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 2012

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BioLineRx Ltd.

(Translation of Registrant's name into English)

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P.O. Box 45158
19 Hartum Street
Jerusalem 91450, Israel
(Address of Principal Executive Offices)

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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 February 6, 2012, the Registrant will issue the press release which is filed as Exhibit 1 to this Report on Form 6-K. This report on Form 6-K is being incorporated by reference into all effective registration statements filed by us under the Securities Act of 1933.

SIGNATURE

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

Dated: February 6, 2012

Exhibit 1

For immediate release

BioLineRx In-Licenses Second Oral Hepatitis C Treatment

Worldwide, exclusive deal signed with Genoscience and RFS Pharma for development and commercialization of BL-8030

Advantages of BL-8030 include high specificity, improved resistance profile, reduced toxicity and potentially reduced drug-drug interactions

Jerusalem, Israel – February 6, 2012 – BioLineRx (NASDAQ: BLRX; TASE: BLRX), a biopharmaceutical development company, announced today it has signed a worldwide, exclusive license agreement with Genoscience and RFS Pharma to develop and commercialize BL-8030, an orally available treatment for Hepatitis C. The agreement includes upfront license fees, milestones and royalties payable to both companies, which terms are consistent with BioLineRx's standard in-license agreements.

BL-8030 is a potent and selective second generation NS3 protease inhibitor. The NS3 protease is essential for the replication of the Hepatitis C virus (HCV) and is an important target for HCV therapies. BL-8030 has been shown to have excellent antiviral activity against various HCV genotypes. Pre-clinical studies have demonstrated an improved resistance profile against common protease inhibitor mutants, resulting in a lower probability that the virus will develop resistance to treatment. In addition, BL-8030 has demonstrated a good toxicity profile in pre-clinical studies, exhibiting specificity only to the viral protease and lack of activity against a relevant panel of human proteases as well as a clean profile versus human liver enzymes, which is expected to lead to less drug-drug interactions.

BL-8030 was invented by Professor Philippe Halfon and his team at Genoscience and co-developed with assistance from scientists at RFS Pharma, LLC. Prof. Halfon, Co-Founder and President of Genoscience, is a specialist in molecular virology and infectious diseases, especially HIV, HPV (Human Papilloma Virus) and Hepatitis. In addition he is the founder of several biotechnology companies focusing on antiviral drug discovery and development including ACTgene, Alphabio and Genoscience. RFS Pharma was founded by Professor Raymond F. Schinazi; he currently serves as the Frances Winship Walters Professor of Pediatrics at Emory University. He is also a founder of Pharmasset, Idenix, Triangle and ActivBiotics Pharma.

Prof. Philippe Halfon said, "We were impressed by the drug development expertise of the BioLineRx team and are very pleased to collaborate with them on a second HCV project. There is clearly a huge unmet medical need in finding a safe and effective treatment for HCV, and based on pre-clinical results, we believe that our product, especially when combined with other available Hepatitis C drugs, has the potential to become an important addition to HCV combination therapies and bring remedy to millions suffering from this devastating disease."

“We worked closely with the group at Genoscience to determine the optimum characteristic that led to the discovery of BL-8030 and related protease inhibitors,” said Dr. Steven J. Coats, Senior Director of Chemistry at RFS Pharma.

“We are privileged and fortunate to partner with two world class groups in the development of viral therapeutics," said Dr. Kinneret Savitsky, CEO of BioLineRx. "Two years ago, we took a strategic decision to enter the dynamic and rapidly growing field of Hepatitis C. Since that time, we have evaluated numerous projects in the field. A year ago, we identified and decided to focus on the in-licensing of the two most promising candidates: BL-8020, which we've recently licensed, and now BL-8030. We will do our utmost to develop these promising drugs as swiftly as possible for the benefit of Hepatitis C infected individuals around the world.”

About Hepatitis C

Hepatitis C is a blood borne infection of the liver caused by the Hepatitis C virus (HCV) which becomes chronic in about 85% of cases. According to the World Health Organization (WHO), up to 170 million people worldwide are chronically infected with HCV. In addition, HCV infection is the leading cause of liver transplantation and is a risk factor for liver cancer. The Hepatitis C market is growing rapidly and is forecasted to reach $16 billion in 2015 in the seven major markets (US, France, Germany, Italy, Spain, UK and Japan).

About BioLineRx

BioLineRx Ltd. is a publicly-traded biopharmaceutical development company. It 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 five clinical stage candidates: BL-1020 for schizophrenia has commenced a Phase II/III study; BL-1040, for prevention of pathological cardiac remodeling following a myocardial infarction, is currently undergoing a pivotal CE-Mark registration trial and has been out-licensed to Ikaria Inc. for a total deal value of $282.5 million, in addition to sales royalties; 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 and BL-7040 for treating Inflammatory Bowel Disease (IBD) has completed Phase I. In addition, BioLineRx has 13 products in various pre-clinical development stages for a variety of indications, including central nervous system diseases, oncology, 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.

About Genoscience
Genoscience, a biopharmaceutical company located in Marseille, France, is focused on the development of new drugs for the treatment of viral diseases as HCV. Genoscience's innovative technology platform, which combines internal expertise in resistance with unique molecular modeling through its proprietary software (GenMol™), allows for the development of highly targeted molecules, taking into account the phenomenon of resistance. For further information about Genoscience, please refer to http://www.genosciencepharma.com.

About RFS Pharma, LLC
RFS Pharma, LLC was founded in September 2004 and is located in a 26,500 sq. ft. state-of-the-art research facility in Tucker, Georgia. RFS Pharma is a privately owned biotech company committed to the discovery and development of antiviral agents and other human therapeutics. The company capitalizes on its expertise in nucleoside chemistry to develop drugs to combat infections caused by drug-resistant HIV and hepatitis viruses. RFS Pharma's lead product candidate is amdoxovir, which is in advanced Phase 2 clinical studies for the treatment of HIV-1 infections. In addition, the company has identified promising, early stage compounds for hepatitis infections, analogs that are effective against noroviruses, and has a proprietary novel nucleoside prodrug technology. For further information about RFS Pharma, please refer to our website, www.rfspharma.com.

Various statements in this release concerning BioLineRx's future expectations, plans and prospects, including, without limitation, statements relating to the ability to develop and commercialize the BL-8030 project, 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 Form 20-F filed with the Securities and Exchange Commission on July 15, 2011. 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.