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 September, 2011
----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 □

Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934:

Yes □ No 🗵

The Registrant announces that it will hold a Special General Meeting of Shareholders on November 2 at 11:00 a.m. (Israel time) at the offices of Yigal Arnon & Co., 1 Azrieli Center, Tel-Aviv, Israel, for the purposes or receiveing shareholder approval for the extension of the option exercise period for the Series II Options issued by the Registrant on December 27, 2009.

The Registrant further announces that that it will hold a Special General Meeting of holders of its Series II Options on November 2 at 11:30 a.m. (Israel time) at the offices of Yigal Armon & Co., 1 Azrieli Center, Tel-Aviv, Israel, for the purposes or receiveing option holder approval for the extension of the option exercise period for the Series II Options.

In connection with these meetings, on or about October 6, 2011, the Registrant will mail to shareholders and Series II Option Holders Notices of the Special General Meeting of Shareholders and Series II Option Holders, respectively, together with the applicable Proxy Statement and Proxy Card. Attached hereto as Exhibits 1 and 2 are, respectively, the Notice of Special General Meeting and Proxy Statement, and Proxy Card for the Shareholders; and attached hereto as Exhibits 3 and 4 are respectively, the Notice of Special General Meeting and Proxy Statement, and Proxy Card for the Series II Options.

This report on Form 6-K is being incorporated into all effective registration statements filed by us under the Securities Act of 1933.

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 Officer and Operating Officer

Exhibit 1

BIOLINE RX LTD.

NOTICE OF

SPECIAL GENERAL MEETING

OF THE HOLDERS OF ORDINARY SHARES

AND

PROXY STATEMENT

November 2, 2011

Bioline RX Ltd.

NOTICE OF SPECIAL GENERAL MEETING OF SHAREHOLDERS

November 2, 2011

Notice is hereby given that a Special General Meeting of the Shareholders (the "Meeting") of Bioline RX Ltd. (the "Company") will be held at the offices of Yigal Arnon & Co., 1 Azrieli Center, 46th Floor, Tel-Aviv, Israel, on November 2, 2011, at 11:00 a.m. for the following purpose:

1. To approve an extension of the exercise period of the series II options issued to the public on December 27, 2009 (the "Series II Options"), from December 28, 2011 until June 30, 2013

Approval of the Proposal to be presented at the Meeting requires the affirmative vote of Entitled Shareholders (defined below) present in person or by proxy or by providing a written ballot and holding our ordinary shares, nominal value New Israeli Shekels ("NIS") 0.01 each (the "Ordinary Shares"), amounting in the aggregate to the majority of the Entitled Shareholders participating in the meeting who hold at least 75% of the voting power of the Entitled Shareholders who are present in person or by proxy or by providing a written ballot and vote on such proposal.

A shareholder is an "Entitled Shareholder" if the percentage of Ordinary Shares held by such shareholder out of all of our issued and outstanding Ordinary Shares on the Record Date (as defined below) is greater than the percentage of Series II Options held by such shareholder out of all of the issued and outstanding Series II Options on the date of the meeting.

The "Record Date" is October 3, 2011.

Subject to the foregoing, you may attend the meeting in person and vote thereat, appoint a proxy, or vote by written ballot. For those who wish to vote by proxy, a proxy card is attached to the proxy statement accompanying this notice. The written ballot (available in Hebrew only), which includes the details regarding its use, is available at www.maya.tase.co.il and may also be obtained by directly addressing the Company as its registered office at 19 Hartum St, PO Box 45158, Har Hotzvim, Jerusalem, 91450, Israel.

By Order of the Board of Directors,

Bioline RX Ltd.

PROXY STATEMENT

KOAT STATEM

BIOLINE RX LTD. 19 Hartum St., Post Office Box 45158 Har Hotzvim, Jerusalem Israel, 91450

SPECIAL GENERAL MEETING OF SHAREHOLDERS

November 2, 2011

The enclosed proxy is being solicited by our Board of Directors for use at our special general meeting of shareholders (the "Meeting") to be held on at 11:00 a.m., on November 2, 2011, or at any adjournment thereof, at the offices of our attorneys, Yigal Arnon & Co., 1 Azrieli Center, Tel Aviv, Israel. The record date for determining which of our shareholders is entitled to notice of, and to vote at, the Meeting is established as of the close of trade on October 3, 2011 (the "Record Date"). On the date hereof, we have outstanding and entitled to vote 123,592,794 of our ordinary shares, nominal value New Israeli Shekels ("NIS") 0.01 each (the "Ordinary Shares").

INFORMATION CONCERNING SOLICITATION AND VOTING

Record Date and Shares Outstanding

You are entitled to vote at the Meeting if you were an Entitled Shareholder (as defined below) at the close of trade on the Record Date. Subject to the terms described herein, you are also entitled to vote at the Meeting if you held Ordinary Shares through a bank, broker or other nominee which was a shareholder of record of the Company at the close of trade on the Record Date or which appeared in the participant listing of a securities depository on that date.

Quorum, Voting and Solicitation and Revocation of Proxies.

At least two Entitled Shareholders (as defined below) who attend the Meeting in person or by proxy who hold or represent together at least 25% of the voting rights of our issued share capital will constitute a quorum for the Meeting. If a quorum is not present within half an hour from the time scheduled for the Meeting, the Meeting will be adjourned to the following week, at the same time and place, without it being necessary to notify our shareholders. A quorum at such adjourned meeting shall be two Entitled Shareholders present in person or by proxy. Each outstanding Ordinary Share held by a shareholder is entitled to one vote.

Shareholders entitled to vote at the meeting may attend the Meeting in person and vote thereat, appoint a proxy, or vote by written ballot. The proxy card must be received by the Company 48 hours prior to the time of the meeting to be validly included in the tally of ordinary shares voted at the Meeting. Please follow the instructions on the proxy card.

Shareholders who hold share through members of the Tel-Aviv Stock Exchange and intend to vote their share with in person or by proxy must deliver to the Company an ownership certificate, confirming their ownership of share of the Company on the record date.

You may change your mind and cancel your proxy card by filing a written notice of revocation with the Company, by completing and returning a duly executed proxy card bearing a later date or by voting in person at the Meeting. Attendance at the Meeting will not in and of itself constitute revocation of proxy. Shares represented by a valid proxy card will be voted in favor of the proposed resolution to be presented at the Meeting, unless you clearly vote against a specific resolution.

The written ballot (available in Hebrew only), which includes the details regarding its use is available at www.magna.isa.gov.il or at www.magna

Approval of the Proposal to be presented at the Meeting requires the affirmative vote of Entitled Shareholders present in person or by proxy or by providing a written ballot and holding our ordinary shares amounting in the aggregate to the majority of the Entitled Shareholders participating in the meeting who hold at least 75% of the voting power of the Entitled Shareholders who are present in person or by proxy or by providing a written ballot and vote on such proposal.

A shareholder is an "Entitled Shareholder" if the percentage of Ordinary Shares held by such shareholder out of all of our issued and outstanding Ordinary Shares on the Record Date is greater than the percentage of Series II Options held by such shareholder out of all of the issued and outstanding Series II Options on the date of the meeting.

For the purposes of calculation, on the date hereof, the number of our issued and outstanding Ordinary Shares is 123,592,794 and the number of issued and outstanding Series II Options is 7,528,946. Should there be any changes to the number of our outstanding securities as described above prior to the Record Date, we shall issue an immediate report disclosing such fact and the updated number of outstanding securities.

Please Note: We have also convened a meeting of the holders of our Series II Options to approve the same proposal being brought for the approval of our shareholders. Approval of the extension of the exercise period for Series II Options shall only become effective if approved by the requisite majority of each meeting and by the district court thereafter.

PROPOSAL EXTEND EXERCISE PERIOD OF SERIES II OPTIONS

On December 27, 2009, we issued 7,528,946 Series II Options to the public pursuant to a shelf offering report, which was published under a shelf prospectus dated May 3, 2009. Each Series II Option is exercisable into one of our Ordinary Shares, par value NIS 0.01 each. The Series II Options are currently due to expire on December 28, 2011. On May 15, 2011, our Board of Directors, along with our Audit Committee, approved an extension of the exercise period of the Series II Options until June 30, 2013. The resolution to extend the exercise period was based on the fact that the price for each of our Ordinary Shares on the TASE is significantly lower than the exercise price of the Series II Options, which are exercisable at a price of NIS 6.08 per Ordinary Share. During the 30 day trading period prior to the date of this proxy statement, the highest closing price of our ordinary shares on the TASE, was NIS 1.35. Consequently, in order to increase the probability of the exercise of the Series II Options and the resulting revenues to our Company, it was resolved to extend the exercise period to June 30, 2013, while leaving all the other terms unchanged. If the exercise period is not extended, it is more likely that most of the Options will expire before option-holders have an opportunity to exercise them. Extending the exercise period will allow us to raise capital without having to expend additional effort, and would not impose on us any other costs. On August 26, 2011, we received approval for summoning this Meeting from the District Court of Jerusalem.

We recommend that shareholders vote "FOR" the approval of the extension of the exercise period of the Series II Options.

The shareholders are requested to adopt the following resolution:

"RESOLVED that the extension of the Series II Options exercise period until June 30, 2013, is hereby approved."

The affirmative vote of the majority of the Entitled Shareholders participating in the meeting who hold at least 75% of the voting power of the Entitled Shareholders, represented at the meeting in person or by proxy or by providing a written ballot and voting thereon, is necessary for approval of the proposal to extend the exercise period of the Series II Options.

The Board of Directors recommends that the shareholders vote "FOR" the approval of the extension of the exercise period of the Series II Options, as described above.

By Order of the Board of Directors

BIOLINE RX LTD

Please date, sign and mail or fax your proxy card to: Corporate Secretary, Bioline RX Ltd.
19 Hartum St, P.O. Box 45158, Har Hotzvim, Jerusalem 91450, Israel
Fax No: (02) 548-9101

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS DIRECTED HEREIN. IF NO DIRECTION IS INDICATED, THIS PROXY WILL BE VOTED "FOR" THE PROPOSALS HEREIN.				
Please mark your vote as in this example	FOR	AGAINST	ABSTAIN	
1. TO APPROVE an extension in the exercise period of Series II Options until June 30, 2013.				
Please tick the box below ONLY if you are a an ENTITLED SHAREHOLDER □				
				Name: number of shares:
A shareholder is an "Entitled Shareholder" if the percentage of Ordinary Shares held by such shareholder out of all of the issued and outstanding				Signature: Date:
Ordinary Shares of the Company on the record date is greater than the percentage of Series II Options held by such shareholder out of all of the issued and outstanding Series II Options of the Company on the date of the meeting. On September 26, 2011, the number of issued and outstanding Ordinary Shares was 123,592,794 and the number of issued and outstanding Series II Options was 7,528,946. Should there be any changes to the number of outstanding securities of the Company as described above prior to the record date, the Company shall issue an immediate report disclosing such fact and the updated number of outstanding securities.				NOTE: Please mark date and sign exactly as the name(s) appear on this proxy. If the signer is a corporation, please sign the full corporate name by a duly authorized officer. Executors, administrators, trustees, etc. should state their full title or capacity. Joint owners should each sign.

BIOLINE RX LTD.

For the Special Meeting of Shareholders To Be Held On November 2, 2011

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned shareholder of Bioline RX Ltd. (the "Company") hereby appoints Adrian Daniels and/or Amir Assali, and each or either of them, the true and lawful attorney, agent and proxy of the undersigned, with full power of substitution, to vote, as designated below, all of the ordinary shares of the Company which the undersigned is entitled in any capacity to vote at the Special Meeting of the shareholders of the Company which will be held at the offices of Yigal Arnon & Co., 1 Azrieli Center, 46th Floor, Tel-Aviv, Israel, on November 2, 2011, at 11 a.m. (local time), and all adjournments and postponements thereof.

(CONTINUED AND TO BE SIGNED ON REVERSE SIDE)

SEE REVERSE SIDE

Exhibit 3

BIOLINE RX LTD.

NOTICE OF

SPECIAL GENERAL MEETING

OF THE HOLDERS OF THE SERIES II OPTIONS

AND

PROXY STATEMENT

November 2, 2011

Bioline RX Ltd.

NOTICE OF SPECIAL GENERAL MEETING OF OPTION HOLDERS

November 2, 2011

Notice is hereby given that a Special General Meeting of the holders of series II options (the "**Option Holders**") (the "**Meeting**") of Bioline RX Ltd. (the "Company") will be held at the offices of Yigal Arnon & Co., 1 Azrieli Center, 46th Floor, Tel-Aviv, Israel, on November 2, 2011, at 11:30 a.m. for the following purpose:

1. To approve an extension of the exercise period of the series II options issued to the public on December 27, 2009 (the "Series II Options"), from December 28, 2011 until June 30, 2013.

Approval of the Proposal to be presented at the Meeting requires the affirmative vote of Entitled Option Holders (defined below) present in person or by proxy or by providing a written ballot and holding our Series II Options amounting in the aggregate to the majority of the Entitled Option Holders participating in the meeting who hold at least 75% of the voting power of the Entitled Option Holders who are present in person or by proxy or by providing a written ballot and vote on such proposal.

An Option Holder is an "Entitled Option Holder" if the percentage of Series II Options held by such Option Holder out of all of our issued and outstanding Series II Options on the Record Date (as defined below) is higher than the percentage of the Company's ordinary shares, nominal value New Israeli Shekels ("NIS") 0.01 each (the "Ordinary Shares") held by such Option Holder out of all of the issued and outstanding Ordinary Shares on the record date of the general meeting of shareholders (October 3, 2011). For purposes of clarification, an Option Holder who held Series II Options on the Record Date in a percentage which is equal or lower than the percentage of Ordinary Shares held by him on the record date of the general meeting of shareholders shall not be considered an Entitled Option Holder.

The "Record Date" is November 2, 2011.

Subject to the foregoing, you may attend the meeting in person and vote thereat, appoint a proxy, or vote by written ballot. For those who wish to vote by proxy, a proxy card is attached to the proxy statement accompanying this notice. The written ballot (available in Hebrew only), which includes the details regarding its use, is available at www.maya.tase.co.il and may also be obtained by directly addressing the Company as its registered office at 19 Hartum St, PO Box 45158, Har Hotzvim, Jerusalem, 91450, Israel.

By Order of the Board of Directors,

Bioline RX Ltd.

PROXY STATEMENT

BIOLINE RX LTD. 19 Hartum St., Post Office Box 45158 Har Hotzvim, Jerusalem Israel, 91450

SPECIAL GENERAL MEETING OF OPTION HOLDERS

November 2, 2011

The enclosed proxy is being solicited by our Board of Directors for use at our Special General Meeting of Option Holders (the "Meeting") to be held on at 11:30 a.m., on November 2, 2011, or at any adjournment thereof, at the offices of our attorneys, Yigal Arnon & Co., 1 Azrieli Center, Tel Aviv, Israel. The record date for determining which of our Option Holders is entitled to notice of, and to vote at, the Meeting is established as of the close trade on November 2, 2011 (the "Record Date"). On the date hereof, we have outstanding and entitled to vote 123,592,794 of our ordinary shares, nominal value New Israeli Shekels ("NIS") 0.01 each (the "Ordinary Shares").

INFORMATION CONCERNING SOLICITATION AND VOTING

Record Date and Shares Outstanding

You are entitled to vote at the Meeting if you are an Entitled Option Holder (as defined below) at the Record Date. Subject to the terms described herein, you are also entitled to vote at the Meeting if you held Series II Options through a bank, broker or other nominee which is an Option Holder of record of the Company on the Record Date.

Quorum, Voting and Solicitation and Revocation of Proxies.

At least two Entitled Option Holders (as defined below) who attend the Meeting in person or by proxy who hold or represent together at least 25% of the voting rights of our issued Series II Options will constitute a quorum for the Meeting. If a quorum is not present within half an hour from the time scheduled for the Meeting, the Meeting will be adjourned to the following day, at the same time and place, without it being necessary to notify our Option Holders. A quorum at such adjourned meeting shall be two Entitled Option Holders present in person or by proxy. Each outstanding Series II Option held by a Option Holder is entitled to one vote.

Option Holders entitled to vote at the meeting may attend the Meeting in person and vote thereat, appoint a proxy, or vote by written ballot. The proxy card must be received by the Company prior to the time of the meeting to be validly included in the tally of Series II Options voted at the Meeting. Please follow the instructions on the proxy card.

Option holders who hold Series II Options through members of the Tel-Aviv Stock Exchange and intend to vote their Series II Options with in person or by proxy must deliver to the Company an ownership certificate, confirming their ownership of Series II Options on the record date.

You may change your mind and cancel your proxy card by filing a written notice of revocation with the Company, by completing and returning a duly executed proxy card bearing a later date or by voting in person at the Meeting. Attendance at the Meeting will not in and of itself constitute revocation of proxy. Series II Options represented by a valid proxy card will be voted in favor of the proposed resolution to be presented at the Meeting, unless you clearly vote against a specific resolution.

The written ballot (available in Hebrew only), which includes the details regarding its use is available at www.magna.isa.gov.il or at www.maya.tase.co.il and may be obtained directly by addressing the Company at its registered office in Israel. A written ballot must be submitted before the time of the Meeting to be validly included in the tally of ordinary shares voted at the Meeting.

Approval of the Proposal to be presented at the Meeting requires the affirmative vote of Entitled Option Holders present in person or by proxy or by providing a written ballot and holding our Series II Options amounting in the aggregate to the majority of the Entitled Option Holders participating in the meeting who hold at least 75% of the voting power of the Entitled Option Holders who are present in person or by proxy or by providing a written ballot and vote on such proposal.

An Option Holder is an "Entitled Option Holder" if the percentage of Series II Options held by such Option Holder out of all of our issued and outstanding Series II Options on the Record Date is higher than the percentage of Ordinary Shares held by such Option Holder out of all of the issued and outstanding Ordinary Shares on the record date of the general meeting of shareholders (October 3, 2011). For purposes of clarification, an Option Holder who held Series II Options on the Record Date in a percentage which is equal or lower than the percentage of Ordinary Shares held by him on the record date of the general meeting of shareholders shall **not** be considered an Entitled Option Holder.

For the purposes of calculation, on the date hereof, the number of our issued and outstanding Ordinary Shares is 123,592,794 and the number of issued and outstanding Series II Options is 7,528,946. Should there be any changes to the number of our outstanding securities as described above prior to the Record Date, we shall issue an immediate report disclosing such fact and the updated number of outstanding securities.

Please Note: We have also convened a meeting of our shareholders to approve the same proposal being brought for the approval of our option holders. Approval of the extension of the exercise period for Series II Options shall only become effective if approved by the requisite majority of each meeting and by the district court thereafter.

PROPOSAL EXTEND EXERCISE PERIOD OF SERIES II OPTIONS

On December 27, 2009, we issued 7,528,946 Series II Options to the public pursuant to a shelf offering report, which was published under a shelf prospectus dated May 3, 2009. Each Series II Option is exercisable into one of our Ordinary Shares, par value NIS 0.01 each. The Series II Options are currently due to expire on December 28, 2011. On May 15, 2011, our Board of Directors, along with our Audit Committee, approved an extension of the exercise period of the Series II Options until June 30, 2013. The resolution to extend the exercise period was based on the fact that the price for each of our Ordinary Shares on the TASE is significantly lower than the exercise of the Series II Options, which are exercisable at a price of NIS 6.08 per Ordinary Share. During the 30 day trading period prior to the date of this proxy statement, the highest closing price of our Ordinary Shares on the TASE, was NIS 1.35. Consequently, in order to increase the probability of the exercise of the Series II Options and the resulting revenues to our Company, it was resolved to extend the exercise period to June 30, 2013, while leaving all the other terms unchanged. If the exercise period is not extended, it is more likely that most of the Series II Options will expire before option-holders have an opportunity to exercise them. Extending the exercise period will allow us to raise capital without having to expend additional effort, and would not impose on us any other costs. On August 26, 2011, we received approval for summoning this Meeting from the District Court of Jerusalem.

We recommend that Option Holders vote "FOR" the approval of the extension of the exercise period of the Series II Options.

The Option Holders are requested to adopt the following resolution:

"RESOLVED that the extension of the Series II Options exercise period until June 30, 2013, is hereby approved."

The affirmative vote of the majority of the Entitled Option Holders participating in the meeting who hold at least 75% of the voting power of the Entitled Option Holders, represented at the meeting in person or by proxy or by providing a written ballot and voting thereon, is necessary for approval of the proposal to extend the exercise period of the Series II Options.

The Board of Directors recommends that the Option Holders vote "FOR" the approval of the extension of the exercise period of the Series II Options, as described above.

By Order of the Board of Directors

Exhibit 4

BIOLINE RX LTD

Please date, sign and mail or fax your proxy card to: Corporate Secretary, Bioline RX Ltd.
19 Hartum St, P.O. Box 45158, Har Hotzvim, Jerusalem 91450, Israel
Fax No: (02) 548-9101

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS DIRECTED HEREIN. IF NO DIRECTION IS INDICATED, THIS PROXY WILL BE VOTED "FOR" THE PROPOSALS HEREIN. Please mark your vote as in this example FOR AGAINST BSTAIN 1. TO APPROVE an extension in the exercise period of Series II Options until Please tick the box below ONLY if you are a an ENTITLED OPTION HOLDER □ number of Series II Options: number of Ordinary Shares: _ An option holder is an "Entitled Option Holder" if the percentage of Series Signature:_ II Options held by such Option Holder out of all of the issued and Date: outstanding Series II Options of the Company on the record date of the NOTE: Please mark date and sign exactly as the name(s) appear on this meeting is lesser than the percentage of Ordinary Shares held by such Option Holder out of all of the issued and outstanding Ordinary Shares of proxy. If the signer is a corporation, please sign the full corporate name the Company on the record date. For purposes of clarification, an option by a duly authorized officer. Executors, administrators, trustees, etc. holder who held only Series II Options and no Ordinary Shares on the should state their full title or capacity. Joint owners should each sign. record date is not an "Entitled Option Holder." On September 26, 2011, the number of issued and outstanding Ordinary Shares was 123,592,794 and the number of issued and outstanding Series II Options was 7,528,946. Should there be any changes to the number of outstanding securities of the Company as described above prior to the record date, the Company shall issue an immediate report disclosing such fact and the updated number of outstanding securities.

BIOLINE RX LTD.

For the Special Meeting of Shareholders To Be Held On November 2, 2011

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned shareholder of Bioline RX Ltd. (the "Company") hereby appoints Adrian Daniels and Amir Assali, and each or either of them, the true and lawful attorney, agent and proxy of the undersigned, with full power of substitution, to vote, as designated below, all of the ordinary shares of the Company which the undersigned is entitled in any capacity to vote at the Special Meeting of the shareholders of the Company which will be held at the offices of Yigal Arnon & Co., 1 Azrieli Center, 46th Floor, Tel-Aviv, Israel, on November 2, 2011, at 11:30 a.m. (local time), and all adjournments and postponements thereof.

(CONTINUED AND TO BE SIGNED ON REVERSE SIDE)

SEE REVERSE SIDE