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GlycoMimetics Initiates First Clinical Trial of GMI-1271 as Potential Treatment for Blood-Related Cancers

- E-selectin antagonist, GMI-1271, also has the potential to reduce complications of chemotherapy -

GAITHERSBURG, Md.--(BUSINESS WIRE)-- GlycoMimetics, Inc. (NASDAQ:GLYC) announced today that the first healthy volunteer has been dosed in a Phase 1 clinical study designed to evaluate the safety, tolerability and pharmacokinetics of GMI-1271, a novel and proprietary E-selectin antagonist in the company's pipeline. GlycoMimetics is initially exploring the clinical use of the drug candidate to treat acute myeloid leukemia (AML) following preclinical studies of GMI-1271 for blood cancers and other cancers that are associated with elevated risk of metastasis and thrombosis.

"We have demonstrated a very attractive preclinical profile for GMI-1271, with research findings substantiating the focus on E-selectin as a potential target for blood-related malignancies and for solid tumors at risk of metastasis," said Helen Thackray, M.D., Vice President of Clinical Development and Chief Medical Officer at GlycoMimetics. "Advancing this compound into clinical testing marks a significant milestone for GlycoMimetics. We believe that GMI-1271 has the potential to be an important new therapy for people with certain blood cancers as well as for those with high risk of metastasis in certain solid tumors."

This single-site Phase 1 trial of GMI-1271, is a randomized, double-blind, placebo-controlled, single ascending intravenous dose study designed to evaluate the safety, tolerability and pharmacokinetics of GMI-1271 in 28 healthy adult subjects (three dose levels will be tested). The company anticipates final data being available in the second half of 2014. The company's next planned study is a Phase 1/2 trial of GMI-1271 as an adjunct to standard chemotherapy in patients with AML.

About AML

Adult acute myeloid leukemia (AML) is a cancer of the blood and bone marrow. AML is the most common type of acute leukemia in adults, and it is estimated that there will be over 18,000 new cases and over 10,000 deaths from the disease in 2014. Unlike other cancers that start in an organ and spread to the bone marrow, AML is known for rapid growth of abnormal white blood cells that gather in the bone marrow and in most cases move into the blood, getting in the way of normal blood cell production. The lack of normal blood cells can cause some of the symptoms of acute myeloid leukemia, including anemia (shortage of red blood cells resulting in tiredness and weakness), neutropenia (shortage of white blood cells that may lead to increased infections), and thrombocytopenia (shortage of platelets in the blood that may lead to excessive bleeding). Current treatment options for AML consist of reducing and eliminating cancer cells mainly through chemotherapy, radiation therapy, and stem cell transplantation.

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 (glycobiology) plays a key role. 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.

Cautionary Note on Forward Looking Statements

Any statements in this press release about future expectations, plans and prospects for GlycoMimetics, including statements about its strategy, its future operations, clinical development of its therapeutic candidates, timing of the availability of data from clinical trials, potential therapeutic utility for its product candidates, market opportunities for its product candidates, its plans for potential future product candidates and other statements containing the words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: availability and timing of data from ongoing clinical trials, the uncertainties inherent in the initiation of future clinical trials, whether interim results from a clinical trial will be predictive of the final results of the trial or results of early clinical trials will be indicative of the results of future trials, expectations for regulatory approvals, availability of funding sufficient for GlycoMimetics's foreseeable and unforeseeable operating expenses and capital expenditure requirements, other matters that could affect the availability or commercial potential of GlycoMimetics's therapeutic candidates and other factors discussed in

the "Risk Factors" section of GlycoMimetics's Quarterly Report on Form 10-Q that was filed with the U.S. Securities and Exchange Commission on May 9, 2014, and other filings GlycoMimetics makes with the Securities and Exchange Commission from time to time. In addition, the forward-looking statements included in this press release represent GlycoMimetics's views as of the date hereof. GlycoMimetics anticipates that subsequent events and developments may cause GlycoMimetics's views to change. However, while GlycoMimetics may elect to update these forward-looking statements at some point in the future, GlycoMimetics specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing GlycoMimetics's views as of any date subsequent to the date hereof.

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