



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 4720

January 27, 2016

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

Re: AveXis, Inc.
Registration Statement on Form S-1
Filed January 15, 2016
File No. 333-209019

Dear Dr. Nolan:

We have reviewed your registration statement and have the following comment. 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 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.

Nationwide Children's Hospital, page 119

1. We note your statements that you must pay NCH royalties on net sales "during the term of the NCH License" and that your licenses from NCH "expire upon the expiration of the royalty term." Please revise your description of this agreement to clarify the term of the agreement.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comment, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

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