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GlycoMimetics Announces Plans to Initiate Breast Cancer Trial to Evaluate GMI-1359

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- Proof-of-concept trial to evaluate safety and biomarkers of cancer cell mobilization in patients with hormone receptor
 positive metastatic breast cancer
- Novel GlycoMimetics drug candidate targets tumor and bone marrow microenvironments

ROCKVILLE, Md.--(BUSINESS WIRE)--Apr. 12, 2019-- GlycoMimetics, Inc. (NASDAQ: GLYC) today announced plans to initiate a clinical trial of GMI-1359 in breast cancer patients whose tumors have spread to bone. GMI-1359 is a dual function antagonist that targets both E-selectin and CXCR4, both of which are involved in tumor trafficking and metastatic spread. The trial will evaluate dose escalation as well as safety and pharmacodynamic markers in these patients.

The trial's Co-Principal Investigators are Kelly Marcom, M.D., and Dorothy Sipkins, M.D., Ph.D., both of the Duke Cancer Institute. Dr. Sipkins has previously published on the key roles of both E-selectin and CXCR4 in the trafficking of metastatic cancer cells and of their establishment as micrometastases in bone.¹

"Dr. Sipkins' work suggests that both E-selectin and CXCR4 mediate key mechanisms that promote progression and migration of circulating cancer cells to protective niches. Importantly, her work reveals a potentially exciting approach to molecularly excise disseminated breast cancer cells with GMI-1359, which was rationally designed to inhibit both of these targets," said John Magnani, Ph.D., Senior Vice President and Chief Scientific Officer at GlycoMimetics.

"Our preclinical research in mice suggests that targeting E-selectin and CXCR4 with a single agent may potentially improve treatment of patients at risk of metastasis to bone, or whose tumors might have already spread," said Dr. Sipkins.

"If ultimately shown safe and effective in clinical trials, this agent could represent a potentially novel approach to treating metastatic cancer, and we're pleased to begin exploring the use of this investigational therapy in individuals with metastatic cancer," added Dr. Marcom.

GlycoMimetics expects to initiate this trial in 2H 2019.

About GMI-1359

GMI-1359 is designed to simultaneously inhibit both E-selectin and CXCR4. E-selectin and CXCR4 are both adhesion molecules involved in tumor trafficking and metastatic spread. Preclinical studies indicate that targeting both E-selectin and CXCR4 with a single compound could improve efficacy in the treatment of cancers that involve the bone marrow such as AML and multiple myeloma or in solid tumors that metastasize to the bone, such as prostate cancer and breast cancer. GMI-1359 has completed a Phase 1 clinical trial in healthy volunteers.

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. GlycoMimetics' most advanced drug candidate, rivipansel, a pan-selectin antagonist, is being developed for the treatment of vaso-occlusive crisis in sickle cell disease and is being evaluated in a Phase 3 clinical trial being conducted by its strategic collaborator, Pfizer. GlycoMimetics' wholly owned drug candidate, uproleselan, an E-selectin antagonist, was evaluated in a Phase 1/2 clinical trial as a potential treatment for AML and is being evaluated across a range of patient populations including a company-sponsored Phase 3 trial in relapsed/refractory AML. GlycoMimetics has also completed a Phase 1 clinical trial with a third drug candidate, GMI-1359, a combined CXCR4 and E-selectin antagonist. GlycoMimetics is located in Rockville, MD in the BioHealth Capital Region. Learn more at www.glycomimetics.com.

Forward-Looking Statements

This press release contains forward-looking statements regarding the clinical development and regulatory pathway and potential benefits and impact of the company's drug candidates. 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 annual report on Form 10-K to be filed with the U.S. Securities and Exchange Commission (SEC) on or about March 6, 2019, and other filings GlycoMimetics 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.

¹ Price et. al. Science Translational Medicine, (2016) 8:340.

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