



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

September 19, 2017

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

**Re: Genprex, Inc.
Amendments No. 2 and No. 3 to Registration Statement on Form S-1
Filed September 8, 2017 and September 15, 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.

General

1. We note the revised disclosure on your cover page that you are offering a minimum of 2,083,334 shares and a maximum of 5,625,000 shares. These amounts conflict with your disclosure throughout that you are offering a minimum of 2,500,000 shares and a maximum of 4,500,000 shares. We also note your statements that you do not intend to close this offering unless you raise minimum gross proceeds of \$12,500,000, and that the disclosure in your fee table and Escrow Deposit Agreement contemplate a maximum offering amount of \$22,500,000. It appears that you are registering a minimum and maximum aggregate offering amount, rather than a minimum and maximum number of shares, which is not appropriate. Please revise your disclosure throughout the registration statement and your Subscription Agreement and Escrow Deposit Agreement, as necessary, to reflect a set minimum and maximum number of shares to be offered. Refer to Item 501(b)(2) of Regulation S-K and the definition of "amount" in Securities Act Rule 405 for guidance.

J. Rodney Varner
Genprex, Inc.
September 19, 2017
Page 2

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