

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

December 27, 2022

Yili Kevin Xie Chief Financial Officer Gracell Biotechnologies Inc. Building 12, Block B, Phase II Biobay Industrial Park 218 Sangtian St. Suzhou Industrial Park, 215123 People's Republic of China

> Re: Gracell Biotechnologies Inc. Form 20-F for Fiscal Year Ended December 31, 2021 Filed April 22, 2022 File No. 001-39838

Dear Yili Kevin Xie:

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 the 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 the comment, we may have additional comments.

Form 20-F for the Fiscal Year Ended December 31, 2021

Item 5. Operating and Financial Review and Prospects

A. Operating Results

Comparison of Years Ended December 31, 2020 and 2021

Research and Development Expenses, page 174

1. You state that research and development activities are central to the Company's business model and are expected to increase substantially in the future. In this regard, please disclose costs incurred during each period presented for each of your key research and development projects and provide other quantitative or qualitative disclosure that increases transparency as to the type of research and development expenses incurred. We

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note that this information had been requested in our comment letters dated November 15, 2020 and December 12, 2020 and included in your Registration Statement on Form F-1 that was declared effective on January 7, 2021.

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 Ibolya Ignat at 202-551-3636 or Franklin Wyman at 202-551-3660 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences