

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

October 5, 2017

Rachel K. King Chief Executive Officer GlycoMimetics, Inc. 9708 Medical Center Drive Rockville, Maryland 20850

Re: GlycoMimetics, Inc.

Registration Statement on Form S-3

Filed September 28, 2017 File No. 333-220697

Dear Ms. King:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Chris Edwards at (202) 551-6761 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Brian F. Leaf