VIA EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance Office of Healthcare & Insurance 100 F Street, N.E. Washington, D.C. 20549-3720

Attention: Justin Dobbie Julia Griffith Sharon Blume Christine Torney

> Re: IGM Biosciences, Inc. Registration Statement on Form S-1 File No. 333-233365

> > Acceleration Request Requested Date: Tuesday, September 17, 2019 Requested Time: 4:00 P.M. Eastern Time

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, IGM Biosciences, Inc. (the "**Company**") hereby requests that the abovereferenced Registration Statement on Form S-1 (File No. 333-233365) (the "**Registration Statement**") be declared effective at the "Requested Date" and "Requested Time" set forth above or at such later time as the Company or its counsel may orally request via telephone call to the staff of the Division of Corporation Finance of the Securities and Exchange Commission. Once the Registration Statement has been declared effective, please orally confirm that event with our counsel, Wilson Sonsini Goodrich & Rosati, P.C., by calling Jennifer Knapp at (650) 849-3041.

[Signature page follows]

Securities and Exchange Commission September 13, 2019 Page 2

Sincerely,

IGM BIOSCIENCES, INC.

/s/ Fred Schwarzer

Fred Schwarzer Chief Executive Officer and President

cc: Misbah Tahir, IGM Biosciences, Inc. Paul Graffagnino, GCA Law Partners LLP

> Tony Jeffries, Wilson Sonsini Goodrich & Rosati, P.C. Kenneth A. Clark, Wilson Sonsini Goodrich & Rosati, P.C. Jennifer Knapp, Wilson Sonsini Goodrich & Rosati, P.C.

Jonie I. Kondracki, Cooley LLP Charles S. Kim, Cooley LLP September 13, 2019

United States Securities and Exchange Commission Division of Corporation Finance Office of Healthcare & Insurance 100 F Street, N.E. Washington, DC 20549

Attention: Justin Dobbie Julia Griffith Sharon Blume Christine Torney

Re: IGM Biosciences, Inc. Registration Statement on Form S-1 (File No. 333-233365)

Ladies and Gentlemen:

Pursuant to Rule 460 of the General Rules and Regulations under the Securities Act of 1933, as amended, we wish to advise that between September 3, 2019 and the date hereof, approximately 1,140 copies of the Preliminary Prospectus dated September 3, 2019 were distributed to prospective underwriters, institutional investors and prospective dealers in connection with the above-captioned Registration Statement.

We wish to advise you that the participating underwriters have informed us that they have complied and will continue to comply with the requirements of Rule 15c2-8 under the Securities Exchange Act of 1934, as amended.

We hereby join in the request of the registrant that the effectiveness of the above-captioned Registration Statement, as amended, be accelerated to 4:00 p.m. Eastern Time, on Tuesday, September 17, 2019 or as soon thereafter as practicable.

[Signature page follows]

Very truly yours,

JEFFERIES LLC PIPER JAFFRAY & CO. STIFEL, NICOLAUS & COMPANY, INCORPORATED

As representatives of the Underwriters

By: Jefferies LLC

By: /s/ Dustin Tyner Name: Dustin Tyner Title: Managing Director

By: Piper Jaffray & Co.

By: /s/ Chris Collins Name: Chris Collins Title: Managing Director

By: Stifel, Nicolaus & Company, Incorporated

By: /s/ Nathan Thompson

Name:Nathan ThompsonTitle:Director

[IGM Biosciences, Inc. – Signature Page to the Acceleration Request]