

Semler Scientific, Inc.  
Form 424B4  
February 21, 2014

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Filed pursuant to Rule 424(b)(4)  
Reg. No. 333-192362  
PROSPECTUS  
1,430,000 Shares  
Common Stock

This is a firm commitment initial public offering of 1,430,000 shares of common stock by Semler Scientific, Inc. No public market currently exists for our common stock.

Our common stock has been approved for listing on The NASDAQ Capital Market under the symbol "SMLR." We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012 and have elected to comply with certain reduced public company disclosure standards.

Investing in our common stock involves risks that are described in the "Risk Factors" section beginning on page 11 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	<b>Per Share</b>	<b>Total</b>
Public offering price	\$ 7.00	\$ 10,010,000
Underwriting discounts and commissions (1)	\$ 0.49	\$ 700,700
Proceeds, before expenses, to us	\$ 6.51	\$ 9,309,300

(1)

- The underwriters will receive compensation in addition to the underwriting discount. See "Underwriting" beginning on page 74 of this prospectus for a description of compensation payable to the underwriters.

We have granted the underwriters a 45-day option to purchase up to 214,500 additional shares of common stock solely to cover over-allotments, if any.

Certain of our directors, officers and more than 5% stockholders and their affiliates have agreed to purchase an aggregate of 285,713 of our common stock in this offering at the initial public offering price. See "Underwriting" for a full description of compensation payable to the underwriters.

The underwriters expect to deliver the shares against payment therefor on or about February 26, 2014.

Aegis Capital Corp  
February 20, 2014

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You should rely only on the information contained in this prospectus or in any free writing prospectus that we may specifically authorize to be delivered or made available to you. We have not, and the underwriters have not, authorized anyone to provide you with any information other than that contained in this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus may only be used where it is legal to offer and sell our securities. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since that date. We are not, and the underwriters are not, making an offer of these securities in any jurisdiction where the offer is not permitted. For investors outside the United States: We have not and the underwriters have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of securities and the distribution of this prospectus outside the United States.

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Prospectus Summary

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our securities, you should carefully read this entire prospectus, including our financial statements and the related notes and the information set forth under the headings “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in each case included elsewhere in this prospectus. Unless otherwise stated or the context requires otherwise, references in this prospectus to “Semler Scientific,” “we,” “us,” or “our” refer to Semler Scientific, Inc.

Semler Scientific, Inc.

Business Overview

We are an emerging medical risk-assessment company. Our mission is to develop, manufacture and market patented products that identify the risk profile of medical patients to allow healthcare providers to capture full reimbursement potential for their services. Our first patented and U.S. Food and Drug Administration, or FDA, cleared product, is FloChec™. FloChec™ is used in the office setting to allow providers to measure arterial blood flow in the extremities and is a useful tool for internists and primary care physicians for whom it was previously impractical to conduct blood flow measurements. FloChec™ received FDA 510(k) clearance in February 2010, we began Beta testing in the third quarter of 2010, and we began commercially leasing FloChec™ in January 2011. In the year ended December 31, 2013 we had total revenue of \$2,274,000 and a net loss of \$2,233,000 compared to total revenue of \$1,199,000 and a net loss of \$2,741,000 in 2012. Our net loss attributable to common stockholders was \$2,233,000 for the year ended December 31, 2013 compared to \$2,826,000 for 2012.

Our Product

We currently have only one patented and FDA cleared product, FloChec™, that we market and lease to our customers. FloChec™ is a four-minute in-office blood flow test. Healthcare providers can use blood flow measurements as part of their examinations of a patient’s vascular condition, including assessments of patients who have vascular disease. The following diagram illustrates the use of FloChec™:

FloChec™ features a sensor clamp that is placed on the toe or finger much like current pulse oximetry devices. Infrared light emitted from the clamp on the dorsal surface of the digit is scattered and reflected by the red blood cells coursing through the area of illumination. Returning light is ‘sensed’ by the sensor. A blood flow waveform is instantaneously constructed by our proprietary software algorithm and displayed on the video monitor. Both index fingers and both large toes are interrogated, which takes about 30 seconds for each. A hardcopy report form is generated that displays four waveforms and the ratio of each leg measurement compared with the arms. Results are classified as Flow Obstruction, Borderline Flow Obstruction and No Flow Obstruction.

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### Other Methods

Blood flow is the amount of blood delivered to a given region per unit time, whereas a blood pressure is the force exerted by circulating blood on the walls of arteries. Given a fixed resistance, blood flow and blood pressure are proportional. The traditional ankle brachial index, or ABI, with Doppler test uses a blood pressure cuff to measure the the systolic blood pressure in the lower legs and in the arms. A blood pressure cuff is inflated proximal to the artery in question. Using a Doppler device, the inflation continues until the pulse in the artery ceases. The blood pressure cuff is then slowly deflated. When the artery's pulse is re-detected through the Doppler probe the pressure in the cuff at that moment indicates the systolic pressure of that artery. The test is repeated on all four extremities. Well-established criteria for the ratio of the blood pressure in a leg compared to the blood pressure in the arms are used to assess the presence or absence of flow obstruction. Generally these tests take 15 minutes to perform and require a vascular technician to be done properly. Like FloChec™, the traditional analog ABI test with Doppler is a non-invasive physiologic measurement that may be abnormal in the presence of peripheral artery disease, or PAD. Alternatively, primary care physicians may palpate the pedal pulses to assess blood flow in the lower extremities. However, pulse palpation is generally not sensitive for the detection of vascular disease. Other options to detect arterial obstructions are imaging systems that use ultrasound, x-ray technology or magnetic resonance to obtain anatomic information about blood vessels in the legs. However, as compared to FloChec™, imaging tests are much more expensive tests that are performed by specialists in special laboratories or offices.

### Market Opportunity

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Health Care Reform Law. The Health Care Reform Law has brought a new way of doing business for providers and health insurance plans. We believe that fee-for-service programs will be reduced in favor of capitated programs that pay a monthly fee per patient.

Fee-for-service is a payment model where services are unbundled and paid for separately. In health care, it gives an incentive for physicians to provide more treatments because payment is dependent on the quantity of care, rather than quality of care. Capitation is a payment arrangement that pays a physician or group of physicians a set amount for each enrolled person assigned to them, per period of time, whether or not that person seeks care. The amount of remuneration is based on the average expected health care utilization of that patient, with greater payment for patients with significant medical history. For Medicare Advantage patients, Centers for Medicare & Medicaid Services, or CMS, pays the fee per patient. CMS uses risk adjustment to adjust capitation payments to health plans, either higher or lower, to account for the differences in expected health costs of individuals. Accordingly, under CMS guidelines, risk adjustments per patient will provide payment that is higher for sicker patients who have conditions that are codified. The coding system used by CMS for the Medicare Advantage program is a hierarchical condition category, or HCC, diagnostic classification system that begins by classifying over 14,000 diagnosis codes into 805 diagnostic groups, or DXGs. Each code maps to exactly one DXG, which represents a well-specified medical condition, such as DXG 96.01 precerebral or cerebral arterial occlusion with infarction. DXGs are further aggregated into 189 condition categories or CCs. CCs describe a broader set of similar diseases. Diseases within a CC are related clinically and with respect to cost. An example is CC96 Ischemic or Unspecified Stroke, which includes DXGs 96.01 and 96.02 acute but ill-defined cerebrovascular disease. We believe that quality of care measured by completeness and wellness will induce higher payments per patient. These changes are already in place for the approximately 14 million participants in the Medicare Advantage program and are expected to expand to more types of insured patients as healthcare reform is deployed.

Undiagnosed vascular disease of the legs has been called a major under-diagnosed health problem in the United States by the National Institute of Health and the Wall Street Journal. Known as peripheral artery disease, or PAD, this condition is a common and deadly cardiovascular disease that is often undiagnosed. PAD develops when the arteries in the legs become clogged with plaque — fatty deposits — that limit blood flow to the legs. Published studies have shown that persons with PAD are four times more likely to die of heart attack, and two to three times more likely to die of stroke. According to a study by P.G. Steg published in the Journal of the American Medical Association, or JAMA, patients with



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PAD have a 21% event rate of cardiovascular death, heart attack, stroke or cardiovascular hospitalization within 12 months. The SAGE Group has estimated that as many as 18 million people are affected with PAD in the United States alone and A.T. Hirsch et al. in a JAMA published article further estimate that only 11% have claudication (pain on exertion), a classic symptom of PAD. One can lower the risks associated with PAD if the disease is detected, with early detection providing the greatest benefit.

We believe medical personnel who care for those older than 50 years are the target market for FloChec™. Based on U.S. Census data, we believe there are more than 80 million older Americans who could be evaluated for the presence of PAD. According to the Agency for Healthcare Research and Quality, there are over 200,000 internists, family practitioners and gerontologists in the United States. In addition, based on American Heart Association data, there are over 20,000 cardiologists and 7,500 vascular and cardiovascular surgeons. Also, there are millions of diabetic patients seen routinely by endocrinologists. Many podiatrists who see patients with these problems and orthopedic surgeons may see value in screening patients for circulation issues prior to leg procedures. Neurologists may need a tool to differentiate leg pain from vascular versus neurologic etiology. Nephrologists see patients with kidney disease, who have a higher frequency of PAD. Wound care centers need to know the adequacy of limb perfusion. We expect that each physician will have thousands of patient visits annually from people older than 50 years. While it is standard practice to ask about symptoms of PAD and to feel for diminished pulses on physical exam, we believe that it is often in the case in busy practices that the questions go unasked. In addition, the physical exam of the extremities is generally cursory in the absence of a patient complaint. Given the ease of use and speed of FloChec™, we believe that many doctors will incorporate its use in their practice as a routine annual test. It is our intent that FloChec™ be incorporated as a tool in the routine physical exam of adult patients by primary care providers in a similar fashion to the use of a thermometer or stethoscope. Providers do not request payment for using a stethoscope during the physical examination. Similarly, we do not expect (or intend) for providers that use our FloChec™ to seek such a reimbursement approval. FloChec™ is not specifically approved under a third-party payor code and we do not track customer requests for reimbursements. Accordingly, our customers may or may not be successful in receiving reimbursement if sought.

### Our Business Strategy

Our mission is to develop, manufacture and market patented products that identify the risk profile of medical patients to allow healthcare providers to capture full reimbursement potential for their services, while growing revenues and becoming and maintaining profitability. We intend to do this by:

- Capitalizing on opportunities provided by the Health Care Reform Law. Under the Health Care Reform Law, for capitated programs, payment is higher for sicker patients who have conditions that are codified. We believe a provider would prefer to have more remuneration for taking care of a patient. A provider expects to spend less time caring for a healthy patient than for a sicker patient. If payment per month was the same for both types of patients, there would be a perverse incentive for the provider to only want to care for healthy persons. Accordingly, CMS anticipated this situation and pays more per month for “sicker” patients who have chronic conditions that are identified on the medical record through use of an established coding system. This creates a business opportunity in finding low-cost, effective means to identify the conditions, which have been established in coding systems for risk adjustment of payments (higher payments paid to providers and healthcare plans to compensate them for caring for sicker or more risky patients). The more common and more dangerous a condition is, the greater the opportunity for profit. The goal is to provide cost-effective wellness.
- Targeting customers with patients at risk of developing PAD. Healthcare providers use blood flow measurements as part of their assessment of a patient’s vascular condition. Our strategy is to keep marketing our FloChec™ system, on a lease-based service model, to medical personnel who care for those older than 50, including cardiologists, internists, nephrologists, endocrinologist, podiatrists, and family practitioners.

Specifically, we believe there are more than 250,000 physicians and other potential customers in the United States alone, many of the patients of whom will be more than 50 years old and at increased risk of developing PAD. Based on U.S. Census data, the evaluable patient population for FloChec™ is estimated to be more than 80 million patients in the United States annually.



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