Stimuvax(c) Phase II data highlight three-year survival results for patients with non-small cell lung cancer

EDMONTON, Sept. 5, 2007 - Biomira Inc. (Nasdaq: BIOM) (TSX: BRA) today announced the presentation of three-year survival results from a randomized Phase II trial of the Stimuvax® MUC-1 vaccine in non-small cell lung cancer (NSCLC). The results suggest that Stimuvax combined with best supportive care (BSC) may provide survival benefits to patients with unresectable stage IIIB NSCLC who had either responded or had stable disease after initial radio-chemotherapy, compared with patients receiving BSC alone. Dr. Charles Butts, from the Department of Medical Oncology, Cross Cancer Institute, Edmonton, Alberta and lead investigator of the Phase II study presented the data yesterday (Abstract # B1-01) at the International Association for the Study of Lung Cancer (IASLC) Congress in Seoul, South Korea.

The updated survival results show that approximately twice as many patients were still alive at three years in the Stimuvax arm compared with BSC alone (49% (n=17) vs. 27% (n=8)), representing a 45% reduction in mortality. As previously reported, patients with stage IIIB locoregional disease who received Stimuvax in this trial also experienced a 17.3 month difference in median survival compared with patients receiving BSC alone (30.6 months vs. 13.3 months, respectively). Patients receiving Stimuvax in this trial also reported mild to moderate side effects limited to flu-like symptoms, gastro-intestinal disturbances and mild injection site reactions.

"The updated survival data are encouraging and support the need for further investigation via the ongoing Phase III trial of Stimuvax as a maintenance therapy for patients with advanced lung cancer," commented Dr. Butts.

Based on the Phase II results, Stimuvax has entered its Phase III development and the START (Stimulating Targeted Antigenic Responses to NSCLC) trial is currently open for enrollment. The START trial is being conducted by Merck KGaA of Darmstadt, Germany, which has licensed worldwide development and commercialization rights to Stimuvax from Biomira. Stimuvax is being developed in Europe by Merck KGaA and in the United States by its affiliate, EMD Serono Inc.

"Patients with unresectable stage III non-small cell lung cancer have significant unmet medical need, and the START study is the first Phase III program to evaluate a therapeutic cancer vaccine in this population," said Dr. Robert L. Kirkman, MD, President and Chief Executive Officer of Biomira. "If these survival results are statistically confirmed in the Phase III trial, Stimuvax has the potential to become an important tool in the treatment of lung cancer."

According to the American Cancer Society, lung cancer is the leading cause of cancer-related deaths in both men and women worldwide, with approximately 80% of cases classified as NSCLC. Current survival rates for NSCLC are low, with only 16% of patients alive five years post-diagnosis. Unfortunately for most patients, current treatments provide limited success. Stimuvax is an innovative cancer vaccine designed to stimulate the body's immune system to identify and destroy cancer cells expressing MUC1, a protein antigen that is widely expressed on common cancers including lung, breast and colorectal.

About the Phase II Trial
171 patients with ECOG 0-2 stage IIIB/IV NSCLC with stable or responding disease after any first-line chemotherapy with or without radiotherapy were randomized to receive Stimuvax plus BSC or BSC alone. Patients were stratified by stage of disease (IIIB LR or stage IIIB with malignant pleural effusion, and stage IV). Patients in the Stimuvax arm received a single intravenous dose of cyclophosphamide 300mg/m2 followed by 8 weekly subcutaneous immunizations with Stimuvax (1,000(micro)g). While the overall study results were not statistically significant, in the randomization stratum of patients with stage IIIB locoregional disease, Stimuvax showed a median survival of 30.6 months versus 13.3 months in the control group - an improvement of 17.3 months. In the Phase IIb study, side effects were primarily limited to flu-like symptoms, GI disturbances and injection site reactions.

About START - Phase III Trial
START is a multi-center, randomized, double-blind, placebo-controlled study that will evaluate patients with documented unresectable stage IIIA or IIIB NSCLC who have had a response or stable disease after at least two cycles of platinum-based chemo-radiotherapy. The study is expected involve more than 1,300 patients in approximately 30 countries. For more information on the START study, or to find a participating center and eligibility criteria, go to www.nsclcstudy.com. The study is also listed on www.clinicaltrials.gov.

About Stimuvax
Stimuvax is an innovative cancer vaccine designed to induce an immune response to cancer cells that express MUC1, a protein antigen widely expressed on common cancers. MUC1 is over expressed on many cancers such as lung cancer, breast cancer and colorectal cancer. Stimuvax is thought to work by stimulating the body's immune system to identify and destroy cancer cells expressing MUC1.
About Biomira
Biomira is a biotechnology company specializing in the development of innovative therapeutic products for the treatment of cancer. Biomira’s goal is to develop and commercialize novel synthetic vaccines and targeted small molecules that have the potential to improve the lives and outcomes of cancer patients.

Forward Looking Statements
This press release contains forward looking statements, including, without limitation, statements related to the therapeutic and commercial potential of Stimuvax; future clinical development plans; the details of the clinical trials; and the anticipated future size of the market for Stimuvax. Any statements contained in this press release that are not statements of historical fact may be deemed to be forward-looking statements. Words such as "believes," "anticipates," "plans," "expects," "will," "intends," "potential," "possible" and similar expressions are intended to identify forward-looking statements. These forward-looking statements are based upon Biomira's current expectations. Forward-looking statements involve risks and uncertainties. Various factors could cause actual results to differ materially from those projected in forward-looking statements, including those predicting the timing, duration and results of clinical trials, the timing and results of regulatory reviews, and the safety and efficacy of Stimuvax. There can be no guarantee that the results of earlier trials will be predictive of either safety or efficacy in future trials. Biomira expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the company’s expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based.

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