



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 4720

June 24, 2016

Anja Krammer
President
BioPharmX Corporation
1098 Hamilton Court
Menlo Park, CA 94025

**Re: BioPharmX Corporation
Registration Statement on Form S-3
Filed June 14, 2016
File No. 333-212015**

Dear Ms. Krammer:

We have limited our review of your registration statement to the issues we have addressed in our comments. In 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 comments apply 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 comments, we may have additional comments.

Incorporation of Documents by Reference, page 14

1. Please incorporate all 8-Ks filed since the end of your latest fiscal year by reference into the S-3, as required by Item 12(a)(2) of Form S-3.

Exhibit 5.1 – Opinion of Sichenzia Ross Friedman Ference LLP

2. We note that BioPharmX is incorporated in Delaware but that the legality opinion is limited to New York law. As such, please have counsel revise the opinion to ensure that it opines as to Delaware law. You may refer to Staff Legal Bulletin No. 19, Part II.B.3.b for further guidance.

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.

Please contact Josh Samples at (202) 551-3199 or Joseph McCann at (202) 551-6262 with any questions.

Sincerely,

/s/ Joseph McCann for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Marcelle Balcombe, Esq.
Sichenzia Ross Friedman Ference LLP