

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

DIVISION OF CORPORATION FINANCE

Mail Stop 4546

April 21, 2017

Thomas Andrew Crockett Chief Executive Officer KalVista Pharmaceuticals, Inc. One Kendall Square, Bld 200, Ste 2203 Cambridge, MA 02139

Re: KalVista Pharmaceuticals, Inc. Registration Statement on Form S-1 Filed March 29, 2017 File No. 333-217009

Dear Mr. Crockett:

We have limited our review of your registration statement to those issues we have addressed in our 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Form S-3

1. We note that the Form 10-K filed on March 30, 2016 incorporates executive compensation paid during 2015 to the Carbylan named executive officers. Currently, your registration statement does not include or incorporate by reference executive compensation disclosures relating to KalVista Pharmaceuticals for the latest completed fiscal year as required by Securities Act Section 10(a) and Schedule A. Please revise your registration statement to include the required executive compensation disclosure.

Prospectus Cover Page

2. We note your disclosure that you or selling security holders may offer securities under the registration statement. It does not appear that you are eligible to omit the identification of selling security holders or the amount of securities registered on their behalf. Please

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revise your registration statement identify the selling shareholders and the securities you are registering on their behalf or remove the references to the selling shareholders from your registration statement. Alternatively, provide your analysis supporting your conclusion that your registration statement is in compliance with Securities Act Rule 430B.

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3. Please amend your disclosure to list all reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by your most recent annual report that are incorporated by reference into the prospectus. Please refer to Item 12(a) of Form S-3. Please add the statement required by Item 12(b) of Form S-3 to ensure that documents filed subsequent to the time of effectiveness are incorporated by reference.

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.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Christine Westbrook at (202) 551-5019 or me at (202) 551-3675 with any questions.

Sincerely,

/s/ Suzanne Hayes Suzanne Hayes Assistant Director Office of Healthcare and Insurance

cc: Robert A. Freedman, Esq. Fenwick & West LLP