



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 4546

September 1, 2017

J. Rodney Varner  
Chief Executive Officer  
Genprex, Inc.  
100 Congress Avenue, Suite 2000  
Austin, TX 78701

**Re: Genprex, Inc.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed August 18, 2017  
File No. 333-219386**

Dear Mr. Varner:

We have reviewed your amended 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 the comment, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our August 3, 2017 letter.

Prospectus Summary  
Our Pipeline, page 6

1. We acknowledge your revised disclosures and response to prior comment 3. However, although you have some preclinical data, it appears that you have not identified a product candidate and/or target and therefore the program is too preliminary for inclusion in a pipeline table. Please revise to remove the program from the table. We will not object to the related narrative disclosure.

J. Rodney Varner  
Genprex, Inc.  
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You may contact Frank Wyman at 202-551-3660 or Lisa Vanjoske at 202-551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Dorrie Yale at 202-551-8776 or Erin Jaskot, Special Counsel, at 202-551-3442 with any other questions.

Sincerely,

*/s/ Erin K. Jaskot, for*

Suzanne Hayes  
Assistant Director  
Office of Healthcare and Insurance

cc: Christopher Ozburn — Streusand, Landon & Ozburn, LLP