November 9, 2020

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 November 5,

2020

File No. 333-249863

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 Tim

Buchmiller at (202) 551-3635 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc: Tony Jeffries, Esq.