



BioLineRx Announces New Results Confirming the Mode of Action of Its Anti-Psychotic Drug- BL-1020

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Jerusalem, Israel, June 21st, 2009- BioLineRx, a drug development company with products in advanced clinical and pre-clinical testing, announced today new results confirming its GABA enhanced BL-1020 drug's MOA.

BL-1020's role in minimizing Extra-Pyramidal Symptoms (EPS) and improving cognitive functions has been studied extensively by the company in the in collaboration with opinion leaders in the field including Prof. Jo Neill (Bradford University, UK) and Dr. Herbert Meltzer (Vanderbilt University, USA). Recent pre-clinical studies clearly show that BL-1020 reverses cognitive impairment and that this reversal is mediated by the GABA moiety of BL-1020. According to Prof. Jo Neill, "BL-1020 improves deficits in preclinical paradigms assessing performance in two distinct cognitive domains. Pharmacological studies confirm a role for GABAA receptors in its pro-cognitive effects".

Dr. Morris Laster, BioLineRx's CEO states that: "These results are extremely important for the confirmation of the mode of action of BL-1020 in reducing EPS and improving cognition. Dr. Laster also said: "These results showing improved cognition may also allow for increased indication coverage for BL-1020 including dementia associated with Parkinson's and even as a potential adjunct treatment for Alzheimer's.

About Current Antipsychotics

Currently available treatments for schizophrenia include two broad classes of antipsychotics: the older "typical" drugs the new generation "atypical" drugs. Both classes of medications are similarly effective at treating schizophrenia but have varying and severe side effects that limit patient compliance. Typical antipsychotics generally cause debilitating movement disorders known as extra-pyramidal side effects. Atypical antipsychotics have fewer motor side effects but may cause increased risks of obesity, diabetes and high blood cholesterol.

About BL-1020

BL-1020 is an orally available antipsychotic for the treatment of schizophrenia. BL-1020 has recently completed a phase 2b clinical trial, designed to provide evidence that BL-1020 is a new generation antipsychotic with minimal side effects and greater tolerability. Results are expected by the end of August, 2009.

In this six-week, double-blind, parallel group study, patients were randomized to one of four arms, receiving a low dose or high dose of BL-1020; risperidone, an approved atypical schizophrenia drug; or placebo. The study also included a blinded 6 weeks continuation phase in which patients who chose to continue are expected to receive active drugs. 363 schizophrenia patients were recruited for the study at 40 sites in the U.S., Europe and India; it was conducted under a U.S. Food and Drug Administration Investigational New Drug (IND) application. The study was designed to provide evidence that BL-1020 is a new generation antipsychotic with minimal side effects and greater tolerability.

Previous clinical trials have shown that BL-1020 is an effective antipsychotic and that that it is associated with minimal side effects that reduce patient compliance with current treatment regimens. Phase IIa trial results have shown the efficacy and tolerability of BL-1020. Pre-clinical studies have shown that BL-1020 has the potential to improve cognition, an unmet medical need in schizophrenia.

We obtained a worldwide exclusive license for BL-1020 from Bar-Ilan Research and Development Company Ltd. and Ramot at Tel Aviv University Ltd. BL-1020 was invented by Prof. Abraham Nudelman (department of Chemistry, Bar-Ilan University), Dr. Ada Rephaeli, Prof. Abraham Weizman and Dr. Irit Gil-Ad (Faculty of Medicine, Tel-Aviv University).

About Schizophrenia

Schizophrenia is a serious mental disorder that affects about 1% of the world's population. It is a multifactorial disease characterized by delusions and hallucinations, emotional withdrawal and apathy, poor attention and disorganization. In 2002, the overall cost of schizophrenia in the United States was estimated at \$62.7 billion, and the market for schizophrenia therapy in the U.S. is estimated to reach approximately \$10 billion in 2012.

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 for schizophrenia and treatment of damaged heart tissue post-myocardial infarction. Additional products under development include compounds for the treatment of cancer and CNS, cardiovascular, infectious and autoimmune diseases.

BioLineRx advances projects from early stage discovery and lead generation to advanced clinical trials, regulatory approval and marketing. Partnering with researchers, universities and biotech companies to further the commercialization of promising compounds, BioLineRx seeks to enrich the pipeline of large pharmaceutical companies seeking their next blockbuster drugs. The Company was founded in 2003 by leaders in the Israeli life science arena including Teva Pharmaceuticals Ltd, Giza, Pitango, Hadasit and the Jerusalem Development Authority.

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