

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

December 19, 2013

Douglas Murphy-Chutorian, M.D. Chief Executive Officer Semler Scientific, Inc. 2330 NW Everett St. Portland, OR 97210

Re: Semler Scientific, Inc.

Amendment No. 1 to Registration Statement on Form S-1

Filed December 6, 2013 File No. 333-192362

Dear Dr. Murphy-Chutorian:

We have reviewed your registration statement and have the following comments. In some of 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. Where 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 these comments, we may have additional comments.

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1. We refer to your response to prior comment 6 and your November 15, 2013 response to prior comment 16. Please revise your disclosure on page 41 to identify the USPTO patent number. To the extent that your company is not named in the patent, provide us support for your disclosure on page 41 that you applied for the patent. Please tell us the dollar amount, if any, paid to all inventors for the assignments you reference in your response and provide us with copies of the applicable assignment agreements. Also, revise the prospectus to describe Advanced Vascular Dynamics' prior interest in your technology, Mr. Herbert Semler's affiliation with Advanced Vascular Dynamics and material terms of your technology transfer agreement with Advanced Vascular Dynamics. Please also refer to Instruction 1.a.iii to Item 404(a) of Regulation S-K and disclose this transfer as a related-party transaction or advise. Also, file this agreement as an exhibit in accordance with Item 601(b)(10).

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2. Please add disclosure to clarify, if true, that cashless warrant exercises are the reason for the reductions in post-offering holdings relative to pre-offering holdings.

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 Dennis Hult at (202) 551-3618 or Jay Webb at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Joseph McCann at (202) 551-6262 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director