Positive Results from Phase I/II Trial of BL-5010 for Non-Surgical Removal of Skin lesions

December 28, 2010

Jerusalem, December 28, 2010. BioLineRx (TASE:BLRX) announces receipt of positive results from the Phase I/II clinical trial of BL-5010, a novel formulation for the non-surgical removal of skin lesions.

The recently completed open-label, single-arm trial was conducted in 60 patients with Seborrheic Keratosis in Germany and the Netherlands. The objectives of the study were to determine the safety and efficacy of BL-5010 in completely removing the lesion and to assess the cosmetic outcome of the novel treatment. The study also aimed at evaluating BL-5010's feasibility in preserving the lesions for subsequent histological examination.

The results of the trial show that for almost all the patients (96.7%) the lesion sloughed off within 30 days of a single application of BL-5010. Furthermore, the results show that BL-5010 has a good safety profile, as no persistent irreversible adverse effects were observed at the treated site.

In addition, most of the investigators and patients who participated in the trial reported that they were very satisfied with the cosmetic outcome of the treatment. 94.6% of the investigators and 84% of the patients stated that the results were good or excellent 180 days following treatment.

Histological examination of the lesions showed that BL-5010 enables preservation of the histological structure of the treated lesion.

Dr. Kinneret Savitsky, BioLineRx CEO said: "We are happy with the positive results of the clinical trial, which fulfill our expectations regarding BL-5010's efficacy and safety. BL-5010 represents a novel method for removing skin lesions without surgery, anesthesia and without significant adverse effects. We are currently looking at our next steps from a regulatory, clinical and business perspective. In addition, we continue to invest significant efforts in developing the rest of our products while seeking additional innovative projects to expand the Company's pipeline."

About BL-5010
BL-5010 is a novel formulation for non-surgical removal of benign skin lesions such as Seborrheic Keratosis. These lesions are widespread, particularly amongst the elderly, and are often uncomfortable, may be painful, may bleed, are prone to infection and are regarded as unaesthetic. Current treatment for such benign lesions includes cryotherapy, laser therapy or electro-cauterization, which may result in complications including pain, bleeding and infection that may delay healing and result in scarring. BL-5010 administration is convenient and does not require special training or necessitate anesthesia. Furthermore, we believe that BL-5010's unique formulation enables preservation of the lesion for histological examination.

About BioLineRx
BioLineRx Ltd. is a publicly-traded (TASE:BLRX) biopharmaceutical development company based in Jerusalem, Israel, with US offices in Rockville, Maryland. BioLineRx is dedicated to identifying, in-licensing and developing therapeutic candidates for unmet medical needs or that have advantages over currently available therapies. BioLineRx's current development pipeline consists of three clinical stage candidates as well as eight candidates in various pre-clinical development stages spanning a variety of indications, including central nervous system diseases, oncology, cardiovascular and autoimmune diseases. Two of BioLineRx's lead compounds, BL-1040 and BL-1020, have been out-licensed for continuation of development and commercialization. BL-1040 (IK-5001), an injected medical device developed for the prevention of cardiac remodeling in Acute Myocardial Infarction (AMI) patients, was out-licensed to Ikaria Holdings Inc. in July 2009 for a total deal value of $282.5 million, in addition to sales royalties. BL-1020 (CYP-1020), for schizophrenia treatment, was out-licensed in June 2010 to Cypress Bioscience Inc. for continuation of development and commercialization in North America only, for a total deal value of $365 million, in addition to sales royalties.

For more information about BioLineRx, please visit www.biolinerx.com.

The estimates and judgments with respect to BL-5010 included in this release are considered forward-looking statements, which involve certain risks and uncertainties. Factors that could cause actual results to differ materially from those forward-looking statements include the high uncertainty that characterizes research and development activities in general, particularly those of drug development, including inefficiencies, inability to manufacture, toxicity, a high level of risk/reward in comparison to current treatments available, as well as new information regarding intellectual property rights which may affect the economic viability of continued product development. The Company assumes no responsibility for updating forward-looking statements made herein or otherwise.