



DIVISION OF
CORPORATION FINANCE

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

August 18, 2021

Iain Mackay
Chief Financial Officer
GlaxoSmithKline plc
980 Great West Road
Brentford, Middlesex TW8 9GS
England

Re: GlaxoSmithKline plc
Form 20-F for the fiscal year ended December 31, 2020
Filed March 12, 2021
File No. 1-15170

Dear Mr. Mackay:

We have reviewed your filing and have the following 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 20-F for the fiscal year December 31, 2020

Exhibit 15.2 - Annual Report

Group financial review, page 50

Financial performance, page 55

1. We note in the Research and development section on page 60 that you do not quantify actual research and development expenditure by segment, only Adjusted R&D by segment. Given the materiality of these expenses, please address your consideration for apparently not continuing to provide this information given, among other things, the requirements of paragraph 21(b) of IFRS 8.

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.

Iain Mackay
GlaxoSmithKline plc
August 18, 2021
Page 2

You may contact Jenn Do at (202) 551-3743 or Daniel Gordon at (202) 551-3486 if you have any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences