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 2012

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 ☑

On September 24, 2012, the Registrant will issue the press release which is filed as Exhibit 1 to this Report on Form 6-K.

This Form 6-K, including all exhibits hereto, is hereby incorporated by reference into all effective registration statements filed by the Company 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.

/s/ Philip Serlin Philip Serlin Chief Financial and Operating Officer

Dated: September 24, 2012



For immediate release

BioLineRx Receives Notice of Allowance from USPTO for New Patent on BL-1020, Extending Patent Protection Until 2031

 New patent provides at least nine years of additional protection over patents previously granted -

Jerusalem, Israel – September 24, 2012 – BioLineRx (NASDAQ: BLRX; TASE: BLRX), a biopharmaceutical development company, announced today that a Notice of Allowance has been received from the United States Patent and Trademark Office (USPTO) claiming the crystalline form of BL-1020, a first-in-class orally available treatment for schizophrenia. The patent, when granted, will be valid at least until 2031, without taking into account any possible extension periods, which is nine years longer than the granted patent coverage previously reported by the Company. Corresponding patent applications are pending in Europe, Japan, India, China, Brazil, Mexico, Canada, Australia and Israel.

"We are extremely pleased with the allowance of the patent covering BL-1020's crystalline form by the USPTO. There is now a significantly longer period of exclusivity to our lead product, which reflects substantial additional progress in its development towards commercialization. This approval, together with recent additional patent approvals regarding BL-1020 and other drug candidates, is a testament to our focused and highly professional patent application strategy," said Dr. Kinneret Savitsky, CEO of BioLineRx. "We believe that the market potential for BL-1020 has increased over the past several months, as some larger pharmaceutical companies have reported failures during late-stage clinical trials, or have reduced the operations surrounding their schizophrenia therapies due to loss of patent protection".

Dr. Savitsky continued, "Today, almost 1% of the world's population suffers from schizophrenia, most of whom suffer concomitant cognitive impairment that may severely affect daily functioning. Whereas current therapies for schizophrenia do not address this need, BL-1020 has shown to significantly improve cognitive function in schizophrenia patients, and we are currently conducting the Phase II/III CLARITY trial with BL-1020's cognition enhancement as its primary objective. We eagerly look forward to the expected results in the second half of 2013."

BL-1020's composition and its use for the treatment of schizophrenia are covered by a separate family of issued patents or pending patent applications in the U.S., Europe, Japan, India, China, Korea, Mexico, Israel and Australia. The issued patents and any additional patents to be issued in the future based on pending patent applications of this family will expire, without taking into account any possible extension periods, in September 2022.

About BL-1020

BL-1020 is a first-in-class GABA-enhanced antipsychotic that combines dopamine antagonism with GABAergic activity. BL-1020 has demonstrated high efficacy and safety with minimal EPS and no metabolic side effects. Most importantly, BL-1020 may have the potential to improve cognition, which is a significant unmet medical need in schizophrenia and other neurological and psychiatric disorders. Three clinical studies have confirmed the safety and efficacy of BL-1020, while pre-clinical studies have also shown that BL-1020's GABA enhancement may provide the basis for improved cognition.

About Schizophrenia

Schizophrenia is a serious mental disorder that affects about 1% of the world's population. It is a multi-factorial disease characterized by delusions and hallucinations, emotional withdrawal and apathy, poor attention and disorganization. The worldwide antipsychotic therapeutic market in 2011 was estimated at approximately \$20 billion.

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) has commenced a Phase II trial, and BL-8040 for treating acute myeloid leukemia (AML) has completed Phase I. In addition, BioLineRx has nine 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.

Various statements in this release concerning BioLineRx's future expectations, including specifically those related to the development and commercialization of BL-1020, 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: changes in relationships with collaborators; the impact of competitive products and technological changes; risks relating to the development of new products; and the ability to implement technological improvements. 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.

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