

Mail Stop 4720

May 6, 2010

Mr. J. J. Finkelstein
President and Chief Executive Officer
RegeneRx Biopharmaceuticals, Inc.
15245 Shady Grove Road, Suite 470
Rockville, Maryland 20850

**Re: RegeneRx Biopharmaceuticals, Inc.
Registration Statement on Form S-1
Pre-effective amendment filed April 27, 2010
File No. 333-166146**

Dear Mr. Finkelstein:

We have reviewed your response letter dated April 27, 2010. Please note that we do not agree that the component parts of the units, the number of common shares, number of warrants or number of common shares issuable on exercise of the warrants, are considered information with respect to public offering price that may be omitted at the time of effectiveness. If these terms change prior to the time your registration statement is taken effective, please file a pre-effective amendment reflecting the change.

Additionally, you have sought our concurrence as to whether any changes to the terms of the units that result from pricing of the offering may be reflected in the final prospectus to be filed pursuant to Rule 424(b)(4). You may provide the price of the unit or the actual exercise price of the warrants, as opposed to the formula, in a 424(b)(4) prospectus. However, substantive changes to the terms of the units must be provided in a pre-effective amendment as described above or a post effective amendment if the change occurs after the registration statement is taken effective

If you have any questions, please call John L. Krug, Senior Counsel, at (202) 551-3862, Suzanne Hayes, Branch Chief, at (202) 551-3675, Dan Greenspan, Special Counsel, at (202) 551-3623, or me at (202) 551-3715.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: Darren K. DeStefano, Esq.