

FOR IMMEDIATE RELEASE

Key GlycoMimetics Patents Issue in the U.S.

Patents Cover Lead Drug GMI-1070 and Related Therapeutic Compounds

GAITHERSBURG, Md. – July 14, 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 U. S. Patent and Trademark Office has issued two patents covering the company's lead drug candidate and related compounds. One patent, US number 7,728,117, specifically covers GMI-1070, the Company's drug candidate now in clinical trials of patients with vaso-occlusive crisis of sickle cell disease. The second patent, US number 7,741,312, contains claims covering a family of molecules that includes and extends beyond GMI-1070.

"Together these patents provide important intellectual property protection for GlycoMimetics' lead program," said Rachel King, Chief Executive Officer. "The issuance of these patents also confirms that mimics of naturally occurring carbohydrates, which are the basis of the Company's technology, represent new and inventive chemical structures."

GlycoMimetics recently announced that GMI-1070 has entered Phase 2 clinical testing with the enrollment of the first patient in the Company's clinical trial testing GMI-1070 in treatment of sickle cell crisis. The Company also announced that the U.S. Food and Drug Administration has granted Fast Track and Orphan Drug Status to the program. Seed IP Law Group in Seattle, Washington serves as GlycoMimetics' patent counsel.

About GMI-1070

GlycoMimetics' lead drug candidate, GMI-1070, is a rationally-designed glycomimetic antagonist of E-, P- and Lselectins, and inhibits a key early step in the inflammatory process that leads to leukocyte adhesion and recruitment to inflamed tissue. A Phase 2 clinical trial of GMI-1070 in patients with sickle cell crisis was initiated in June 2010 following the completion of two Phase 1 studies and a pilot study in sickle cell patients.

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.

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 over 75,000 hospitalizations per year associated with vaso-occlusive crisis in the U.S.

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.