the Company of the Offered Securities) will give rise to a right to terminate or accelerate the due date of any payment due under, or conflict with or result in the breach of any term or provision of, or constitute a default (or an event which with notice or lapse of time or both would constitute a default) under, except such defaults that individually or in the aggregate would not reasonably be expected to, individually or in the aggregate, result in a Material Adverse Change, or require any consent or waiver under, or result in the execution or imposition of any lien, charge or encumbrance upon any properties or assets of the Company or its Subsidiaries pursuant to the terms of, any indenture, mortgage, deed of trust or other agreement or instrument to which the Company or any of its Subsidiaries is a party or by which either the Company or its Subsidiaries or their properties or businesses is bound, or any franchise, license, permit, judgment, decree, order, statute, rule or regulation applicable to the Company or any of its Subsidiaries, or violate any provision of the Articles of Association, charter or by-laws, as applicable, of the Company or any of its Subsidiaries, except for such consents or waivers which have already been obtained and are in full force and effect.

10. Contracts. The material contracts to which the Company is a party that are filed pursuant to the Exchange Act with the Securities and Exchange Commission (the "Commission") by the Company have been duly and validly authorized, executed and delivered by the Company and constitute the legal, valid and binding agreements of the Company, enforceable by and against it in accordance with their respective terms, except as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws relating to enforcement of creditors' rights generally, and general equitable principles relating to the availability of remedies, and except as rights to indemnity or contribution may be limited by federal or state securities laws and the public policy underlying such laws.

11. No Actions. There is no legal or governmental action, suit or proceeding pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its Subsidiaries or any of their respective directors and officers in their capacities as such, which has as the subject thereof any officer or director of, or property owned or leased by, the Company or any of its Subsidiaries that would reasonably be expected to result in a Material Adverse Change or adversely affect the consummation of the transactions contemplated hereby.

12. Properties. The Company and each of its Subsidiaries has good and marketable title in fee simple to all real property and good and marketable title to all other properties and assets reflected as owned in the Financial Statements, in each case free and clear of any security interests, mortgages, pledges, liens, encumbrances, equities, claims, and other defects or restrictions of any kind, except as described in the Registration Statement and the General Disclosure Package, or such as do not materially affect the value of the property and assets and do not materially interfere with the use made and proposed to be made by the Company and its Subsidiaries. The real property, improvements, buildings, equipment, and personal property held under lease by the Company or any Subsidiary are held under valid and enforceable leases, with such exceptions as are not material and do not materially interfere with the use made or proposed to be made of such real property, improvements, equipment, or personal property by the Company or such Subsidiary.

13. No Material Adverse Change. Except as disclosed in the Registration Statement or the General Disclosure Package, since the date of the Financial Statements of the Company incorporated by reference in the Prospectus: (i) there has not been any change in the share capital or long-term debt of the Company or any of its Subsidiaries, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of share capital, or any Material Adverse Change; (ii) neither the Company nor any of its Subsidiaries has entered into any transaction or agreement that is material to the Company and its Subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and its Subsidiaries taken as a whole; and (iii) neither the Company nor any of its Subsidiaries has sustained any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority.

14. Intellectual Property. For purposes of this Agreement: “Intellectual Property” means patents, patent rights, patent applications, licenses, inventions, copyrights, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trade and service marks, trade and service mark registrations, and trade names; and “Company Intellectual Property” means Intellectual Property that is owned by or licensed to the Company or that is necessary for the Company and its Subsidiaries to conduct their respective businesses as described in the Registration Statement and the General Disclosure Package. To the knowledge of the Company, the Company and each of its Subsidiaries own, possess, or have adequate rights to use the Company Intellectual Property. Neither the Company nor any of its Subsidiaries has received any notice or claim from any person alleging that, and neither is otherwise aware that, the conduct of the business of the Company and any of its Subsidiaries constitutes or would constitute any infringement or misappropriation of, or conflict with, any Intellectual Property right of any third party. To the knowledge of the Company and except as set forth in the Registration Statement and the General Disclosure Package, no third party possesses or has the right to obtain rights to the Company Intellectual Property, other than the licensors and licensees of the Company Intellectual Property. Except as set forth in the Registration Statement and the General Disclosure Package, neither the Company nor any of its Subsidiaries is obligated to pay a royalty, grant a license, or provide other consideration to any third party in connection with the Company Intellectual Property, other than the licensors and licensees of the Company Intellectual Property. There is no pending, or to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the Company’s or its Subsidiaries’, as applicable, rights in or to any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim. To the knowledge of the Company, there is no U.S. patent which contains claims that are valid and enforceable and are necessary for the manufacture, use, sale or offer for sale of the Company’s product candidates, or that interferes with the claims of any Intellectual Property owned by or licensed to the Company. To the knowledge of the Company, all prior art references material to patentability as defined in 37 C.F.R. § 1.56 known to the Company during the prosecution of the U.S. patents and U.S. patent applications were disclosed to the U.S. Patent and Trademark Office, or will be disclosed in the pending U.S. patent applications within the statutory period available for such disclosure.

15. Compliance. Neither the Company nor any Subsidiary is or has been in violation of any applicable laws, rules and regulations of the jurisdictions in which it is conducting business, including, without limitation, all applicable local, state and federal environmental laws and regulations, except where failure to be so in compliance would not reasonably be expected to result in a Material Adverse Change.

16. Taxes. The Company and each of its Subsidiaries has filed all material Israeli, federal, state, and other foreign tax returns or has properly requested extensions thereof and has paid all taxes and other governmental assessments and charges required to be paid by any of them and, if due and payable, any related or similar assessment, fine, or penalty levied against any of them except as may be being contested in good faith and by appropriate proceedings. The Company is not aware of any tax deficiency that has been or would reasonably be expected to be asserted or threatened against the Company that would reasonably be expected to result in a Material Adverse Change.

17. Transfer Taxes. Except as set forth in the Registration Statement and the General Disclosure Package, there are no transfer taxes or other similar fees or charges under Israeli or federal laws or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance or sale by the Company of the Offered Securities.

18. Investment Company. The Company is not, and after receipt of payment for the Offered Securities and after application of the net proceeds therefrom as described in the Prospectus, will not be, an "investment company," or an entity "controlled" by an "investment company," within the meaning of Investment Company Act of 1940, as amended.

19. Offering Materials. Each of the Company, its directors and officers has not distributed and will not distribute prior to the Closing Date any offering material, including any "free writing prospectus" (as defined in Rule 405 promulgated under the Securities Act), in connection with the offering and sale of the Offered Securities other than the Prospectus, and any amendment or supplement thereto.

20. Insurance. Each of the Company and each of its Subsidiaries is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which they are engaged; neither the Company nor any of its Subsidiaries has been refused any insurance coverage sought or applied for; and neither the Company nor any of its Subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to result in a Material Adverse Change.

21. Price of ADSs and Warrants. The Company has not taken and will not take, directly or indirectly, any action which constitutes, was designed to, or that would reasonably be expected to cause or result in, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Offered Securities. The Company will take reasonable best efforts to cause its officers and directors not to take, directly or indirectly, any action which is designed to or which has constituted or which would be expected to cause or result in stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Offered Securities.

22. Use of Proceeds. The Company shall use the proceeds from the sale of the Offered Securities as described under "Use of Proceeds" in the Prospectus.

23. Non-Public Information. The Company has not disclosed to the Investor information that would constitute material non-public information as of the Closing Date other than the existence of the transactions contemplated hereby.

24. Related Party Transactions. No transaction has occurred between or among the Company, on the one hand, and its affiliates, officers or directors on the other hand, that is required to have been described under applicable securities laws in its Exchange Act filings and is not so described in such filings.

25. Off-Balance Sheet Arrangements. There is no transaction, arrangement or other relationship between the Company and an unconsolidated or other off-balance sheet entity that is required to be disclosed by the Company in its Exchange Act filings and is not so disclosed or that otherwise would reasonably be expected to, individually or in the aggregate, result in a Material Adverse Change. There are no such transactions, arrangements or other relationships with the Company that may create contingencies or liabilities that are not otherwise disclosed by the Company in its Exchange Act filings.

26. Governmental Permits, Etc. The Company and each Subsidiary possesses such valid and current certificates, authorizations, licenses or permits ("Permits") issued by the appropriate Israeli, state, federal, or other foreign regulatory agencies, self-regulatory organizations or other bodies necessary to conduct their respective businesses, except for Permits that, the lack of which, would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change, and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of, or non-compliance with, any such Permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to result in a Material Adverse Change.

27. Financial Statements. The financial statements and the related notes thereto of the Company and its consolidated Subsidiaries incorporated in the Prospectus or included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing and present fairly in all material respects the financial position, results of operations and cash flows of the Company and its Subsidiaries as of the dates indicated and for the periods specified; such financial statements have been prepared in conformity with the International Financial Reporting Standards ("IFRS") applied on a consistent basis throughout the periods covered thereby; and the other financial information included in the Registration Statement and the General Disclosure Package has been derived from the accounting records of the Company and its Subsidiaries and is accurately presented and is prepared on a basis consistent with such financial statements and the Company's accounting records.

28. Listing Compliance. (i) The Company is in compliance with the requirements of the Nasdaq Capital Market for continued listing of the ADSs. The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the ADSs under the Exchange Act or the listing of the ADSs on the Nasdaq Capital Market, nor has the Company received any notification that the Commission or the Nasdaq Capital Market is contemplating terminating such registration or listing. The transactions contemplated by this Agreement and the Warrants will not contravene the rules and regulations of the Nasdaq Capital Market and no prior approvals by or notifications to the Nasdaq Capital Market are required in connection with the transactions contemplated hereby and thereby. The Company will comply with all requirements of the Nasdaq Capital Market with respect to the issuance of the ADSs. (ii) The Company is in compliance with the requirements of the TASE for continued listing of the Ordinary Shares. The Company has taken no action designed to, or likely to have the effect of, terminating the listing of the Ordinary Shares under the TASE, nor has the Company received any notification that the Israeli Securities Authority or the TASE is contemplating terminating such listing. The transactions contemplated by this Agreement and the Warrants will not contravene the rules and regulations of the TASE. The Company will comply with all requirements of the Nasdaq Capital Market with respect to the issuance of the ADSs and the TASE with respect to the Ordinary Shares.

29. Internal Accounting Controls. The Company and its Subsidiaries maintain systems of "internal control over financial reporting" sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with IFRS and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Neither the Company nor any of its Subsidiaries is aware of any material weakness or significant deficiency in their internal controls over financial reporting. The Company and its Subsidiaries maintain an effective system of "disclosure controls and procedures" (as defined in Rule 13a-15(e) under the Exchange Act) that is designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company's management, including its principal executive officer(s) and principal financial officer(s), as appropriate to allow timely decisions regarding required disclosure.

30. Foreign Corrupt Practices. None of the Company, any of its Subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its Subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury ("OFAC"); and the Company will not directly or indirectly use the proceeds of the offering of the Offered Securities hereunder, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person that, to the Company's knowledge, is currently subject to any U.S. sanctions administered by OFAC.

31. Employee Relations. No labor dispute with the employees of the Company or any of its Subsidiaries, exists or, to the knowledge of the Company, is threatened or imminent that would reasonably be expected to result in a Material Adverse Change. Without limiting the generality of the foregoing, the Company and each of its Subsidiaries is in compliance, in all material respects, with the labor and employment laws and collective bargaining agreements applicable to its employees in the jurisdiction of such employment.

32. Environmental Matters. Except as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change: (i) the Company and its Subsidiaries are in compliance with all Israeli, federal, state, local, and foreign laws and regulation relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum, and petroleum products (collectively, the "Materials of Environmental Concern"), or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport, or handling of Materials of Environment Concern (collectively, the "Environmental Laws"), which includes, but is not limited to, compliance with any permits or other governmental authorizations required for the operation of the business of the Company or any of its Subsidiaries under applicable Environmental Laws, or compliance with the terms and conditions thereof, and neither the Company nor any of its Subsidiaries has received any written communication, whether from a governmental authority, citizens group, employee, or otherwise, that alleges that the Company or any of its Subsidiaries is in violation of any Environmental Law; (ii) there is no claim, action, or cause of action filed with a court or governmental authority, no investigation with respect to which the Company has received written notice, and no written notice by any person or entity alleging potential liability for investigatory costs, cleanup costs, governmental responses costs, natural resources damages, property damages, personal injuries, attorneys' fees, or penalties arising out of, based on or resulting from the presence, or release into the environment, of any Material of Environmental Concern at any location owned, leased, managed, franchised or operated by the Company or any of its Subsidiaries, now or in the past (collectively, the "Environmental Claims"), pending or, to the Company's knowledge, threatened against the Company, any of its Subsidiaries or any person or entity whose liability for any Environmental Claim the Company or any of its Subsidiaries has retained or assumed either contractually or by operation of law; and (iii) to the Company's knowledge, there are no past or present actions, activities, circumstances, conditions, events, or incidents, including, without limitation, the release, emission, discharge, presence, or disposal of any Material of Environmental Concern, that would reasonably be expected to result in a violation of any Environmental Law or form the basis of a potential Environmental Claim against the Company or any of its Subsidiaries or against any person or entity whose liability for any Environmental Claim the Company or any of its Subsidiaries has retained or assumed either contractually or by operation of law. The Company is not currently aware that it will be required to make future material capital expenditures to comply with Environmental Laws.

33. No Adjustment to Other Securities. The issuance and sale of the Offered Securities hereunder will not obligate the Company to issue ADSs, Warrants, Ordinary Shares or other securities to any other person (other than the Investor) and will not result in the adjustment of the exercise, conversion, exchange or reset price of any outstanding securities.

34. No Applicable Takeover Protections. Subject to the Investor's compliance with the terms of this Agreement, there is no control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Articles of Association or the laws of Israel which is or could become applicable to the Investor as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Offered Securities and the Investor's ownership of the Offered Securities.

Exhibit 99.3

BIOLINERX, LTD.

WARRANT TO PURCHASE AMERICAN DEPOSITARY SHARES

Warrant No.: ADS-B[ ]
Number of American Depositary Shares: 1,600,000
Date of Issuance: February 11, 2013 ("**Issuance Date**")

BioLineRx, Ltd., an Israeli company (the "**Company**"), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, OrbiMed Israel Partners Limited Partnership, the registered holder hereof or its permitted assigns (the "**Holder**"), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, pursuant to this Warrant to Purchase American Depositary Shares ("ADSs") (including any Warrants to Purchase ADSs issued in exchange, transfer or replacement hereof, the "**Warrant**"), at any time or times on or after the Issuance Date , but not after 11:59 p.m., New York time, on the Expiration Date (as defined below), One Million Six Hundred Thousand (1,600,000) ADSs (the "**Warrant ADSs**"). For purposes of clarification, each ADS represents ten ordinary shares, par value NIS 0.01 per share (the "**Ordinary Shares**"), of the Company. Except as otherwise defined herein, capitalized terms in this Warrant shall have the meanings set forth in Section 16. This Warrant is issued pursuant to that certain Subscription Agreement (the "**Subscription Agreement**") dated as of February 6, 2013 (the "**Subscription Date**") by and between the Company and the Holder.

1. EXERCISE OF WARRANT.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof, this Warrant may be exercised by the Holder on any day on or after the Issuance Date, in whole or in part, by delivery to the Company of a duly executed facsimile copy of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), of the Holder's election to exercise this Warrant. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant ADSs available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant ADSs available hereunder shall have the effect of lowering the outstanding number of Warrant ADSs purchasable hereunder in an amount equal to the applicable number of Warrant ADSs purchased. The Holder and the Company shall maintain records showing the number of Warrant ADSs purchased and the date of such purchases. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant ADSs hereunder, the number of Warrant ADSs available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

(b) Exercise Price. For purposes of this Warrant, "**Exercise Price**" means $3.94, subject to adjustment as provided herein.

(c) Delivery of Securities Upon Exercise. On or before the first (1st) Business Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Holder (to the number specified in the Exercise Notice) and the depositary for the ADSs (the "**Depositary**"). On or before the third (3rd) Business Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**"), the Company shall (i) issue and deposit with the Depositary a number of Ordinary Shares that will be represented by the number of Warrant ADSs to which the Holder is entitled in respect of that exercise, (ii) pay the fee of the Depositary for the issuance of that number of ADSs and (iii) instruct the Depositary to execute and deliver to that Holder an American Depositary Receipt ("**ADR**") evidencing that number of Warrant ADSs. Certificates for the Warrant ADSs purchased hereunder shall be transmitted by the Depositary to the Holder by crediting the account of the Holder's prime broker with The Depository Trust Corporation through its Deposit or Withdrawal at Custodian system if the Company is then a participant in such system and otherwise by physical delivery via overnight courier to the address specified by the Holder in the Exercise Notice by the Share Delivery Date. The Warrant ADSs shall be deemed to have been issued, and the Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such Warrant ADSs for all purposes, as of the date the Warrant has been exercised, with payment to the Company of the Exercise Price (or by cashless exercise). The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant ADSs upon exercise of this Warrant.

(d) Company's Failure to Timely Deliver Securities. If the Company shall fail to deliver the certificate or certificates representing Warrant ADSs by the Share Delivery Date, and if on or after the Share Delivery Date the Holder purchases (in an open market transaction or otherwise) ADSs or Ordinary Shares to deliver in satisfaction of a sale by the Holder of ADSs issuable upon such exercise that the Holder anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Business Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions, if any) for the ADSs or Ordinary Shares so purchased (the "**Buy-In Price**"), at which point the Company's obligation to issue and deliver such Warrant ADSs shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Warrant ADSs (or, at the option of the Holder, reinstate the portion of the Warrant and equivalent number of Warrant ADSs for which such exercise was not honored) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of ADSs, times (B) the price at which the sell order giving rise to such purchase obligation was executed.

(e) Payment of Exercise Price. Within two (2) Trading Days of the date of the Exercise Notice, the Holder shall make payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of Warrant ADSs as to which this Warrant is being exercised (the "**Aggregate Exercise Price**") in cash or by wire transfer of immediately available funds, unless the cashless exercise procedure specified in paragraph (f) below is specified in the applicable Exercise Notice.

(f) Cashless Exercise. The Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price pursuant to paragraph (e) above, elect instead to receive upon such exercise the **"Net Number"** of ADSs determined according to the following formula (a **"Cashless Exercise"**):

$$X = Y [(A-B)/A]$$

where:

X = the Net Number of Warrant ADSs to be issued to the Holder.

Y = the number of Warrant ADSs with respect to which this Warrant is being exercised.

A = the Closing Sale Price of the ADSs on the Principal Market immediately prior to (but no including) the Exercise Date.

B = the Exercise Price.

(g) Fractional Shares. No fractional ADSs are to be issued upon the exercise of this Warrant. If any fractional share of an ADS would, except for the provisions of the prior sentence, be deliverable upon such exercise, the Company, in lieu of delivering such fractional share, shall pay to the exercising Holder an amount in cash equal to the Closing Sale Price on the Principal Market of such fractional ADS on the date of exercise.

(h) Rule 144. For purposes of Rule 144(d) promulgated under the Securities Act of 1933, as amended (the "**Securities Act**"), as in effect on the date hereof, it is intended that the Warrant ADSs issued in a Cashless Exercise shall be deemed to have been acquired by the Holder, and the holding period for the Warrant ADSs shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Subscription Agreement.

(i) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant ADSs, the Company shall promptly issue to the Holder the number of Warrant ADSs that are not disputed.

(j) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Exercise Notice, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates), would beneficially own in excess of the Beneficial Ownership Limitation. For purposes of the foregoing sentence, the number of Ordinary Shares beneficially owned by the Holder and its Affiliates shall include the number of Ordinary Shares underlying ADSs issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of Ordinary Shares underlying ADSs which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates. Except as set forth in the preceding sentence, for purposes of this Section 1(j), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 1(j) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of an Exercise Notice shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, the Holder will be deemed to represent to the Company each time it delivers an Exercise Notice that such Exercise Notice has not violated the restrictions set forth in this paragraph and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 1(j), in determining the number of outstanding Ordinary Shares, a Holder may rely on the number of outstanding Ordinary Shares as stated in the most recent of the following: (i) the Company's most recent periodic or annual report filed with the Securities and Exchange Commission (the "**SEC**"), as the case may be, (ii) a more recent public announcement by the Company or (iii) a more recent written notice by the Company or the Depositary setting forth the number of Ordinary Shares outstanding. Upon the written or oral request of a Holder, the Company shall within two (2) Trading Days confirm orally and in writing to the Holder the number of Ordinary Shares then outstanding. In any case, the number of outstanding Ordinary Shares shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates since the date as of which such number of outstanding Ordinary Shares was reported. The "Beneficial Ownership Limitation" shall be 9.99% of the number of Ordinary Shares outstanding immediately after giving effect to the issuance of Ordinary Shares issuable upon exercise of this Warrant. The Holder, upon not less than 61 days' prior written notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 1(j) and the provisions of this Section 1(j) shall continue to apply. Any such increase or decrease will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(j) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant. Notwithstanding anything to the contrary contained herein, the terms of this Section 1(j) shall not apply to any Holder whose beneficial ownership of Ordinary Shares exceeded the Beneficial Ownership Limitation as of immediately prior to the consummation of the transactions contemplated by the Subscription Agreement.

(k) Other Limitations. Notwithstanding anything to the contrary, any or all of the Warrants may not be exercised on the record date with respect to the distribution of bonus shares, offer by way of rights issue, distribution of dividends, consolidation of share capital, consolidation of shares, reduction or split in share capital or company split (each hereinafter referred to as a "Corporate Event"). In addition, if the ex-date with respect to a Corporate Event occurs before the record date relating to such Corporate Event, then the exercise of Warrants shall not occur on such ex-date.

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant ADSs shall be adjusted from time to time as follows:

(a) Adjustment upon Subdivision or Combination of Ordinary Shares or ADSs. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization, reorganization, scheme, arrangement or otherwise) one or more classes of its outstanding Ordinary Shares or ADSs into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant ADSs will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by any stock split, stock dividend, recapitalization, reorganization, scheme, arrangement or otherwise) one or more classes of its outstanding Ordinary Shares or ADSs into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant ADSs will be proportionately decreased. Any adjustment under this Section 2(a) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(b) Other Events. If any event occurs of the type contemplated by the provisions of this Section 2 but not expressly provided for by such provisions, then the Company's Board of Directors shall make an appropriate adjustment in the Exercise Price and the number of Warrant ADSs so as to protect the rights of the Holder; *provided* that no such adjustment pursuant to this Section 2(b) shall increase the Exercise Price or decrease the number of Warrant ADSs as otherwise determined pursuant to this Section 2.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. If the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Ordinary Shares or ADSs, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, stock split, spin off, subdivision, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "**Distribution**"), at any time after the issuance of this Warrant, then, in each such case:

(a) the Exercise Price in effect immediately prior to the close of business on the record date fixed for the determination of holders of Ordinary Shares or ADSs, as applicable, entitled to receive the Distribution shall be reduced, effective as of the close of business on such record date, to a price determined by multiplying such Exercise Price by a fraction of which (i) the numerator shall be the Closing Sale Price of the Ordinary Shares or ADSs, as applicable, on the Trading Day immediately preceding such record date minus the value of the Distribution (as determined in good faith by the Company's Board of Directors) applicable to one Ordinary Share or ADS, as applicable, and (ii) the denominator shall be the Closing Sale Price of the Ordinary Shares or ADSs, as applicable on the Trading Day immediately preceding such record date; and

(b) the number of Warrant ADSs shall be increased or decreased to a number equal to the number of ADSs obtainable immediately prior to the close of business on the record date fixed for the determination of holders of Ordinary Shares or ADSs, as applicable, entitled to receive the Distribution multiplied by the reciprocal of the fraction set forth in the immediately preceding paragraph (a); *provided* that in the event that the Distribution is of shares of common stock ("**Other Shares of Common Stock**") of a company whose common shares are traded on a national securities exchange or a national automated quotation system, then the Holder may elect to receive a warrant to purchase Other Shares of Common Stock in lieu of an adjustment in the number of Warrant ADSs, the terms of which shall be identical to those of this Warrant, except that such warrant shall be exercisable into the number of shares of Other Shares of Common Stock that would have been payable to the Holder pursuant to the Distribution had the Holder exercised this Warrant immediately prior to such record date and with an aggregate exercise price equal to the product of the amount by which the exercise price of this Warrant was decreased with respect to the Distribution pursuant to the terms of the immediately preceding paragraph (a) and the number of Warrant ADSs calculated in accordance with the first part of this paragraph (b).

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. In addition to any adjustments pursuant to Section 2 above, if at any time the Company grants, issues or sells any rights to purchase stock, warrants, securities or other property pro rata to the record holders of Ordinary Shares or ADSs (the "**Purchase Rights**"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of Ordinary Shares or ADSs acquirable upon complete exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Ordinary Shares or ADSs are to be determined for the grant, issue or sale of such Purchase Rights.

(b) In connection with any Fundamental Transaction, the Company shall make appropriate provision so that this Warrant shall thereafter be exercisable for shares of the Successor Entity based upon the conversion ratio or other consideration payable in the Fundamental Transaction. The provisions of this Section shall apply similarly and equally to successive Fundamental Transactions and shall be applied without regard to any limitations on the exercise of this Warrant.

In the event that any person becomes a Parent Entity of the Company, such person shall assume all of the obligations of the Company under this Warrant with the same effect as if such person had been named as the Company herein.

5. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Association, Bylaws or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any Ordinary Shares underlying the ADSs receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Ordinary Shares and ADSs upon the exercise of this Warrant, and (iii) shall, so long as this Warrant is outstanding, take all action necessary to reserve and keep available out of its authorized and unissued Ordinary Shares, solely for the purpose of effecting the exercise of this Warrant, 100% of the number of Ordinary Shares to be issued upon exercise of this Warrant then outstanding (without regard to any limitations on exercise).

6. WARRANT HOLDER NOT DEEMED A SHAREHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company or a holder of ADSs for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant ADSs which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a shareholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company shall forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant ADSs being transferred by the Holder and, if less then the total number of Warrant ADSs then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant ADSs not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in reasonable and customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant ADSs then underlying this Warrant.

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant ADSs then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant ADSs as is designated by the Holder at the time of such surrender; provided, however, that no Warrants for fractional ADSs will be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant ADSs then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant ADSs designated by the Holder which, when added to the number of ADSs underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant ADSs then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES.

(a) If (i) the Company shall declare a dividend (or any other distribution in whatever form) on the Ordinary Shares or ADSs, (ii) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Ordinary Shares or ADSs, (iii) the Company shall authorize the granting to all holders of the Ordinary Shares or ADSs Purchase Rights, (iv) the approval of any shareholders of the Company shall be required in connection with any reclassification of the Ordinary Shares or ADSs, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Ordinary Shares or ADSs are converted into other securities, cash or property, or (v) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be mailed to the Holder, at least twenty (20) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Ordinary Shares or ADSs of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Ordinary Shares or ADSs of record shall be entitled to exchange their Ordinary Shares or ADSs for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of the subsidiaries, the Company shall simultaneously file such notice with the SEC pursuant to a Report on Form 6-K or other eligible form. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

(b) Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be in writing and shall be sufficient if sent by first-class mail or courier, postage prepaid, and addressed as follows: (a) if to the Company, P.O. Box 45158, 19 Hartum Street, Jerusalem 91450, Israel or any other address as the Company may hereafter notify to the Holder and (b) if to the Holder, addressed to such address as the Holder may hereafter from time to time notify to the Company for the purposes of notice hereunder. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefore.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

10. SEVERABILITY. In case any one or more of the provisions contained in this Warrant shall be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

11. GOVERNING LAW AND VENUE. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each of the Company and the Holder submits to the nonexclusive jurisdiction of the United States District Court for the Southern District of New York and of any New York State court sitting in New York City, New York for purposes of all legal proceedings arising out of or relating to this Warrant and the transactions contemplated hereby. Each of the Company and the Holder irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of the venue of any such proceeding brought in such a court and any claim that any such proceeding brought in such a court has been brought in an inconvenient forum.

12. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and the Holder and shall not be construed against any person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant.

14. TRANSFER. This Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company.

15. WARRANT AGENT. The Company shall serve as warrant agent under this Warrant. Upon 30 days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation or other entity into which the Company or any new warrant agent may be merged or any corporation or other entity resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation or other entity to which the Company or any new warrant agent transfers substantially all of its corporate trust or stockholder services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the books and records of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) "**Affiliate**" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

(b) "**Bloomberg**" means Bloomberg Financial Markets.

(c) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(d) "**Closing Sale Price**" means, for any security as of any date, the last trade price for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing trade price, as the case may be, then the last trade price, respectively, of such security prior to 4:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last trade price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no last trade price is reported for such security by Bloomberg, the average of the closing bid and closing ask prices of any market makers for such security as reported in the "pink sheets" by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(e) "**Eligible Market**" means the Principal Market, The New York Stock Exchange, Inc., the NYSE MKT or The NASDAQ Stock Market.

(f) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(g) "**Expiration Date**" means the date sixty (60) months after the Issuance Date or, if such date falls on a day other than a Business Day or a day that is not a Trading Day (a "**Holiday**"), the next date that is not a Holiday.

(h) "**Fundamental Transaction**" means that the Company shall, directly or indirectly, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Person, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company and its subsidiaries on a consolidated basis to another Person, or (iii) allow another Person to make a purchase, tender or exchange offer that is accepted by the holders of more than the 50% of the outstanding Ordinary Shares (including those Ordinary Shares underlying ADSs) (not including any Ordinary Shares held by the Person or Persons making or party to, or associated or affiliated with the Persons making or party to, such purchase, tender or exchange offer), or (iv) consummate a stock purchase or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the outstanding Ordinary Shares (including those Ordinary Shares underlying ADSs) (not including any Ordinary Shares held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock purchase agreement or other business combination), or (v) reorganize, recapitalize or reclassify its Ordinary Shares, or (vi) any "person" or "group" (as these terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act) is or shall become the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of 50% or more of the aggregate ordinary voting power represented by issued and outstanding Ordinary Shares (including those Ordinary Shares underlying ADSs).

(i) "**Ordinary Shares**" means (i) the Company's Ordinary Shares, par value NIS 0.01 per share, and (ii) any share capital into which such Ordinary Shares shall have been changed or any share capital resulting from a reclassification of such Ordinary Shares.

(j) "**Parent Entity**" of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(k) "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(l) "**Principal Market**" means The NASDAQ Stock Market.

(m) "**Securities Act**" means the Securities Act of 1933, as amended.

(n) "**Successor Entity**" means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(o) "**Trading Day**" means any day on which the ADSs are traded on the Principal Market, or, if the Principal Market is not the principal trading market for the ADSs, then on the principal securities exchange or securities market on which the ADSs are then traded; provided that "Trading Day" shall not include any day on which the ADSs are scheduled to trade on such exchange or market for less than 4.5 hours or any day that the ADSs are suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00 p.m., New York time).

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase American Depositary Shares to be duly executed as of the Issuance Date set out above.

BIOLINERX, LTD.

By: _____
Name:
Title:

EXHIBIT A

EXERCISE NOTICE
TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE AMERICAN DEPOSITARY SHARES

BIOLINERX, LTD.

The undersigned holder hereby exercises the right to purchase _____ American Depositary Shares ("**Warrant ADSs**") of BiolineRx, Ltd., an Israeli company (the "**Company**"), evidenced by the attached Warrant to American Depositary Shares (the "**Warrant**"). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder's payment of the Exercise Price shall be made as:

_____ a "Cash Exercise" with respect to _____ Warrant ADSs; and/or

_____ a "Cashless Exercise" with respect to _____ Warrant ADSs.

2. Payment of Exercise Price. In the event that the Holder conducted a Cash Exercise with respect to some or all of the Warrant ADSs to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of $_____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant ADSs.

_____ Issue a certificate or certificates representing said Warrant ADSs in the name of the _____ and deliver such certificate or certificates to _____.

_____ Deliver the Warrant ADSs in uncertificated form to:

Firm Name and DTC Number: _____

Account Name and Number: _____

4. Confirmation. Please send confirmation of receipt of this Exercise Notice to the following facsimile number: _____.

Date: _____ __, 20___

Name of Registered Holder

By: _____
Name:
Title:

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs The Bank of New York Mellon (the "Depositary") to issue the above indicated number of American Depositary Shares in accordance with the Depositary Instructions dated _____, 20__ from the Company and acknowledged and agreed to by the Depositary.

BIOLINERX, LTD.

By: _____
Name:
Title: