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

DIVISION OF
CORPORATION FINANCE

September 23, 2013

Via E-mail
Mark R. Baker
Chief Executive Officer and Director
Progenics Pharmaceuticals, Inc.
777 Old Saw Mill River Road
Tarrytown, NY 10591

Re: Progenics Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2012
Filed March 15, 2013
Form 10-Q for the Quarterly Period Ended June 30, 2013
Filed August 9, 2013
File No. 000-23143

Dear Mr. Baker:

We have reviewed your filings and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing any amendment to your filing and the information you provide in response to the comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2012
Business
General

1. We note your table on page 3 indicating the stage of development of each of your product candidates. Please provide proposed disclosure to be included in an amended Form 10-K which expands your disclosure in the business section to include a discussion of the following:
   - The location, design, and goals for your Phase 2 testing in relation to PSMA ADC, MIP-1404, and Azedra;
   - The location, design, and results of your Phase 3 testing for Relistor-Oral;
   - The specific results of the Phase 1 testing for PSMA ADC, MIP-1404, and Azedra that led you to the conclusion that advancement to Phase 2 testing was warranted; and

- The specific results of the Phase 2 testing for Relistor-Oral that led you to the conclusion that advancement to Phase 3 testing was warranted

In your discussion of the clinical development of your product candidates, please specifically identify any clinical endpoints and whether and how such endpoints were met. Please also indicate the number of patients treated in each trial. In addition, please provide a discussion of any adverse events which have occurred, identify such adverse events, and indicate the frequency with which they occurred.

Relistor, page 5

2. We note your disclosure that in July 2012, the FDA issued a Complete Response Letter for the sNDA for Relistor injection for subcutaneous use for the treatment of OIC in adult patients with chronic, non-cancer pain. Please provide proposed disclosure to be included in an amended Form 10-K which discusses the following:

   - The specific concerns expressed by the FDA with respect to the sNDA;
   - Any additional clinical trials or research that need to be conducted to address the FDA's concern; and
   - Any subsequent meetings or correspondence with the FDA to discuss the CRL and the specific issues discussed in any such meeting.

License and Other Agreements
Relistor, page 6

3. We note that you in-license the rights to methylnaltrexone from the University of Chicago and have filed the related agreements as exhibits. Please provide proposed disclosure to be included in an amended Form 10-K which includes a full discussion of the material terms of this license agreement, including the following:

   - the duration and termination provisions of the agreement and, to the extent duration may be tied to patent expiration, the expiration dates of any material patents licensed under the agreement;
   - the royalty percentage that must be paid within a ten-percent range (i.e. "single digits," "between 10 and 20 percent;")
   - the amount of any other material payments obligations that may be required in the future; and
   - any additional material contract provisions.

4. Please revise your exhibit index to incorporate by reference your agreement with Amgen Fremont (formerly Abgenix) as you appear to have material payment obligations remaining under this agreement.

Patents and Proprietary Technology, page 7

5. We note the table on this page indicating a range of dates during which groups of patents will expire. Please provide proposed disclosure to be included in an amended Form 10-K which expands your disclosure to indicate the date of expiration for the most significant patent relating to each of the following product candidates: PSMA ADC, MIP-1404, and Relistor. Please also indicate the particular type of patent protection retained (i.e. method of use, composition of matter).

6. Based on your patent disclosure at page 7 it appears that certain patents related to your oncology platform will expire in 2013. Please provide proposed disclosure to be included in an amended Form 10-K which identifies the specific product(s) to which this patent relates. In addition, please provide an additional risk factor which discusses the extent to which the Company faces material risk stemming from the expiration of a material patents.

Risk Factors, page 11
We are dependent on Salix, Ono and other business partners…," page 11

7. We note your disclosure in this risk factor regarding the receipt of a complete response letter from the FDA in relation to Relistor. Please provide proposed disclosure to be included in an amended Form 10-K which revises your risk factor discussion to include a separate risk factor which highlights your receipt of a CRL from the FDA, discusses the FDA's concerns, and identifies the specific risks you may face with respect to your on-going partnerships with Salix and Ono as well as the continued development and potential marketing approval of Relistor, in both subcutaneous and oral form.

Form 10-Q for the Quarterly Period Ended June 30, 2013
Notes to Consolidated Financial Statements
2. Acquisition of Molecular Insight Pharmaceuticals, Inc., page 9

8. Please provide us proposed disclosure to be included in future periodic reports addressing the following regarding your in process research and development :

   - Disclose the specific nature and fair value of each significant in-process research and development project acquired.
   - Disclose the appraisal method used to value the projects.
   - Disclose the significant appraisal assumptions, such as the period in which material net cash inflows from significant projects are expected to commence and the risk adjusted discount rate applied to the project's cash flows.

9. Please provide us proposed disclosure to be included in future periodic reports that clarifies how you determined the contingent consideration recorded. Additionally, please

tell us why the contingent consideration was not included in your Fair Value Measurement footnote along with the required disclosures of ASC 820-10-50.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include 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 filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comment as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Tabatha Akins, Staff Accountant, at (202) 551-3658 or Joel Parker, Accounting Branch Chief, at (202) 551-3651 if you have any questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. Please contact Austin Stephenson, Attorney Advisor, at (202) 551-3192 or Bryan Pitko, Attorney Advisor, at (202) 551-3203 with questions on any of the other comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant