First Patient With Advanced Breast Cancer Receives First Dose in Clinical Trial of GlycoMimetics' GMI-1359

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- *Proof-of-concept Phase 1b trial evaluating safety and biomarkers of anti-cancer effect in patients with hormone receptor positive metastatic breast cancer*
- *Novel GlycoMimetics drug candidate targets tumor and bone marrow microenvironment*

ROCKVILLE, Md.--(BUSINESS WIRE)--Jan. 30, 2020-- GlycoMimetics, Inc. (Nasdaq: GLYC) today announced that Duke University investigators have dosed the first patient in a proof-of-concept Phase 1b study to evaluate GlycoMimetics' novel GMI-1359 drug candidate in patients with advanced breast cancer. The dose-escalating study will enroll up to 12 individuals with metastatic, hormone receptor positive breast cancer with stable or minimally progressive disease, including bone metastasis. GMI-1359 is a dual inhibitor of both E-selectin and CXCR4. The trial is designed to evaluate safety, pharmacokinetics and pharmacodynamic measures of biologic activity, such as increases in circulating tumor cells and mobilization of CD34+ and immune T-cell subsets. GlycoMimetics expects the trial results to be available in late 2020, the conclusions of which the Company will use to inform future development of GMI-1359.

Kelly Marcom, M.D., and Dorothy Sipkins, M.D., Ph.D., both of the Duke Cancer Institute, are the trial's co-principal investigators. This clinical trial builds on published findings from Dr. Sipkins on the key roles of both E-selectin and CXCR4 in the trafficking of metastatic cancer cells and of their establishment as micro-metastases in bone. Dr. Sipkins' research suggests that both E-selectin and CXCR4 mediate key mechanisms that promote progression and migration of cancer cells to protective niches in the bone marrow micro-environment, and reveals the potential for an E-selectin and CXCR4 inhibitor like GMI-1359 to molecularly excise disseminated breast cancer cells.[1]

"The initiation of enrollment is an important milestone in our exploration of GMI-1359 and its potential as a novel approach to treating metastatic cancer," said GlycoMimetics Senior Vice President of Clinical Development and Chief Medical Officer Helen Thackray, M.D., FAAP. "We're pleased to have such distinguished researchers at Duke University begin to explore the use of this investigational therapy and look forward to learning more about its potential impact as clinical study advances."

More information on this clinical trial can be found at www.clinicaltrials.gov.

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 acute myeloid leukemia and multiple myeloma or in solid tumors that metastasize to the bone, such as prostate cancer and breast cancer, as well as in osteosarcoma, a rare pediatric tumor. GMI-1359 has completed a Phase 1 clinical trial in healthy volunteers. The newly initiated Phase 1b clinical study in breast cancer patients is designed to enable investigators to identify an effective dose of the drug candidate and to generate initial biomarker data around the drug's activity.

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' wholly owned drug candidate, uproleselan, an E-selectin antagonist, was evaluated in a Phase 1/2 clinical trial as a potential treatment for acute myeloid leukemia (AML). It has received Breakthrough Therapy Designation from the U.S. Food and Drug Administration 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 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.

[1] T. T. Price, M. L. Burness, A. Sivan, M. J. Warner, R. Cheng, C. H. Lee, L. Olivere, K. Comatas, J. Magnani, H. Kim Lyerly, Q. Cheng, C. M. McCall, D. A. Sipkins, Dormant breast cancer micrometastases reside in specific bone marrow niches that regulate their transit to and from bone. *Sci. Transl. Med.* 8, 340ra73 (2016).

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