GlycoMimetics Enters into Agreement with HOVON to Initiate Study Startup Activities for Planned Clinical Trial of GMI-1271 and Decitabine in Patients with Newly Diagnosed Acute Myeloid Leukemia (AML) Who Are Unfit for Chemotherapy

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- *Trial in patients with AML and "unfit" for chemotherapy, as well as those with Myelodysplastic Syndrome (MDS), expands potential indications for GMI-1271 and complements planned GlycoMimetics-sponsored registration trial in patients with relapsed/refractory AML*
- *Company on track to disclose details for design of Phase 3 trial in relapsed/refractory AML patients during 2017 year-end earnings call scheduled for March 6, 2018*

ROCKVILLE, Md.--(BUSINESS WIRE)--Feb. 8, 2018-- GlycoMimetics, Inc. (NASDAQ: GLYC) announced today that it has entered into an agreement with the Haemato Oncology Foundation for Adults in the Netherlands (HOVON) groupto initiate clinical trial startup activities. In the planned clinical trial, HOVON researchers will evaluate GlycoMimetics' drug candidate, GMI-1271, in adults with newly diagnosed acute myeloid leukemia (AML) but who cannot tolerate intensive chemotherapy, as well as in patients with myelodysplastic syndrome (MDS) with a high risk of leukemia. The HOVON Central Office has already approved a protocol concept, and this agreement enables HOVON to commit staff to the planned trial in order to finalize the protocol, start regulatory and ethics reviews, and begin development of the database. Separately, GlycoMimetics said it plans to announce the design details for its company-sponsored Phase 3 trial in relapsed/refractory AML patients as part of its fourth-quarter and year-end 2017 earnings call scheduled for March 6, 2018.

"HOVON is one of the most prestigious collaborative clinical groups in Europe and is focused exclusively on improving clinical outcomes in patients with hematologic malignancies. HOVON's interest in evaluating GMI-1271 in patients with previously untreated AML and MDS who are unable to tolerate intensive chemotherapy underscores the importance of the efficacy and safety data we've generated to date in clinical trials with GMI-1271," noted Helen Thackray, M.D., FAAP, GlycoMimetics Senior Vice-President, Clinical Development and Chief Medical Officer. "We believe GMI-1271 has the potential for broad utility in the treatment of hematologic malignancies, and this trial expands the scope of development across the continuum of care in AML and complements our own planned Phase 3 registration trial in patients with relapsed/refractory disease."

Professor Gerwin Huls, Principal Investigator at HOVON and Professor of Haematology at University Medical Centre Groningen, said, "With Breakthrough Therapy designation awarded by the U.S. Food and Drug Administration in patients with relapsed/refractory AML, GMI-1271 is clearly a promising agent. We look forward to generating data in this 'unfit' AML population to see if GMI-1271 can improve patient outcomes over what is achieved with decitabine alone."

The HOVON trial will be the first to evaluate GMI-1271 together with decitabine in this underserved population of AML and MDS patients, who are not considered by their physicians to be candidates for intensive chemotherapy; these two populations represent a significant potential label expansion opportunity for GMI-1271. HOVON intends to enroll approximately 140 patients in the clinical trial, including a control arm. Key efficacy endpoints will include complete remission rate, disease-free survival, and overall survival. The trial is expected to start this year and will be conducted in five countries across Europe.

About GMI-1271

GMI-1271 is designed to block E-selectin (an adhesion molecule on cells in the bone marrow) from binding with blood cancer cells as a targeted approach to disrupting well-established mechanisms of leukemic cell resistance within the bone marrow microenvironment. In the Phase 1/2 clinical trial that has now completed enrollment, GMI-1271 was evaluated in both newly diagnosed elderly and relapsed/refractory patients with acute myeloid leukemia (AML). In both populations, patients treated with GMI-1271 together with standard chemotherapy achieved better than expected remission rates and overall survival based on historical controls, as well as lower than expected induction-related mortality rates. Importantly, treatment in this patient population was well tolerated with minimal adverse effects.

About the HOVON Group

Established in 1985, HOVON is a Dutch-Belgian cooperative clinical trial group in hematology oncology with a strong clinical development program in leukemia, malignant lymphomas and multiple myeloma. Some 80 percent of hospitals in the Netherlands have participated or continue to participate in HOVON trials, and each hospital is in contact with a consultant affiliated to a hematological intensive care center participating in HOVON. In addition, the HOVON group works with several other countries in Europe and has a long-standing track record with trials in acute leukemia to help ensure the best possible treatment plan for every individual patient diagnosed with a hemato-oncological disorder.

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, GMI-1271, an E-selectin antagonist, was evaluated in a Phase 1/2 clinical trial as a potential treatment for AML and is currently being evaluated in a Phase 1 clinical trial for the treatment of multiple myeloma. The FDA recently granted GMI-1271 Breakthrough Therapy designation for the treatment of adult AML patients with relapsed/refractory disease. GlycoMimetics has also recently initiated 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.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements regarding the clinical development of GMI-1271, including the expected timing of completion of clinical trials

and the presentation of clinical data. 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 that was filed with the U.S. Securities and Exchange Commission (SEC) on March 1, 2017, 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.

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