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November 15, 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
Submitted October 10, 2013
CIK No. 1554859

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 November 6, 2013 (the "Letter") regarding the Company's above-referenced Draft Registration Statement on Form S-1 (the "Draft Registration Statement"), as confidentially submitted to the U.S. Securities and Exchange Commission (the "Commission") on October 10, 2013. Contemporaneous with this submission, the Company is filing on the EDGAR system a complete copy the first public Registration Statement on Form S-1 (the "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 Registration Statement.

Artwork

1. Please note that you may include text in your artwork only to the extent necessary to explain briefly the visuals in the presentation. Additionally, it is not appropriate to highlight key product features in your artwork without balancing the presentation to highlight key product limitations and/or competitive disadvantages. Please revise your graphics accordingly.

Response: Changes in response to the Staff's Comment have been made to inside front cover and inside back cover of the prospectus included in the Registration Statement.

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General

2. We note your disclosure on page 40 that your primary competitor is a standard blood pressure cuff ABI device. Please clarify here if your product is a blood pressure measurement device or if it does something in addition to measuring blood pressure. If your product does something different, explain more clearly why you have not discussed other types of competitors.

Response: Changes in response to the Staff's Comment have been made to page 43 of the Registration Statement.

3. We note disclosure throughout that your product has not been approved for reimbursement under any third-party payor code and that you do not intend to provide coding advice. Please explain more fully in the summary, business and risk factors sections what you mean by "coding advice" and why you would not seek to provide it if it would help obtain reimbursement approval.

Response: Changes in response to the Staff's Comment have been made to pages 3, 13, 41 and 47 of the Registration Statement.

4. In this connection, it is unclear why you will be more vulnerable to coverage and reimbursement limitations imposed by CMS as the Medicaid eligible population grows.

Response: Payments for services provided to Medicare and Medicaid patients are controlled by CMS. To the extent that FloChec™ is used by providers in the care of these patients, decisions by CMS concerning reimbursement for services may impact providers' choice of which services to provide. For example, if CMS decreases the monthly payment for a 65 year old patient from $1,000 per month to $500 per month, then the provider will have to decide which steps to eliminate from his or her routine office visits in order to maintain a profitable business model. If the time of an office visit will need to be 7 minutes in length instead of 15 minutes in length in order to maintain a profitable business, a provider may decide to eliminate certain services or conducting certain procedures, such as deciding not to use a thermometer, take someone's blood pressure or use a FloChec™ to run an ABI test. Thus, reimbursement limitations imposed by CMS on providers may affect their decision making about which services to provide during an office visit, which could affect the Company. The Company has also revised the disclosures on pages 47-48 of the Registration Statement.

Business Overview, page 1

5. We note that the first paragraph of your business overview prominently highlights your revenues for past periods. Please balance your disclosure by also disclosing your net losses for these same periods.

Response: Changes in response to the Staff's Comment have been made to pages 1, 32 and 39 of the Registration Statement.

Market Overview, page 2

6. It is not clear why the Health Care Reform law represents an opportunity for you. Please clarify and in doing so explain what fee for service programs are versus capitated programs, in addition to explaining who pays a monthly fee per patient. Clarify why it is more or less desirable to have a payment that is "higher for sicker patients" and who benefits from higher or lower payments.

Response: Changes in response to the Staff's Comment have been made to pages 2, 40 and 41 of the Registration Statement.

7. In this connection, explain "coding systems" and "risk adjustment."

Response: Changes in response to the Staff's Comment have been made to pages 2 and 40 of the Registration Statement.

Implications of Being an Emerging Growth Company, page 5

8. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

Response: As of the date hereof, the Company has not made, nor has it authorized anyone to make on its behalf, any written communication to potential investors in reliance on Section 5(d) of the Securities Act. Similarly, there have not been any research reports published or distributed in reliance upon Section 2(a)(3) of the Securities Act by any broker dealer that is participating or will participate in the offering. To the extent any such written communications are made, or research reports published or distributed, the Company undertakes to furnish the Staff with copies thereof.

9. Your decision to avail yourself of the JOBS Act provisions permitting an extended period to adopt new accounting standards is revocable. Please revise accordingly. Note that if you later decide to opt out of the extended period for adopting new accounting standards, you would need to disclose that decision and it would be irrevocable.

Response: Changes in response to the Staff's Comment have been made to pages 7 and 34 of the Registration Statement.

10. Please revise to clarify that your ability to avail yourself of the extended adoption period for new or revised accounting pronouncements is also subject to the limits described in the penultimate paragraph on page 6. In addition, clarify that even when you cease to be an emerging growth company you may still enjoy reduced reporting obligations insofar as you remain a smaller reporting company.

Response: Changes in response to the Staff's Comment have been made to page 6 of the Registration Statement.

Risk Factors, page 10

11. We noted disclosures on page 19 that "In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of these accounting standards until they would otherwise apply to private companies. We have irrevocably elected to avail ourselves of this exemption and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies". Please state in your risk factors that, as a result of this election, your financial statements may not be comparable to companies that comply with public company effective dates. Also, include a similar statement in your critical accounting policy disclosures.

Response: Changes in response to the Staff's Comment have been made to pages 20 and 34 of the Registration Statement.

Our product..., page 12

12. Please revise your disclosure here and on pages 44-45 to clarify whether to your knowledge your customers have been denied reimbursement by Medicare and/or Medicaid.

Response: Changes in response to the Staff's Comment have been made to pages 13 and 47 of the Registration Statement.

Capitalization, page 30

13. "Cash and cash equivalents" is not a component of capitalization as applicable to this disclosure. Please revise to remove that caption from the presentation of capitalization.

Response: Changes in response to the Staff's Comment have been made to page 31 of the Registration Statement.

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Management's Discussion and Analysis of Financial Condition and Results of Operations, page 31

Results of Operations, page 32

Revenue, page 32 and 33

14. We note that you attribute the increase in revenues to both an increase in volume of units rented and average price per rental. In light of the significant increase in revenues, your Management's Discussion and Analysis disclosure appears broad and does not provide a thorough analysis that provides readers a view of the company through the eyes of management. When individual line items disclosed in your statements of operations significantly fluctuate in comparison to the comparable prior period, management should quantify and disclose the nature of each item that caused the significant change. For example, please quantify each material factor, i.e. such as price changes and / or volume changes, separately disclose the effect on operations attributable to each factor causing the aggregate change from year to year and disclose the nature of or reason for each factor causing the aggregate change. Your revised analysis should discuss the underlying material causes of the factors described as well as the known or expected future impact of any referenced factors on operating results.

Response: Changes in response to the Staff's Comment have been made to pages 34 and 35 of the Registration Statement.

Cost of Revenue, page 33

15. In a related matter, we also noted you disclosed several factors affecting the increase in your cost of revenue. Please quantify these factors and explain the reason for each factor causing the aggregate change as well as any known or expected future impact of such factors on your operations. Also, tell us what you meant by the disclosures on page 34 that "there was a lower rate of depreciation per (rental) unit per month". Reconcile the referenced disclosures with your accounting policy for "Assets for Lease" at page F-7 which indicates these assets are depreciated on a straight-line basis over 36 months for the units outstanding.

Response: Changes in response to the Staff's Comment have been made to pages 32, 34 and 35 of the Registration Statement.

Business, page 37

16. Based on publicly available filings contained on FDA's website, it appears that Advanced Vascular Dynamics and Herbert J. Semler submitted a 510(k) application, dated December 21, 2009, for the FloChec System. With a view to revised disclosure, please tell us about your relationship, if any, with Advanced Vascular Dynamics. Please also revise to disclose briefly the history of your technology development.

Response: The Company advises the Staff that there is no direct relationship between Semler Technologies, Inc., d/b/a Advanced Vascular Dynamics, a private entity, and the Company. Supplementally, the Company informs the Staff that Advanced Vascular Dynamics is controlled by an adult child of Dr. Semler, Matt Semler, who is neither an officer, Director or beneficial owner of more than 5% of the Company's equity securities. As disclosed on page 50 of the Registration Statement, Dr. Semler, the Company's co-founder and Chairman, previously served as Chairman of the Board of Advanced Vascular Dynamics. The Company acknowledges that Advanced Vascular Dynamics obtained the 510(k) clearance letter from the FDA, but subsequently assigned the rights to the Company. For these reasons, the Company respectfully submits that no additional disclosures are required regarding Advanced Vascular Dynamics. The Company has added a brief history of the development of its technology on page 40 of the Registration Statement.

Use of Proceeds, page 26

17. To the extent possible, please identify more specifically your immediate term working capital and general capital needs, so an investor has a clearer picture of your intended use of proceeds.

Response: Changes in response to the Staff's Comment have been made to page 27 of the Registration Statement.

Sources of Revenues and Expenses, page 31

18. Please explain in more detail what you mean when you say the revenue is recognized as earned, "normally" on a month-to-month basis. Also, does any of your revenue relate to the number of procedures performed?

Response: Changes in response to the Staff's Comment have been made to pages 32 and 33 of the Registration Statement. The Company supplementally informs the Staff that none of the Company's revenue relates to the number of procedures performed.

Factors Affecting Future Results, page 32

19. Please confirm your belief that reimbursement status and the 2.3% health care device tax will not affect your future revenues or revise.

Response: The Company confirms its current belief that its reimbursement status and the 2.3% health care excise tax will not materially affect its future revenues. Because reimbursement does not have a direct relationship with the Company's revenues (which are recognized based on renting the FloChec™ to customers), the Company respectfully submits to the Staff that a discussion of the possible effects of reimbursement status on the Company's revenues is not necessary to an understanding of the Company's financial statements included in the Registration Statement, nor does the Company believe that such a discussion would provide meaningful information to investors in the Company in the Management's Discussion and Analysis of Financial Condition and Results of Operations section of the Registration Statement. As disclosed elsewhere in the Registration Statement, the Company does not expect (or intend) that providers use FloChec™ to seek reimbursement. Moreover, the Company does not receive payments based on reimbursement. Accordingly, while some providers may choose not to lease a FloChec™ because the reimbursement status may be uncertain, or some providers may have had reimbursement requests rejected and determine not to renew the lease of the FloChec™, which could affect the Company's revenues, these types of risks are more general business risks regarding the overall success of the Company's product and market acceptance, and are addressed by the Company in the Risk Factors (see pages 12 and 13 of the Registration Statement). As for the 2.3% health care device tax, the Company notes that there may be risks associated with such tax in the Risk Factors (see pages 18-19 of the Registration Statement)

discussion given the overall impact on the industry in which it operates, which could have an adverse effect on its results of operations. However, the Company's current experience is that such tax has not had, nor is it currently expected to have, a material effect on the Company's revenues. For this reason, the Company respectfully submits that inclusion of a discussion of the potential effects of such tax on the Company's revenues is not necessary for an investor to understand the Company's financial statements or expected future results of operations, nor would additional disclosures provide meaningful information to investors.

Liquidity and Capital Resources, page 34

20. Please address anticipated sources and uses of capital in light of current and anticipated needs.

Response: Changes in response to the Staff's Comment have been made to page 36 of the Registration Statement.

Market Opportunity, page 38

21. We note the inclusion of third-party data in the prospectus, such as the market data from the SAGE Group and others. Please provide us with copies of the sources of this data, clearly marking the relevant sections of the reports that support the data you have included in the prospectus and the page number of your prospectus where such data has been used. Also, please tell us whether you commissioned data for use in connection with the registration statement.

Response: In response to the Staff's Comments, copies of the applicable sources, clearly marked as requested, are being provided to the Staff under separate cover. The Company did not commission or pay any fees for data for use in connection with the Registration Statement.

22. In this connection, please ensure that all statements about the market or other data are supported by such third party data or identify those statements as management's belief.

Response: The Company respectfully submits that all statements about the market or other data are supported by such third party data or have been clearly identified as management's belief.

Manufacturing, page 40

23. Please revise to identify the independent contractor who manufactures your sole commercialized product and file the service and supply agreement as a material contract.

Response: The Company respectfully submits to the Staff that the identity of the Company's independent unaffiliated third-party contractor who manufactures its sole commercialized product, FloChec™ is not meaningful information to investors in the Company. The Company has disclosed to investors the risks associated with having a sole supplier in the Risk Factors, as well as the risks of the manufacture of its sole commercialized product at a single facility (see pages 14-15 of the Registration Statement). However, the Company has also indicated that there are many qualified contract manufacturers available and that its product is relatively easy to manufacture (as there is no special technical expertise required or unique qualifications necessary). Moreover, the Company respectfully submits that the service and supply agreement with its contract manufacturer is not a material agreement within the meaning of Item 601(b)(10) of Regulation S-K and accordingly, need not be filed as an Exhibit to the Registration Statement. The service and supply agreement was entered into in the ordinary course by the Company and is such as ordinarily accompanies the kind of business conducted by the Company. Notably, the service and supply agreement is not a contract of the type specified in Regulation S-K Item 601(b)10 (ii)(A)-(D). Even though the Company has only one service and supply agreement in place, this is by the Company's choice. The independent contractor is not an exclusive manufacturer, and the Company could engage other contract manufacturers if it so chooses. The Company has no minimum volume requirements or other commitments and purchasing is done by blanket purchase order. In addition, the Company may terminate the service and supply agreement at any time upon three months' notice, or immediately upon uncured breach or insolvency. Further, Company reserves all right, title and interest in and to any and all intellectual property rights relating to its products or any improvements thereto. Accordingly, the Company is not contractually committed for any material time or amount to the independent contractor manufacturer. For the foregoing reasons, the Company does not consider this service and supply agreement as being material to the Company, and does not consider itself to be substantially dependent on such service and supply agreement.

Research and Development Program, page 40

24. Please revise to describe in greater detail the "certain results" that you reference in the first full paragraph on page 41 and provide us with copies of the white papers. Also, please revise to clarify how you determined that these results are "frequently concordant" with other ABI and imaging studies. Please identify the studies used in your comparison and provide us with copies.

Response: Changes in response to the Staff's Comment have been made to page 43 of the Registration Statement. In addition, the applicable white papers have been included as part of the sources provided in response to Comment 21 above. The Company supplementally notes that one of the white papers has now been published in a peer-reviewed journal, which is also reflected on page 43 of the Registration Statement.

Patents and Licenses, page 41

25. Please revise to disclose the term of your patent and patent applications. Please refer to Regulation S-K, Item 101(h). We also note your disclosure on page 21 indicating that third parties, including employees and independent contractors, may claim ownership of your intellectual property. Please also tell us whether any third parties, including employees/contractors who have not executed assignments, have an ownership interest in the referenced patent and patent applications.

Response: Changes in response to the Staff's Comment have been made to page 43 of the Registration Statement. The Company supplementally informs the Staff that no third parties, including employees/contractors who have not executed assignments, have an ownership interest in the referenced patent and patent applications.

Employees, page 46

26. To the extent that Dr. Murphy-Chutorian is not an employee prior to effectiveness of the registration statement, please revise to disclose why he is not an employee and disclose, as applicable, any risks associated with your having a chief executive officer who is not also an employee.

Response: The Company supplementally informs the Staff that Dr. Murphy-Chutorian is now an employee. A copy of his at-will employment agreement dated November 11, 2013 is filed as Exhibit 10.6 to the Registration Statement.

Summary Compensation Table, page 51

27. Please revise the table to disclose all plan compensation earned by Dr. Murphy-Chutorian for all services rendered in all capacities to you during 2012 or advise. Refer to Regulation S-K, Item 402(m). In this regard, please disclose all consulting fees earned by Dr. Murphy-Chutorian during fiscal year 2012, including those fees earned prior to his appointment as your chief executive officer, or advise.

Response: Changes in response to the Staff's Comment have been made to pages 54 and 55 of the Registration Statement.

Security Ownership.., pg. 55

28. Please revise to disclose the natural person or persons with voting and/or dispositive control over the shares beneficially owned by GPG SSF Investments.

Response: Changes in response to the Staff's Comment have been made to page 60 of the Registration Statement.

Certain Relationships and Related Transactions, pg. 57

29. Please revise your disclosure on page 60 to add an appropriate heading concerning consulting fees earned by Dr. Murphy-Chutorian in past years.

Response: Changes in response to the Staff's Comment have been made to page 65 of the Registration Statement.

Semler HealthPerks, Inc., pg. 60

30. Please revise to describe briefly the business of Semler HealthPerks, Inc. Also, based on your disclosure on page 61 it appears that the loan to Semler remains outstanding. To the extent that the loan is outstanding, please provide us an analysis of whether you would comply with section 402 of the Sarbanes-Oxley Act of 2002 upon the filing of a registration statement.

Response: Changes in response to the Staff's Comment have been made to pages 65 and 66 of the Registration Statement. The Company informs the Staff that the loan to Semler HealthPerks, Inc. has been forgiven and accordingly is no longer outstanding.

Director Loan Guarantees, pg. 61

31. Please revise to provide disclosure about these transactions as required by Regulation SK, Item 404.

Response: Changes in response to the Staff's Comment have been made to page 66 of the Registration Statement.

Index to Financial Statements, page F-1

Statements of Stockholders' Equity (Deficit) for the Years Ended December 31, 2012 and 2011, page F-5

32. We note this statement includes redeemable convertible preferred stock presented as temporary equity in your December 31, 2012 balance sheet. Given that fact, please tell us why this statement is titled "Statements of Stockholders' Equity (Deficit)". Also, given disclosures in this statement, tell us why page F-16 indicated that $611 thousand of offering costs for the redeemable convertible preferred stock were charged to additional paid in capital.

Response: Changes in response to the Staff's Comment have been made to page F-5 of the Registration Statement. The Company supplementally informs the Staff that page F-16 previously erroneously indicated that $611 thousand of offering costs for the redeemable convertible preferred stock were charged to additional paid in capital notwithstanding the correct presentation as a reduction to preferred stock in the Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit) at June 30, 2013. The current disclosure on F-16 reflects the presentation in the Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit) at September 30, 2013.

Balance Sheets, page F-23

33. Please tell us how you computed the unaudited pro forma Stockholders' deficit amounts at June 30, 2013 that are presented on this page.

Response: The Company informs the Staff that the unaudited pro forma stockholders' deficit amounts at June 30, 2013 have now been replaced with the amounts at September 30, 2013, which already take into account the removal of the redemption right, which was previously accounted for in the pro forma adjustements. Accordingly, the calculation of the pro forma column at September 30, 2013 reflects the automatic conversion of the preferred into common effective upon the offering.

Exhibits

34. We note your disclosure on page 63 concerning a warrant agreement with the underwriters. Please confirm that you will file this agreement as an exhibit to the registration statement.

Response: The Company notes for the Staff that such form of warrant agreement is filed as Exhibit 10.2 to the Registration Statement.

35. We note your disclosure on pages 12 and 40 concerning your supply and distribution agreement with Bard Peripheral Vascular, Inc. Please file the agreement as an exhibit or explain why it is not material to the business.

Response: The Company respectfully submits that the supply and distribution agreement with Bard Peripheral Vascular, Inc. ("Bard") is not a material contract within the meaning of Item 601(b)(10) of Regulation S-K. The supply and distribution agreement was entered into in the ordinary course by the Company and is such as ordinarily accompanies the kind of business conducted by the Company. Notably, the supply and distribution agreement is not a contract of the type specified in Regulation S-K Item 601(b) 10(ii)(A)-(D). As disclosed in the Registration Statement (see pages 13 and 42), the relationship with Bard is co-exclusive. The Company has the right, and does, engage in the marketing and distribution of its FloChec™ product. The Company also has the right to grant other distributors the right distribute its products within the territory subject to certain limitations. Notably, as disclosed in the Registration Statement (see pages 13 and 42), the Bard supply and distribution agreement accounted for less than 20% of the Company's revenues in each of the nine months ended September 30, 2013 and in the year ended December 31, 2012. In addition, the Company reserves all right, title and interest in and to any and all intellectual property rights relating to its products or any improvements thereto. Plus, the Company is not committed to Bard for a material amount of time. Either party may terminate the supply and distribution agreement upon 30 days written notice to the other party in the event of a material breach that is not cured or in the event of insolvency, and either Bard or the Company could choose not to renew the agreement at the end of its current term (the end of 2014, as disclosed on page 14 of the Registration Statement). For these reasons, the Company does not view this supply and distribution agreement as being material to the Company, nor does it consider that it is substantially dependent on such agreement.

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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.