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GlycoMimetics to Receive $20 Million Payment from Pfizer Following Initiation of Phase 3 Trial with Rivipansel

GAITHERSBURG, Md.--(BUSINESS WIRE)-- GlycoMimetics, Inc. (NASDAQ: GLYC) announced today that Pfizer Inc. (NYSE: PFE) has dosed the first patient in the RESET (**R**ivipansel: **E**valuating **S**afety, **E**fficacy and **T**ime to Discharge) study - a Phase 3 clinical trial assessing the efficacy and safety of rivipansel for the treatment of vaso-occlusive crisis (VOC) in patients hospitalized with sickle cell disease who are six years of age or older. The start of this trial triggered the second of two milestone payments from Pfizer to GlycoMimetics totaling $35 million for Phase 3 initiation. GlycoMimetics received a $15 million milestone payment from Pfizer in May 2014.

According to Rachel King, Chief Executive Officer of GlycoMimetics, "The initiation of the Phase 3 trial is important progress toward our vision for an effective therapy for people experiencing sickle cell crisis. It's rewarding for the GlycoMimetics team to see this milestone reached."

This Phase 3, multicenter, randomized, double-blind, placebo-controlled, parallel-group study is planning to enroll at least 350 individuals with sickle cell disease, aged six and older who are hospitalized for a vaso-occlusive crisis, and will evaluate the efficacy and safety of treatment with rivipansel. Trial participants must be receiving treatment with intravenous opioids for their vaso-occlusive crisis and must be able to receive the first dose of study drug within 24 hours of initiation of intravenous opioid therapy. The primary endpoint for the study will be time to readiness-for-discharge. Key secondary endpoints will include time to discharge, cumulative IV opioid consumption and time to discontinuation of IV opioids. For additional information about the RESET Trial and to learn more about eligibility, patients can visit www.resetsicklecell.com.

In July 2014, GlycoMimetics announced that Pfizer had reached agreement with the U.S. Food & Drug Administration (FDA), under a special protocol assessment (SPA), for the Phase 3 clinical trial of rivipansel. The SPA serves as an agreement between Pfizer and the FDA regarding the design, endpoints and statistical analysis approach of a Phase 3 clinical trial, results from which could potentially support approval of a New Drug Application (NDA). This includes specific agreement on the approvable composite primary endpoint, time to readiness-for-discharge, and the key secondary endpoints (time to discharge, cumulative IV opioid consumption, and time to discontinuation of IV opioids) considered supportive but not sufficient for approval individually.

GlycoMimetics reported top line data from the Phase 2 trial of rivipansel in April 2013 and presented full data from the clinical trial in two oral presentations and one poster presentation at the December 2013 meeting of the American Society of Hematology (ASH). The oral presentations were selected as "Best of ASH." In the Phase 2 trial, patients treated with rivipansel experienced meaningful reductions in time to reach resolution of VOC, length of hospital stay and use of opioid analgesics for pain management, in each case as compared to patients receiving placebo.

In 2011, Pfizer and GlycoMimetics entered into a worldwide license agreement for the development and, if approved by applicable regulatory authorities, commercialization of rivipansel. GlycoMimetics was responsible for development through the Phase 2 clinical trial and Pfizer is now responsible for all future clinical development of rivipansel.

Rivipansel has previously received both Orphan Drug and Fast Track status for the treatment of VOC from the FDA, and Orphan Product status in the European Union.

About Sickle Cell Disease and VOC

Sickle cell disease is a genetic disease affecting 90,000 to 100,000 people in the United States, predominantly of African descent. One of the most severe complications of sickle cell disease is vaso-occlusive crisis (VOC). VOC is typically characterized by excruciating, debilitating pain that occurs periodically throughout the life of a person with sickle cell disease. VOC is responsible for more than 73,000 hospitalizations per year in the United States with an average hospital stay of approximately six days. The current standard of care for VOC consists of supportive therapy, primarily in the form of hydration and pain management, typically requiring extended hospitalization.

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 conducting 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 rivipansel, including the recently initiated Phase 3 clinical trial. 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 on March 16, 2015, 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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