

September 11, 2023

Michael Jensen
Chief Financial Officer
Synlogic, Inc.
301 Binney St., Suite 402
Cambridge, MA 02142

Re: Synlogic, Inc.
Form 10-K for the
Filed March 29,
File No. 001-37566

fiscal year ended December 31, 2022
2023

Dear Michael Jensen:

We have limited our review of your filing to the financial statements and related disclosures and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

Form 10-K for the fiscal year ended December 31, 2022

Management's Discussion and Analysis of Financial Condition and Results of Operations
Financial Overview
Research and Development Expense, page 83

1. Please revise your future filings to break out the amounts incurred for Internal research and development expenses by nature or type of expense (i.e. employee related expenses) for each period presented.

In closing, 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.

You may contact Vanessa Robertson at 202-551-3649 or Daniel Gordon at 202-551-3486 with any questions.

Michael Jensen
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Comapany NameSynlogic, Inc.

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Division of Corporation Finance
Office of Life Sciences