



GlycoMimetics, Inc.

FOR IMMEDIATE RELEASE

GlycoMimetics, Inc. Commences Phase 1 Clinical Trial of Lead Drug Candidate

Pan-selectin inhibitor will initially target vaso-occlusive crisis associated with sickle cell disease

GAITHERSBURG, Md. – September 5, 2008 - GlycoMimetics, Inc., a privately held company developing a new class of glycobiology-based therapies for a broad range of indications, today announced it has initiated a Phase 1 clinical trial for GMI-1070, its lead drug candidate for the treatment of vaso-occlusive crisis of sickle cell disease.

"We are pleased to advance our lead drug candidate into clinical trials," said Rachel King, Chief Executive Officer of GlycoMimetics. "GMI-1070 possesses excellent drug-like properties and has demonstrated potency in pre-clinical studies of vaso-occlusive crisis as well as in other disease indications."

The Phase 1 trial will evaluate the safety and pharmacokinetics of a single intravenous dose of GMI-1070 at a range of dose levels. The initial Phase 1 trial will be followed by additional multiple dose studies in healthy volunteers and, later, in sickle cell patients to further assess safety and to evaluate clinical effects.

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. GMI-1070 was discovered at GlycoMimetics in collaboration with the University of Basel Pharmacenter in Basel, Switzerland.

About Vaso-Occlusive Crisis

Vaso-occlusive crisis is the main clinical feature of sickle cell disease, often resulting in significant clinical complications, including 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 GlycoMimetics, Inc.

GlycoMimetics 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>.