



DIVISION OF  
CORPORATION FINANCE

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

August 17, 2010

Dr. Paul J. Maddon, M.D., Ph.D.  
Chief Executive Officer  
Progenics Pharmaceuticals, Inc.  
777 Old Saw Mill River Road  
Tarrytown, New York 10591

**Re: Progenics Pharmaceuticals, Inc.**  
**Form 10-K for the fiscal year ended December 31, 2009**  
**Filed March 15, 2010**  
**File No. 000-23143**

Dear Dr. Maddon:

We have reviewed your supplemental response dated August 5, 2010 and have the following comments.

Please respond to this letter within ten business days by amending your filing. After reviewing any amendment to your filing we may have additional comments.

Definitive Proxy Statement

Compensation Discussion and Analysis, page 21

1. We note your response to comment 4 and reissue our comment. The additional information contained in your response constitutes substantial and material information that should have been included in your CD&A for 2009. Please include a revised CD&A in an amended Form 10-K. You should file this amendment promptly.

Form 10-K

PMSA, page 7

PRO 140; Virology, page 8

2. We note your response to comment 1 and reissue our comment with respect to the Abgenix, AlphaVax, and Seattle Genetics agreements. These agreements appear to transfer technology or know-how necessary to enable you to continue to pursue your clinical development activities. Please file these agreements as exhibits to your Form 10-K. If additional time is required to prepare a confidential treatment request with respect to one or more of these agreements, you may first file an amendment providing a revised CD&A and then file a separate exhibits only amendment.

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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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you have any questions, please contact John Krug, Staff Attorney, at (202) 551-3862, Dan Greenspan, Special Counsel, at (202) 551-3623, Suzanne Hayes, Branch Chief, at (202) 551-3675, or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler  
Assistant Director

cc: Donald J. Murray, Esq.  
Dewey & LeBoeuf LLP  
1301 Avenue of the Americas  
New York, New York 10019-6092