



GlycoMimetics, Inc.

FOR IMMEDIATE RELEASE

GlycoMimetics, Inc. to Present New Results of Lead Candidate in Additional Animal Models of Sickle Cell Disease at American Society of Hematology Annual Meeting

Second Abstract Describing a Model of Myeloid Leukemia Also Accepted

GAITHERSBURG, Md. -- December 8, 2008 --GlycoMimetics, Inc. (GMI), a privately held firm that is developing a new class of glycobiology-based therapies for a broad range of indications, today announced it has been selected to give an oral presentation of new results of its lead drug candidate in animal models of vaso-occlusive crisis of sickle cell disease at the 50th Annual American Society of Hematology (ASH) meeting, December 6th-9th in San Francisco.

A second abstract that describes the drug candidate's potential use in Acute Myeloid Leukemia has also been accepted for publication in the 2008 volume of the meeting's Education Program.

The two abstracts describe the results of a series of experiments that demonstrate the activity of GMI's lead drug candidate, GMI-1070. The candidate is a rationally designed carbohydrate mimic (or "glycomimetic") that has been shown to inhibit inflammation in several animal models of disease, including vaso-occlusive crisis of sickle cell disease. Phase 1 clinical trials of GMI-1070 in sickle cell are underway, with Phase 2 trials planned for 2009.

Abstract #535, "Effects of Pan-Selectin Antagonist GMI-1070 on the Treatment of Vaso-Occlusion in Sickle Cell Mice", will be presented by Dr. John Magnani, Vice President and Chief Scientific Officer of GlycoMimetics, Inc., on Monday, December 8th. The study described in the presentation concludes that GMI-1070 can significantly improve outcomes - including survival - when animals are dosed after a vaso-occlusive crisis is well underway.

Abstract #14499, "Pan-Selectin Inhibitor GMI-1070 Blocks Cell Adhesion of Acute Myelogenous Leukemia Cell Lines", describes a model developed to study the dissemination of the disease from bone marrow to other organs, and the effects of GMI-1070 on the adhesion of AML cells.

About GlycoMimetics, Inc.

GMI is a privately held biopharmaceutical company that capitalizes on advances in the field of glycobiology. The Company uses rational design of small molecule drugs that mimic the functions of bioactive carbohydrates to develop new drug candidates. The company's initial focus is on therapeutics to treat inflammation, cancer, and infectious diseases. More information is available at the company's web site: <http://www.glycomimetics.com>.

About GMI-1070

GMI's lead compound, GMI-1070, is a rationally designed glycomimetic inhibitor of E-, P- and L-selectins, and inhibits a key early step in the inflammatory process leading to leukocyte adhesion and recruitment to inflamed tissue. GMI-1070 has been shown to be active in several models of diseases in which leukocyte adhesion and activation play a key role, including vaso-occlusive crisis of sickle cell disease. By inhibiting selectin interactions, GMI-1070 may be able to decrease the enhanced cell adhesion that results in vaso-occlusive crisis. In pre-clinical studies, GMI-1070 restored blood flow to affected vessels of sickle cell animals experiencing vaso-occlusive crisis. GMI-1070 is also being evaluated in preclinical studies for the treatment of certain hematologic cancers, where selectin-mediated cell adhesion and migration is known to play a key role in the disease process. Phase 1 clinical trials of GMI-1070 in sickle cell disease began earlier this year, with phase 2 trials planned in 2009.

About Vaso-Occlusive Crisis

Vaso-occlusive crisis is the main clinical feature of sickle cell disease, often resulting in significant clinical complications, and sometimes death. Currently, there are no mechanism-based therapies for treatment of vaso-occlusive crisis. Treatment consists primarily of supportive therapy in the form of hydration and pain control, typically requiring hospitalization for five to six days. There are approximately 75,000 hospitalizations per year associated with vaso-occlusive crisis in the US.

About Acute Myeloid Leukemia

Acute Myeloid Leukemia (AML) is a cancer of the blood or bone marrow and is characterized by increased proliferation of abnormal white blood cells and the resulting inhibition of healthy blood cell production. Most patients with AML initially respond to chemotherapy but later relapse and die from the disease. AML is the most common acute leukemia affecting adults, and its incidence is expected to increase as the population ages.