

July 25, 2019

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

Re: IGM Biosciences, Inc.  
Draft Registration Statement on Form S-1  
Submitted June 28, 2019  
CIK No. 0001496323

Dear Mr. Schwarzer:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement on Form S-1

Prospectus Summary  
Overview, page 1

1. We note your disclosure that "IgM antibodies have inherent properties that we believe may enable them to improve upon the efficacy and safety of IgG antibodies in multiple therapeutic applications." Since none of your product candidates has received FDA approval, it is premature to suggest or imply that they are safe and effective. We also note other examples of statements regarding safety and efficacy in the table on page 79 and the disclosure on pages 87 and 90. Please revise your disclosure regarding safety and efficacy in the summary and throughout your prospectus to clarify this point.

Fred Schwarzer  
FirstName LastNameFred Schwarzer  
IGM Biosciences, Inc.  
Comapany NameIGM Biosciences, Inc.  
July 25, 2019  
July 25, 2019 Page 2  
Page 2

2. Briefly explain technical terms where they are first used in your disclosure. For example, explain what "IgM" and "IgG" mean and how the two antibodies differ.

3. Please include in the summary the information that appears on page 83 in the Business section to the effect that a generally effective treatment for most Non-Hodgkins Lymphoma patients already exists.

Our Strategy, page 3

4. Please briefly provide us with or explain the basis for your statement that you are a global leader in the development of IgM antibodies for therapeutic use.

Emerging Growth Company Status, page 5

5. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf,

present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.  
Risk Factors, page 11

6. We note that there are references to foreign regulators and foreign markets throughout the Risk Factors and other sections of your prospectus. Please revise to explain what non-U.S. markets, if any, you plan to enter, and what steps you have taken in attaining the necessary regulatory approvals.

7. Please revise your disclosure pertaining to the risks associated with patents to clarify that you have relatively few patents, and many patent applications, at this point in your development.  
Use of Proceeds, page 58

8. Please revise to clarify whether you believe the net proceeds will be sufficient to complete the Phase 1 clinical trials for your two product candidates, and if not, how far into those trials you expect the proceeds to last.  
Results of Operations  
Research and Development Expenses, page 68

9. We note you incurred over \$7 million in direct clinical trials expenses as of December 31, 2018 even though none of your product candidates had reached phase 1 clinical trials. Please expand your disclosures to explain what these expenses are considering they are larger than your preclinical trials expenses. In your revised disclosures, consider the description of research and development expenses already included on page 66, as applicable.

Fred Schwarzer  
FirstName LastNameFred Schwarzer  
IGM Biosciences, Inc.  
Company NameIGM Biosciences, Inc.  
July 25, 2019  
Page 3  
July 25, 2019 Page 3  
FirstName LastName  
Critical Accounting Policies and Estimates  
Fair Value of Common Stock, page 72

10. Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the IPO and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features.  
Business, page 74

11. Please provide us a basis for statements that you have "the most advanced research and development program focused on engineered therapeutic IgM antibodies;" that your platform allows you "to create IgM antibodies with higher affinity and avidity than naturally occurring IgM antibodies;" that your "platform also allows us to utilize the strong and durable binding of IgM antibodies to kill cancer cells with T cells, induce programmed death of cancer cells or deliver immune stimulating cytokines to the region of the bound cell;" and that your "IgM platform creates significant competitive advantages and can serve as the foundation for the development of a broad range of IgM based therapeutic drugs."  
Exclusive Jurisdiction, page 139

12. Please disclose, if true, that your exclusive forum provision does not apply to actions arising under the Securities Act or Exchange Act. Please also ensure that the exclusive forum provision in the bylaws states this clearly, or tell us how you will inform investors in future filings that the provision does not apply to any actions arising under the Securities Act or Exchange Act.

General

13. Please provide us mockups of any pages that include any additional pictures or graphics to be presented, including any accompanying captions. Please keep in mind, in scheduling your printing and distribution of the preliminary prospectus, that we may have comments after our review of these materials.

Fred Schwarzer

FirstName LastNameFred Schwarzer

IGM Biosciences, Inc.

Comapany NameIGM Biosciences, Inc.

July 25, 2019

Page 4

July 25, 2019 Page 4

FirstName LastName

You may contact Christine Torney at (202) 551-3652 or Sharon Blume at (202) 551-

3474 if you have questions regarding comments on the financial statements and related

matters. Please contact Julia Griffith at (202) 551-3267 or Justin Dobbie at

(202) 551-3469 with

any other questions.

Sincerely,

Division of

Corporation Finance

Office of Healthcare

& Insurance