For Immediate Release

BioLineRx and Yissum Sign a Licensing Agreement for the Development of a Novel Compound for the Treatment of Inflammatory Bowel Disease

Jerusalem, Israel, November 12, 2008 – Yissum Ltd., the Technology Transfer Company of the Hebrew University of Jerusalem, and BioLineRx Ltd. (TASE: BLRX), a clinical stage drug development company, today announced that they have signed a worldwide exclusive license agreement for BioLineRx to develop and commercialize BL-5040, a new anti-hormone for the treatment of inflammatory diseases. Rights to the compound were also obtained from Tel Aviv Sourasky Medical Center. Financial terms of the license were not disclosed.

BL-5040 is a novel drug candidate that utilizes a mutated version of leptin acting as an antagonist with anti-inflammatory properties. Leptin is a hormone that has an important role in regulating inflammation immunity, as well as appetite control. BL-5040 binds tightly to the leptin receptor and thus blocks the binding of leptin. It has been shown that BL-5040 can block inflammation in animal models without discernible side-effects. BioLineRx will be developing BL-5040 to treat inflammatory bowel diseases (IBD) such as colitis and Crohn's disease.

"IBD belongs to a large family of diseases caused by the unleashed activity of our own immune system. BL-5040 addresses the very mechanism causing the disease and therefore has the potential to be a breakthrough in the treatment of inflammatory diseases such as colitis and Crohn's," stated Nava Swersky Sofer, CEO of Yissum. "We are delighted to once again collaborate with BioLineRx to further develop our invention for the benefit of patients."

“The treatment of IBD has not advanced significantly in the last few decades, and current therapies suffer from limited efficiency or significant side effects. BL-5040 is part of the new and exciting biological approach for treating these debilitating diseases, and preclinical trials look very promising," commented Morris C. Laster, MD, CEO of BioLineRx. "We look forward to further developing this drug candidate, which we believe may present a new and improved treatment for inflammatory disease and could have a positive impact on millions of lives."

The compound was initially developed by Prof. Arieh Gertler, from the Robert H. Smith Faculty of Agriculture, Food and the Environment at the Hebrew University of Jerusalem in collaboration with Drs. Isabel Callebaut of L'Universite Pierre et Marie
Curie and Jean Djiane of INRA of France. Thereafter, the collaborative research was carried out with Prof. Zamir Halpern and Dr. Eran Elinav, both from the Institute for Gastroenterology and Liver Diseases at Tel Aviv Sourasky Medical Center, who studied the medical applications of the compound.

Approximately 1 in 500 people suffer from IBD. The condition has few specific treatments available, with sales of existing drugs estimated at $1.8 billion, but none of the current treatments fully addresses patients’ needs.

About Yissum
Yissum was founded in 1964 to protect the Hebrew University’s intellectual property and commercialize it. $1 in annual sales is generated by products based on Hebrew University technologies licensed out by Yissum. Ranked among the top technology transfer companies in the world, Yissum has registered 5500 patents covering 1600 inventions; licensed out 480 technologies and spun out 65 companies. Yissum’s business partners span the globe and include companies such as Novartis, Microsoft, Johnson & Johnson, Merck, Intel, Teva and many more. For further information please visit www.yissum.co.il.

About BioLineRx
BioLineRx, a clinical stage drug development company traded on the Tel Aviv Stock Exchange (TASE: BLRX), is dedicated to building a robust pipeline of promising therapeutics for unmet medical needs. The Company’s lead programs include BL-1020 for the treatment of schizophrenia, currently in Phase 2b trials; and BL-1040 for the treatment of damaged heart tissue post-myocardial infarction, currently in a Phase 1/2 study. Additional products under development include compounds for the treatment of cancer and CNS, cardiovascular, metabolic, infectious and autoimmune diseases.

BioLineRx advances projects from early stage discovery and lead generation to advanced clinical trials. BioLineRx partners with researchers, universities and biotech companies to further the development of promising compounds. The Company was founded in 2003 by leaders in the Israeli life science arena including Teva Pharmaceuticals Ltd., venture capital firms Giza Venture Capital and Pitango Venture Capital, and Hadassit, the technology transfer company of Hadassah Hospital and the Jerusalem Development Authority. For more information, please visit www.biolinerx.com.

This press release contains "forward-looking statements" that involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms including "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would," “hope,” “look forward” and similar expressions intended to identify forward-looking statements. Forward-looking statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. You should not put undue reliance on any forward-looking statements. Unless we are required to do so
under applicable laws, we do not intend to update or revise any forward-looking statements.

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