BIOLINERX

BioLineRx's BL-1040 Named One of 10 Most Promising Cardiovascular Projects by Windhover

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Jerusalem, Israel, July 16, 2008 – BioLineRx Ltd. (TASE: BLRX), a clinical stage drug development company, announced today that BL-1040, a novel myocardial implant for the treatment of acute myocardial infarction (MI), has been selected as one of the Top 10 most promising cardiovascular projects in development available for strategic partnering by an independent committee assembled by Windhover Information, a leading provider of business information products and services to senior executives in the pharmaceutical, biotechnology, and medical device industries.

"Selected companies have been screened using a strict set of judging criteria for the Top 10 award and represent what our committee considered the most attractive cardiovascular opportunities the industry has to offer," said Roger Longman, Managing Director of Windhover Information. "Winners have met rigorous criteria including: unmet medical need, market potential, diversity of indications, strong science, multi-level partnering opportunities (biotech and pharma), potential for new opportunities beyond initial indications, and corporate stability."

"We are extremely proud that BL-1040 has been selected as one of the top ten most innovative cardiovascular treatments, further recognition of BL-1040's potential to become a revolutionizing new therapy for acute MI," said Morris C. Laster, M.D., Chief Executive Officer of BioLineRx. "BL-1040, currently in Phase 1/2 clinical trials, is the first compound that attempts to treat damaged cardiac tissue resulting from an acute MI and addresses a tremendous unmet medical need."

The selection committee was led by Marc Wortman, PhD, contributing writer to Windhover's In Vivo and Start Up, Michael Rice, Senior Consultant, and Ed Saltzman, President of Defined Health, a leading business development strategy consulting firm. Drawing on the analytic resources of these organizations, the group evaluated hundreds of compounds currently in development for the treatment of cardiovascular disease prior to selecting BioLineRx's BL-1040 among the top ten most attractive.

As a selected company, BioLineRx has been invited to present data on BL-1040 at Windhover's Therapeutic Area Partnerships conference on November 3-5, 2008, in Philadelphia, PA.

About BL-1040

BL-1040 represents a breakthrough approach to supporting cardiac tissue damaged as a result of acute myocardial infarction (MI), improving cardiac function and survival. The novel myocardial implant is a resorbable liquid polymer that is administered via the coronary artery during standard catheterization and flows into the damaged heart muscle. The liquid polymerizes within the infarcted cardiac tissue and forms a protective "scaffold" that enhances the mechanical strength of the heart muscle during recovery and repair, thereby preventing pathological enlargement of the left ventricle after the MI. It is excreted naturally from the body within six weeks after injection, leaving behind a stronger, more stable heart muscle. BL-1040 is currently in Phase 1/2 testing.

BL-1040 was in-licensed by BioLineRx from Ben-Gurion University through BGN Technologies, and it was developed by Professor Smadar Cohen and Professor Jonathan Leor from the Department of Biotech and Biomedical Engineering at Ben-Gurion University.

For further information on BL-1040, please visit the BioLineRx website and BL-1040 animation.

About Windhover

Windhover Information Inc., an Elsevier company, has led the field in providing analysis of the healthcare industry to decision-makers at all levels since the founding of its flagship publication, IN VIVO, The Business & Medicine Report, in 1983. Windhover provides its information and analysis in many formats, including print, electronic databases, international conferences and webinars. For more on the company's products and services, please see www.windhover.com.

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 leading programs are BL-1020 for the treatment of schizophrenia, which has begun a Phase 2b trial, and BL-1040 for the treatment of damaged heart tissue post-myocardial infarction, which is undergoing 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 Hadasit, 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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