



GlycoMimetics, Inc.

FOR IMMEDIATE RELEASE

***Blood* Publishes Pre-Clinical Data on GlycoMimetics, Inc. Lead Compound in Sickle Cell Disease Model**

GAITHERSBURG, Md. September 28, 2010 – GlycoMimetics, Inc., a clinical-stage biotechnology company developing a new class of glycobiology-based therapies for a broad range of indications, today announced that the journal *Blood* has published pre-clinical data on the company's lead compound GMI-1070 in a model of sickle cell disease. The article, "GMI-1070, a novel pan-selectin antagonist, reverses acute vascular occlusions in sickle cell mice," presents pre-clinical data supporting testing of GMI-1070 in clinical trials to treat patients with vaso-occlusive crisis of sickle cell disease. The article is accompanied by a commentary entitled "Mightier Than the Sickle Cell," which discusses the biological mechanism involved in the activity of GMI-1070 in the sickle cell model.

"We are very pleased to have this important data published in *Blood*," said John Magnani, Ph.D., Chief Scientific Officer of GlycoMimetics. "It provides key support for the Company's clinical program in sickle cell disease, which is targeting treatment of vaso-occlusive crisis – the disease's main clinical feature. Currently, there are no mechanism-based therapies for treatment of vaso-occlusive crisis, which is a significant clinical problem. "

In the *Blood* paper, investigators describe experiments testing GMI-1070 in a mouse model of sickle cell crisis. In that model, GMI-1070 rapidly reverses vaso-occlusion. The experiments were performed in the laboratory of Dr. Paul Frenette at the Mount Sinai College of Medicine in New York. GMI-1070 is currently in Phase 2 clinical testing in patients experiencing vaso-occlusive crisis.

The paper is available on line at

<http://bloodjournal.hematologylibrary.org/cgi/content/abstract/116/10/1779>

About GMI-1070

Glycomimetics' 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 preclinical 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. A Phase 2 clinical trial of GMI-1070 in sickle cell disease was initiated in June 2010.

About Sickle Cell Disease and Vaso-Occlusive Crisis

Vaso-occlusive crisis is the main clinical feature of sickle cell disease, often resulting in significant patient 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 more than 75,000 hospitalizations per year associated with vaso-occlusive crisis in the U.S., according to

Davis et al in

"Cost of hospitalizations associated with sickle cell disease in the United States," Public Health Rep 1997; 112:40-3.

About GlycoMimetics, Inc.

GlycoMimetics is a privately held biotechnology 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. For additional information, please visit the company's web site: <http://www.glycomimetics.com>.