



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 4720

February 5, 2016

Sean P. Nolan
President and Chief Executive Officer
AveXis, Inc.
2275 Half Day Road, Suite 160
Bannockburn, Illinois 60015

Re: AveXis Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed February 1, 2016
File No. 333-209019

Dear Dr. Nolan:

We have reviewed your amended registration statement 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 letter by amending your registration statement and providing the requested information. If you do not believe our comment applies 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 this comment, we may have additional comments.

Prospectus Summary, page 1

1. We note your statement here and on page 84 that you "have observed compelling preliminary evidence of efficacy." Because approval of the FDA and other comparable regulatory agencies is dependent on such agencies' making a determination (according to criteria specified in law and agency regulations) that a drug or biologic is both safe and effective, while you may state that you have met certain endpoints, it is premature for you to describe or suggest that your product candidate, or any other non-approved product is safe or effective or has demonstrated safety or efficacy. Accordingly, please revise this language to eliminate any suggestion that your product has been or will ultimately be determined to be effective or to have demonstrated efficacy for purposes of granting marketing approval by the FDA or comparable agency.

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You may contact Jacob Luxenburg at (202) 551-2339 or James Rosenberg at (202) 551-3679 if you have questions regarding comments on the financial statements and related matters. Please contact Tara Keating Brooks at (202) 551-8336, Amy Reischauer at (202) 551-3793, or me at (202) 551-3675 with any other questions.

Sincerely,

/s/ Amy Reischauer for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Divakar Gupta, Cooley LLP