August 16, 2021

Fred M. Schwarzer Chief Executive Officer and President IGM Biosciences, Inc. 325 E. Middlefield Road Mountain View, California 94043

Re: IGM Biosciences, Inc.

Registration Statement on Form S-3

Filed August 9,

2021 File No. 333-258641

Dear Mr. Schwarzer:

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 Alan

Campbell at 202-551-4224 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc: Jennifer Knapp