

February 22, 2021

Josh Hoffman
Chief Executive Officer
Zymergen Inc.
5980 Horton Street, Suite 105
Emeryville, CA 94608

Re: Zymergen Inc.
Draft Registration
Submitted January
File No. 377-04089

Statement on Form S-1
25, 2021

Dear Mr. Hoffman:

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 submitted January 25, 2021

Prospectus Summary
Overview, page 1

1. Please balance the disclosure in the prospectus summary by addressing and appropriately highlighting challenges that you face. In this regard, at a minimum, please address the following items in the summary:

growing revenue and achieving profitability;

which those plans are impacted by the use of non-bio produced molecules;

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your current financial condition, including the covenant defaults under your credit facility and the going concern opinion issued by your auditor; and

your outstanding debt.

Our biofacturing platform discovers biomolecules and engineers microbes that can produce those

2. You disclose that "DuPont spent nine years and around \$400 million in the late 1960s and early 1970s developing Kevlar, a heat-resistant, strong fiber used in bullet-proof vests, tires, and many other applications." Please remove this reference from your filing, including where you discuss the same in your business description, as it does not appear to be a relevant comparison.
We have breakthrough products in the market or in development., page 2

3. We note your disclosure that "[i]n order to accelerate commercialization and meet customer demand, we launched Hyaline with a non-bio produced molecule sourced from a third party," and you have a process in place to convert to a bio-produced molecule in 2022. Please briefly describe the process you have in place to convert to this molecule.
Please also amend your discussion of the ten other products in development to clarify whether you will rely on third party suppliers to supply any molecules to produce these products, and convert to bio-produced molecules at a later date, as you have done with your Hyaline product.

4. We note your reference to market data prepared by a third party. Please identify this third party, and tell us whether you commissioned the preparation of this market data. If so, please file as an exhibit the consent required by Rule 436 and Section 7 of the Securities Act, or tell us why you do not believe you are required to do so. As a related matter, please clarify whether the market data prepared by a third party and the "consumer survey" relate to the same data, and briefly describe the parameters of the survey. Finally, please disclose the market data and/or survey results that support your statements about your market opportunity.
Products and Pipeline, page 5

5. Please add here the product pipeline table appearing on page 61.
Risk Factors
Risks Related to Our Business
"Our existing credit facility provides our secured lender with liens . . .",
page 27

6. You disclose that "[d]uring the course of 2020, we sought and obtained various default waivers under this agreement due to our inability to comply with certain of our Josh Hoffman Zymergen Inc. February 22, 2021 Page 3 covenants." Please amend your risk factor disclosure to clarify whether you are currently in compliance with the covenants in your credit facility, and whether you expect to seek default waivers in the future. Please also briefly describe here the covenants for which you obtained waivers.
"We are party to a mitigation agreement with the Committee on Foreign Investment . . .", page 38

7. Please disclose, if material, the estimated costs to you in implementing and complying with the standards imposed by the CFIUS agreement, if estimable. Please also briefly explain why your business is required to operate pursuant to an agreement with CFIUS, and whether you expect this agreement to remain in effect indefinitely.
"Our ability to use our net operating loss carryforwards . . .", page 39

8. Please amend your filing to clarify whether this offering qualifies as

an "ownership change," for purposes of the relevant tax law.
Management's Discussion and Analysis of Financial Condition and Results of Operations
Overview, page 59

9. We note your statements here and throughout your filing that "[o]ur biofacturing platform allows us to bring more products to market faster," and "[b]ased on the development timelines of our first products, we expect to create our materials in about half the time and 1/10 th of the cost of what traditional chemicals and materials companies can deliver, which allows us to address a wide array of commercial applications." However, you have yet to bring a product to market with a bio-produced molecule, as your Hyaline product currently contains a non-bio produced molecule sourced from a third party, and you disclose on page 61 that, "[s]ubstantially all of our revenue to date has been generated from R&D service contracts and collaboration arrangements aimed at developing, testing and validating our biofacturing platform." Therefore, where you talk about your business model and your ability to create your materials and bring products to market, please clearly disclose that you currently and historically generate your revenue from R&D service contracts, and not from the sale of your products. Make conforming changes throughout your filing, including to your prospectus summary, where you should clearly disclose your current sources of revenue.
The Evolution of Our Business, page 60

10. We note the agreements referenced in this section. Please amend your disclosure to clarify the duration and expiration of each agreement, and, where applicable, whether you expect to enter into similar agreements in the future. Please also file the agreements referenced in this section, where you do not believe you are22,

February 2021 required to do3so. See Item 601(b)(10) of Regulation S-K.

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Our Product and Product Pipeline, page 61

11. Please annotate the row for the Hyaline product to indicate that it is in the market with a non-bio produced molecule sourced from a third party. In addition, please delete the final row of the table as it lacks specificity.
Our International Operations, page 63

12. We note your disclosure on page 22 that you "currently operate [y]our business through various international subsidiaries," and "[y]our collaborators currently conduct business and market our products outside of the United States." We also note your disclosure here that "[r]evenue from Japan and South Korea is approximately 17% and 6%, respectively, of [y]our total revenue in the year ended December 31, 2019." Please clarify the geographic market from which you derive the remainder of your revenue.

13. Please amend your disclosure to provide a timeline for the establishment of your business operations hubs in both Asia and Europe. Results of Operations for the Years Ended December 31, 2019 and December 31, 2020, page 67

14. Please amend your disclosure to discuss, where relevant, the impact of COVID-19 on your results of operations for the periods presented. Critical Accounting Policies Revenue Recognition Research and Development Service Agreement Revenue, page 72

15. In addition to the variable consideration mentioned, please tell us and disclose the material judgments, assumptions and uncertainties associated with recognizing your revenue, and the factors subject to estimation and variability. For factors that are variable, disclose those most subject to change and the related sensitivity to change, along with the factors that cause changes. Refer to Section V of Release No. 33-8350, "Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations," available on our public website. Business Overview Industry Background, page 80

16. Please amend your filing to provide sources for the industry data cited throughout this section, and for your statements about synthetic biology. Please also provide sources for your statements, as appropriate, where you discuss your initial target verticals, beginning on page 95. Josh Hoffman
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Our Solutions, page 81

17. We note your disclosures here and in the prospectus summary that "[u]sing our biofacturing platform, we estimate the timelines and costs of bringing our products to market to be roughly five years and \$50 million;" and "we plan to develop and commercialize product breakthroughs in about half the time and 1/10 the of the cost of traditional processes." Please tell us the assumptions upon which you are relying to support these claims, and why you believe they are reliable. In doing so, please address the variables among the various different markets you believe you can address. We may have additional comments based on your response. Alternatively, please remove these statements from your filing. Strengths, page 82

18. Considering your disclosure elsewhere that you currently generate substantially all of your revenue from your R&D service contracts and collaboration arrangements, please amend your description of business to clearly describe your current business model, along with intended future business model, including the role of your biofacturing platform in your research and development activities related to your R&D contracts and arrangements. Intellectual Property Collaborative Research and Development, page 104

19. We note your disclosure that "[o]ur collaboration agreements also

typically include one or more of the following: payments for the R&D services to be performed, milestone payments to be received upon the achievement of the milestone events defined in the agreements, revenue sharing and royalty payments upon the commercialization of the molecules in which we share in the customer's profits." In an appropriate place in your filing, please briefly describe the specific terms of your collaboration agreement with Sumitomo Chemical. Please also file this agreement as an exhibit to your registration statement, or tell us why you do not believe you are required to do so. See Item 601(b)(10) of Regulation S-K. Government Regulations, page 105

20. This section of your filing discloses the future regulations that may affect the development, production, and sales of your products. Please amend this disclosure to clearly describe the regulations that apply to your current operations, including your activities related to your R&D service contracts. Certain Relationships and Related Transactions Loan Agreement, page 127

21. Please file the relevant agreements discussed in this section as exhibits to your registration statement, or tell us why you are not required to do so. See Item 601(b)(10) of Regulation S-K. Josh Hoffman Zymergen Inc. February 22, 2021 Page 6 Description of Capital Stock Preferred Stock, page 129

22. Please describe the terms of the convertible preferred stock that is currently outstanding, including voting rights, conversion terms, etc., or tell us why you are not required to include this disclosure in your filing. Financial Statements for the year ended December 31, 2019 Summary of Accounting Policies, page F-8

23. Please tell us if there are any circumstances under which you would not receive consideration for efforts expended or that would preclude you from recognizing revenue for any efforts expended during or at the end of the contract term. In regard to this, tell us if there are any circumstances under which the performance obligation may not be satisfied at the end of the contract term that would impact the amount of revenue recognized.

Please explain to us how the contract term for revenue recognition purposes is affected based on the customer's rights to terminate the contract for convenience and the impact on the amount of revenue recognized or recognizable.

You disclose you measure progress using the input method of time elapsed. Please explain if this refers to time elapsed relative to the total term of the contract or some other basis. If based on the total term of the contract, tell us how the term of the contract is determined. Additionally, tell us if contract term completion is based on the passage of time or some other basis, and if some other basis, what that basis is. You may contact Nasreen Mohammed at (202) 551-3773 or Doug Jones at (202) 551-3309 if you have questions regarding comments on the financial statements and related matters. Please contact Katherine Bagley at (202) 551-2545 or Dietrich King at (202) 551-

8071 with any other questions.

FirstName LastNameJosh Hoffman

Corporation Finance
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Services

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cc: Sarah Solum

FirstName LastName

Sincerely,

Division of

Office of Trade &