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GlycoMimetics Highlights Potential Therapeutic Benefits of Its Novel E-Selectin Antagonist at 56th ASH Annual Meeting

- Preclinical Data Shared Through Four Oral Presentations and One Poster Focus on the Potential Role of GMI-1271 in Treating Blood Cancers and Coagulation Disorders
- Biomarker Data from Phase 2 Study of Rivipansel Also Displayed via Poster Session at ASH Meeting

GAITHERSBURG, Md.--(BUSINESS WIRE)-- GlycoMimetics, Inc. (NASDAQ:GLYC) today announced that data from research related to the company's E-Selectin antagonist (GMI-1271), focusing on its potential in treating blood cancers and coagulation disorders, were highlighted this week through four oral presentations and one poster session at the 2014 American Society of Hematology Annual Meeting in San Francisco. GMI-1271 is currently in clinical studies for blood cancers, other cancers that are associated with elevated risk of metastasis and thrombosis, and serious blood-clotting disorders.

"The data shared at ASH this year continue to highlight the strength of our advancing pipeline as well as the potential value of GMI-1271 in targeting E-selectin for multiple blood (or hematologic) cancers and other related conditions, such as acute venous thrombosis," said John Magnani, Ph.D., GlycoMimetics Vice President and Chief Scientific Officer."

Key findings of the GMI-1271 presentations at the ASH meeting included:

- GMI-1271 significantly enhanced the reconstitution potential of hematopoietic stem cells (those blood cells that produce all other blood cells) harvested when used in combination with granulocyte-colony stimulating factor (G-CSF), compared to G-CSF alone. Researchers shared these results in the presentation entitled, "Mobilisation of Reconstituting HSC Is Boosted By Synergy Between G-CSF and E-Selectin Antagonist GMI 1271." [Abstract #317]
- The presentation, "Vascular Niche E-Selectin Protects Acute Myeloid Leukemia Stem Cells from Chemotherapy," covered
 results demonstrating that E-selectin is a key vascular niche component mediating chemoresistance and that, in a
 preclinical model of AML, GMI-1271 demonstrated improved survival in combination with chemotherapy, compared to
 chemotherapy alone. [Abstract #620]
- Findings from the presentation entitled, "The Vascular Niche is Involved in Regulating Leukemic Stem Cells in Murine Chronic Myelogenous Leukemia (CML)," suggest that inhibition of E-selectin with GMI-1271 may be a possible strategy to target leukemic stem cells in CML. [Abstract #516]
- In the presentation "E-Selectin Inhibitor GMI-1271 Works in Combination with Low-Molecular Weight Heparin to Decrease Venous Thrombosis and Bleeding Risk in a Mouse Model," researchers demonstrated that GMI-1271 works in combination with Heparin® to significantly reduce acute venous thrombosis without increasing bleeding risk. [Abstract #593]

In addition, results shared through the poster entitled, "Multiple Myeloma Cells Express Functional E-Selectin Ligands Which Can be Inhibited Both *in-Vitro* and *in-Vivo* Leading to Prolongation of Survival in a Murine Transplant Model," suggest the importance of E-selectin in homing and engraftmentof multiple myeloma cells and provide a rationale for targeting E-selectin in the disease. [Abstract #4718]

Separately, a poster presentation featured biomarker data from the Phase 2 study of GlycoMimetics' drug candidate for sickle cell disease, rivipansel, which is being developed by Pfizer under a license agreement with GlycoMimetics. That poster, entitled "Pan Selectin Antagonist Rivipansel (GMI-1070) Reduces Soluble E-Selectin Levels While Improving Clinical Outcomes in SCD Vaso-Occlusive Crisis," contained data showing that soluble E-selectin levels were reduced in patients treated with rivipansel. [Abstract #2704]

About GlycoMimetics, Inc.

GlycoMimetics is a clinical stage biotechnology company focused on the discovery and development of novel glycomimetic drugs to address unmet medical needs resulting from diseases in which carbohydrate biology plays a key role. Pfizer is the company's development partner for rivipansel, a GlycoMimetics-discovered investigational therapy for pain crisis associated with sickle cell disease, and is preparing to conduct a Phase 3 clinical study. A GlycoMimetics wholly-owned candidate therapy (GMI-1271) for acute myeloid leukemia (AML) and other blood disorders is also in clinical trials. Glycomimetics are molecules that mimic the structure of carbohydrates involved in important biological processes. Using its expertise in carbohydrate chemistry and knowledge of carbohydrate biology, GlycoMimetics is developing a pipeline of glycomimetic drug candidates that

inhibit disease-related functions of carbohydrates, such as the roles they play in inflammation, cancer and infection. Learn more at www.glycomimetics.com.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements regarding the clinical development of GMI-1271. Actual results may differ materially from those in these forward-looking statements. For a further description of the risks associated with these statements, as well as other risks facing GlycoMimetics, please see the risk factors described in the Company's quarterly report on Form 10-Q that was filed with the U.S. Securities and Exchange Commission on October 31, 2014, and other filings the Company makes with the SEC from time to time. Forward-looking statements speak only as of the date of this release, and GlycoMimetics undertakes no obligation to update or revise these statements, except as may be required by law.

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