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December 6, 2013

Amanda Ravitz
Assistant Director
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Semler Scientific, Inc.
Registration Statement on Form S-1
Filed November 15, 2013
File No. 333-192362

Dear Ms. Ravitz:

On behalf of our client, Semler Scientific, Inc., a Delaware corporation (the "Company"), we hereby provide responses to comments (the "Comments) of the Staff of the U.S. Securities and Exchange Commission (the "Staff") issued in a letter dated December 2, 2013 (the "Letter") regarding the Company's above-referenced Registration Statement on Form S-1 (the "Registration Statement"), as filed with the U.S. Securities and Exchange Commission (the "Commission") on November 15, 2013. Contemporaneous with this submission, the Company is filing on the EDGAR system a complete copy of Amendment No. 1 to the Registration Statement on Form S-1 (the "Amended Registration Statement") reflecting the responses of the Company below.

The Company's responses are numbered to correspond to the Comments as numbered in the Letter. For your convenience, each of the Comments contained in the Letter have been restated in bold below in their entirety, with the Company's corresponding response set forth immediately under such comment. In the responses below, page number references are to the Amended Registration Statement.

Our Product, page 1

1. We note your response to prior comment 2 and your disclosures on pages 3, 39, and 43. Please revise your summary to explain the ankle brachial index (ABI), and briefly describe the difference between blood pressure and blood flow. Please revise to clarify how measurements taken by FloChec differ from those taken by competitive products and indicate, if true, whether the algorithm used in diagnosing PAD is a standard one within the medical profession or is proprietary to your business. Also, please revise to clarify how "traditional analog" ABI, Doppler and/or imaging systems differ from your own technology in terms of what they measure and how they measure it.

Response: Changes in response to the Staff's Comment have been made to pages 2 and 41 of the Amended Registration Statement.

2. We note your new disclosure that you expect your product to be used as part of a routine office visit, like a thermometer or stethoscope. However, given that physicians likely make a one-time minimal payment for these products, it is unclear whether your product would be viewed by physicians the same way in making purchasing decisions. Please tell us what consideration you have given to this and/revise to disclose risks associated with the uniqueness of your product in this regard.

Response: We have considered this and acknowledge that the decision to rent a FloChec™ is not exactly parallel to a one-time capital purchase. Accordingly, we have made changes in response to the Staff's Comment to page 12 of the Amended Registration Statement.

Market Opportunity, page 2

3. We note your revised disclosures in response to prior comment 3. Please revise your summary to explain that FloChec is not approved under a third-party payor code, that you do not track reimbursement, and that your customers may or may not be successful in receiving reimbursement. Please also revise the heading on page 13 to clarify that your product is not approved under any payor codes.

Response: Changes in response to the Staff's Comment have been made to pages 3, 4, 13 and 43 of the Amended Registration Statement.

Although part of our business strategy....page 18

4. We note your response to prior comment 19. Please revise to explain briefly how the health care device tax is applied to products, such as FloChec, that are leased as opposed to sold to customers.

Response: Changes in response to the Staff's Comment have been made to page 19 of the Amended Registration Statement.

Use of Proceeds, page 27

5. We note your revised disclosure in response to prior comment 17. Please refer to Regulation S-K, Item 504 and revise to disclose the approximate dollar amount of proceeds intended for each stated purpose. Also, please revise, as applicable, to disclose that the proceeds will be used to pay accrued expenses owed to your chief executive officer.

Response: Changes in response to the Staff's Comment have been made to page 28 of the Amended Registration Statement.

Our Product, page 39

6. We note your response to prior comment 16 and your revised disclosure on page 40. Please revise to explain briefly the 2007 and 2011 assignments that you reference. Please also revise your related-party transaction disclosure, as applicable, to describe material terms of the 2011 assignment. Please also file both assignments as material contracts pursuant to Regulation S-K, Item 601(b)(10).

Response: The Company has revised the disclosure to delete reference to the assignments and clarifies for the Staff that the prior disclosure was simply referring to the assignments by the inventors to their employer that are normal and done in the ordinary course of business. The title of the patent and applications are held by the Company. See page 41 of the Amended Registration Statement. The Company does not believe that these ordinary course assignments fall within the meaning of a related party transaction under Item 404 of Regulation S-K because the inventors were employees and/or consultants of the Company, the assignment to the Company was made in the ordinary course of such role, was required by the terms of their respective agreements with the Company, and was not done for value in excess of the lesser of (x) $120,000 or (y) 1% of the Company's average total assets at year end for the last two completed fiscal years. For the same reason, the Company respectfully submits that these ordinary course assignments are not material contracts pursuant to Regulation S-K, Item 601(b)(10) and need not be filed as exhibits to the Amended Registration Statement.

Market Opportunity, page 40

7. With respect to the materials provided in response to prior comment 21, please tell us:

- **Whether the article included in tab 1 was published by the National Institute of Health;**
- **Which published study supports the statement on page 2 that persons with PAD are four times more likely to die of a heart attack, and two to three times more likely to die of a stroke; and**
- **What section of the A.T. Hirsch et al. article included in tab 5 supports the 75% figure cited on page 2.**

Response: The Company respectfully submits that the article included in Tab 1 was originally published by the Journal of Investigational Medicine, and subsequently publicized on the National Institute of Health ("NIH") web-page (see: http://www.ncbi.nlm.nih.gov/pubmed/16984798). The Company respectfully submits that the NIH has published other material, such as patient fact sheets, discussing how peripheral artery disease, or PAD, is a major under-diagnosed health problem. Copies of these materials are being provided to the Staff under separate cover. The Company respectfully submits that a number of published studies support the statement that persons with PAD are four times more likely to die of a heart attack, and two to three times more likely to die of a stroke. Copies of such studies are being provided to the Staff under separate cover. Because the increased mortality rates of heart disease or stroke for PAD patients is easily verifiable and reported in a variety of sources, the Company respectfully submits that it is not necessary to include a specific source citation in the Amended Registration Statement. Finally, the Company notes that it has revised the disclosure on pages 3 and 42 of the

Amended Registration Statement to state the findings reported in the A.T. Hirsch et al. article rather than the prior claim, which it believes is supported by the findings reported in the Hirsch et al. article. The Company respectfully submits that the prior disclosure stating that more than 75% are without classic symptoms of PAD, such as leg pain on exertion (*e.g.*, claudication) was a conservative estimate based on the Hirsch et al. reported findings that as few as 11% of patients with PAD experience claudication (pain upon exertion). The Hirsch et al. study thus implies that 89% of patients with PAD do not have classic symptoms of PAD (*e.g.*, claudication, or pain upon exertion).

Manufacturing, page 42

8. We note your response to prior comment number 23; however, it appears that an agreement with your sole supplier is material. Please revise your disclosure and file the agreement as an exhibit or advise.

Response: While the Company respectfully submits that such contract is not material within the meaning of Item 601(b)(10) of Regulation S-K for the reasons previously noted, the Company has nevertheless filed the agreement as Exhibit 10.8 to the Amended Registration Statement.

Research and Development Program, page 43

9. We note your revised disclosure in response to prior comment 24. To the extent that you choose to reference clinical studies in the prospectus, please revise to include material information about these studies, including what each study assessed, who conducted the studies, when they were conducted, whether there were any material limitations to the research, and whether you provided funding for the research and/or whether the authors had any competing interests. You should also explain the results of each study so that it is clear how it was determined that these results were "frequently concordant" as compared to competitive technologies.

Response: Changes in response to the Staff's Comment have been made to page 45 of the Amended Registration Statement.

Summary Compensation Table, page 55

10. We note your revised disclosure in response to prior comment 27. Please revise footnote 4 to clarify the nature of the $482,026 in accrued expenses owed to Dr. Murphy-Chutorian and discuss this compensation in your narrative summary on page 56. Also, please revise your disclosure on page 65 to describe briefly the consulting services he performed for you. Finally, please file the sales representative agreement and any material consulting arrangements with Dr. Murphy-Chutorian pursuant to Regulation SK, Item 601(b)(10).

Response: Changes in response to the Staff's Comment have been made to pages 57, 58, 66 and 67 of the Amended Registration Statement. In addition, a copy of Dr. Murphy-Chutorian's sales representative agreement is filed as Exhibit 10.7 to the Amended Registration Statement.

[remainder of page intentionally left blank]

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The Company has authorized me to acknowledge on its behalf that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- 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.

Should you have any questions concerning any of the foregoing, please contact me by telephone at (212) 549-0378.

Sincerely,

/s/ Yvan-Claude Pierre,
Yvan-Claude Pierre
Reed Smith LLP

Cc: Douglas Murphy-Chutorian, MD, Semler Scientific, Inc.