



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

July 26, 2016

Johan M. (Thijs) Spoor
President and Chief Executive Officer
AzurRx BioPharma, Inc.
760 Parkside Avenue
Downstate Biotechnology Incubator, Suite 217
Brooklyn, NY 11226

Re: AzurRx BioPharma, Inc.
Registration Statement on Form S-1
Filed July 13, 2016
File No. 333-212511

Dear Mr. Spoor:

We have reviewed your 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.

Notes to the Consolidated Financial Statements

Note 10 – Original Issue Discounted Convertible Notes, page F-17

1. You state in your response to comment 3 that the change in the fair value of the embedded conversion option was not at least 10 percent of the carrying amount of the original debt. Please provide us an analysis supporting this statement including the estimated conversion price based on a 20% discount to the pre-money IPO valuation and the significant assumptions you used to calculate the fair value of the embedded conversion options.

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 comments, 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 Keira Nakada at (202) 551-3659 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Josh Samples at (202) 551-3199 or me at (202) 551-3675 with any other questions.

Sincerely,

/s/Suzanne Hayes

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: David J. Levine, Esq.
Loeb & Loeb LLP