

April 27, 2017

U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Attention: Suzanne Hayes
Christine Westbrook

**Re: KalVista Pharmaceuticals, Inc.
Registration Statement on Form S-3
Filed March 29, 2017
File No. 333-217009**

Ladies and Gentlemen:

On behalf of KalVista Pharmaceuticals, Inc. (the "**Company**"), we are concurrently transmitting herewith Amendment No. 1 (the "**Amendment**") to the Registration Statement on Form S-3 (File No. 333-217009) filed by the Company with the U.S. Securities and Exchange Commission (the "**Commission**") on March 29, 2017 (the "**Registration Statement**"). In this letter, we respond to the comments from the staff of the Commission (the "**Staff**") dated April 21, 2017 (the "**Letter**"). The numbered paragraphs below correspond to the numbered comments in the Letter; the Staff's comment is presented in bold italics. We have also enclosed with the copy of this letter that is being transmitted via overnight courier two copies of the Amendment in paper format, marked to show changes from the Registration Statement as initially submitted.

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.***

In response to the Staff's comment, the Company has revised its disclosure on page 8 of the Amendment to incorporate by reference the Company's definitive proxy statement dated March 2, 2017.

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 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.

In response to the Staff's comment, the Company has revised its disclosure on the Prospectus Cover Page of the Amendment to remove references to the selling security holders.

Incorporation by Reference, page 8

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.***

In response to the Staff's comment, the Company has revised its disclosure on page 8 of the Amendment.

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 respectfully refer the Staff to the third sentence on page 8 of the Amendment, which states "We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14, or 15(d) of the Exchange Act prior to the termination of any offering of securities made by this prospectus." We believe this sentence satisfies the disclosure requirement of Item 12(b) of Form S-3.

Sincerely,

FENWICK & WEST LLP

/s/ Robert A. Freedman

Robert A. Freedman

cc: Thomas Andrew Crockett, KalVista Pharmaceuticals, Inc.
Benjamin L. Palleiko, KalVista Pharmaceuticals, Inc.
Julia Forbess, Fenwick & West LLP