

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**FORM 8-K**

**CURRENT REPORT**

Pursuant to Section 13 OR 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 17, 2023

**SEMLER SCIENTIFIC, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation)

**001-36305**  
(Commission File Number)

**26-1367393**  
(IRS Employer Identification No.)

**2340-2348 Walsh Avenue, Suite 2344**  
**Santa Clara, CA**  
(Address of principal executive offices)

**95051**  
(Zip Code)

Registrant's telephone number, including area code: **(877) 774-4211**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.001 par value per share	SMLR	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

**Item 7.01. Regulation FD Disclosure.**

From time to time, Semler Scientific, Inc., or Semler, presents and/or distributes to the investment community at various industry and other conferences slide presentations to provide updates and summaries of its business. Semler posted to the "Events & Presentations" section of the "Investor Info" portion of its website at <http://ir.semilerscientific.com/events-and-presentations> a copy of its corporate slide presentation for the 22<sup>nd</sup> Annual Needham Virtual Healthcare Conference. A copy of the presentation is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

*The information contained in this Item 7.01 and in the accompanying Exhibit 99.1 shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or incorporated by reference in any filing under such Act or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.*

**Item 9.01. Financial Statements and Exhibits.**

*The information contained in this Item 9.01 and in the accompanying Exhibit 99.1 shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or incorporated by reference in any filing under such Act or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.*

(d) Exhibits.

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">99.1</a>	<a href="#">Corporate Presentation – 22<sup>nd</sup> Annual Needham Virtual Healthcare Conference (April 2023)</a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**SEMLER SCIENTIFIC, INC.**

Date: April 17, 2023

By: /s/ Wayne T. Pan, M.D., Ph.D.  
Name: Wayne T. Pan, M.D., Ph.D.  
Title: Chief Executive Officer

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**Semler Scientific**

NASDAQ:SMLR

**Needham Virtual Healthcare Conference**

**April 2023**

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# Forward-Looking Statements

This presentation includes statements that are, or may be deemed, "forward-looking statements." In some cases, these forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believe," "estimate," "anticipate," "expect," "plan," "intend," "may," "could," "might," "will," "should," or, in each case, their negative or other variations thereon or comparable terminology, although not all forward-looking statements contain these words. Such forward-looking statements appear in a number of places throughout this presentation and include express and implied statements regarding the effects of the CMS 2024 final rate announcement, QuantaFlo® as an aid in the diagnosis of heart dysfunction, the market opportunity for our products, our up to \$20.0 million buyback program and any purchases thereunder, new products and service offerings, as well as our plans for maximizing stockholder returns and our goals for the year, among others. These statements are based on our current intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, the impact of healthcare reform (including the Affordable Care Act) on our business, the effect of new financial incentives for medical providers and the amount of such payments, our ongoing and planned development of products, the timing of launch of such new products, the strength and breadth of our intellectual property, the degree of clinical utility and adoption of our product, particularly for specific patient populations, and the success of new service models.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics, our expected financing needs and sources of financing, the industry in which we operate and the trends that may affect the industry or us. Our results of operations, financial condition, liquidity, prospects, growth and strategies depend on the economic circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. Although we believe that we have a reasonable basis for each forward-looking statement contained in this presentation, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this presentation as a result of, among other factors, the factors referenced in the "Risk Factors" section of our Annual Report on Form 10-K as filed with the Securities and Exchange Commission on March 23, 2023 and as may be amended from time to time, the recent CMS Advance Notice and the potential change in the reimbursement landscape and the continued effects of the on-going COVID-19 pandemic, including our assumptions regarding its duration and the impact on use of our products and services and the recent seasonality observed in our variable (fee per test) and other geopolitical events that may impact our supply chain, such as the Russian invasion of Ukraine and inflation. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this presentation, they may not be predictive of results of developments in future periods. Any forward-looking statements that we make in this presentation speak only as of the date of such statement, and we undertake no obligation to update such statements to reflect events or circumstances after the date of this presentation, except as required by law.

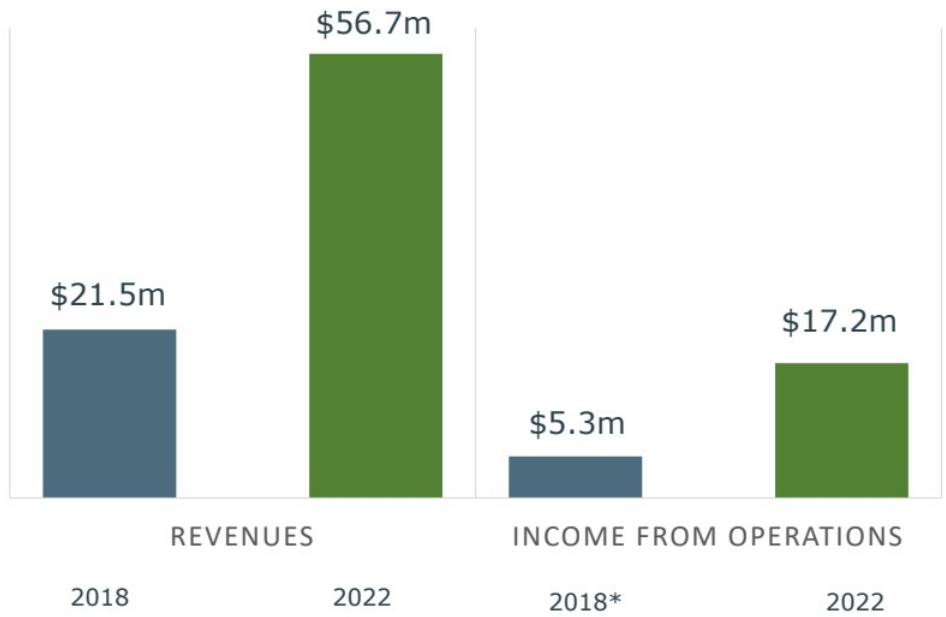
You should read carefully our "Cautionary Note Regarding Forward-Looking Statements and Industry Data" and the factors described in the "Risk Factors" sections of the Annual Report to better understand the risks and uncertainties inherent in our business.

# Investment Highlights

(in millions of U.S. Dollars)

Solid track record of growth and profitability

- Recurring SAAS revenue model
- Strong cash position of \$43.1 million as of 12/31/22
  - Reinvest in business
  - Diversity products
  - Share buybacks



\*2018 was the first year since inception with income from operations

- 1 Technology to bring **cardiac and vascular testing** to the **front lines of medicine**
- 2 High-leverage distribution model supporting **value-based healthcare** companies such as **Health Insurance Plans** and other emerging customers
- 3 Software as a service (SAAS) **recurring-revenue subscription licensing model** with a **Large and underpenetrated** addressal market opportunity
- 4 **Proven clinical benefit** of early testing and opportunity to promote **health equity** and improve disparities for underserved patients

# QuantaFlo Product Family

Comparison	QuantaFlo®	QuantaFlo® HD
Aids in the diagnosis:	for Peripheral Artery Disease (PAD)	for Heart dysfunction (HD)
Market Introduction	2011	2022
Regulatory Status	FDA cleared	
Point of Service	Office, clinic, home	
Hardware	PC, laptop or tablet + sensor	
Test administered by	Medical aide	
Pricing Model	Fixed-fee license or Variable-fee license	





## **Insulin Insights™**

Entered into an exclusive **distribution agreement** with Mellitus Health in the U.S., including Puerto Rico, except selected accounts. Insulin Insights™ is an FDA-cleared software solution designed to provide healthcare providers optimal **insulin dosing** recommendations for diabetic patients.

## **Monarch Medical Technologies**

Investment in Monarch whose main FDA cleared product EndoTool®, offers a technology-enabled approach to **glycemic management** for diabetic patients in the inpatient setting.

## **SYNAPS Dx – Equity Investment**

Investment in SYNAPS Dx whose main product, Discern is a **test for early Alzheimer’s disease**.

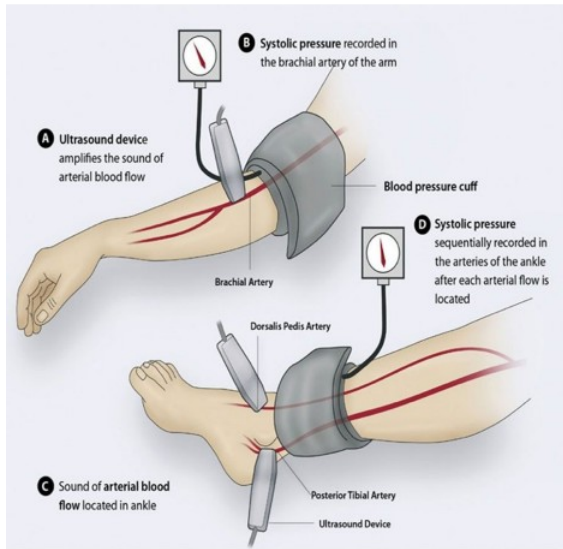


- **Two types of recurring revenue** depending on customer type:
  - Monthly fixed-fees
  - Variable-fees or fee-per-test based on usage (plus cost of sensor)
- Offering enterprise solutions, such as EMR integration; results in **high customer retention**
- Opportunity to introduce **new, synergistic products** that have recurring revenues and are sold through the same channel

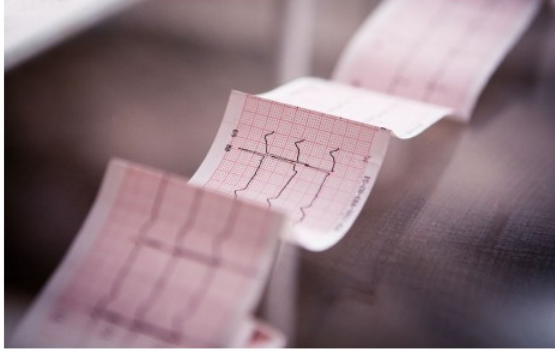


- **FDA** marketing clearance and **patent** granted
- Well-suited for use in primary care & specialty practices, health fairs and during in home evaluations
- Delivers **fast, clinically-proven, accurate results** in ~5 minutes by a medical aide, saving valuable physician time
- Performed at the point of care providing significant opportunity to **improve health**

# Competition in the Peripheral Arterial Disease (PAD) Market



- Traditional Ankle-Brachial Index (ABI) testing for PAD has been the standard for decades, uses blood pressure cuffs and doppler ultrasound imaging
- Requires a trained vascular technician, performed by referral in a specialized vascular lab, requires more time and cost, **accuracy same as or less than QuantaFlo®**
- ABI not suitable for certain types of patients
- ABI not practical for primary care offices or home testing




- Traditional transthoracic echocardiograph (Echo testing for heart dysfunction)
- Requires a trained sonographer to perform the test, performed by referral in a specialized lab, takes about an hour, must be read by a primary care physician or cardiologist
- Not suitable for certain types of patients and not practical for primary care offices or home testing
- **QuantaFlo**<sup>®</sup> has a statistically significant correlation to Echo ( $p < .01$ )<sup>1</sup>



- More than **400K medical professionals** practicing primary care medicine in the U.S.
- We believe there are **80+ million people** in U.S. who, based on AHA/ACC criteria could be tested:
  - 64 million age 65 or older, or
    - 10,000 people in the U.S. turn 65 every day
  - Age 50 to 64 with cardiovascular risk factors
- Of these 80+ million:
  - **28 million are Medicare Advantage**
  - 36 million are Medicare

References: Source Appendix 2.



Society benefits from  
“early warning”  
of patients’  
health status:

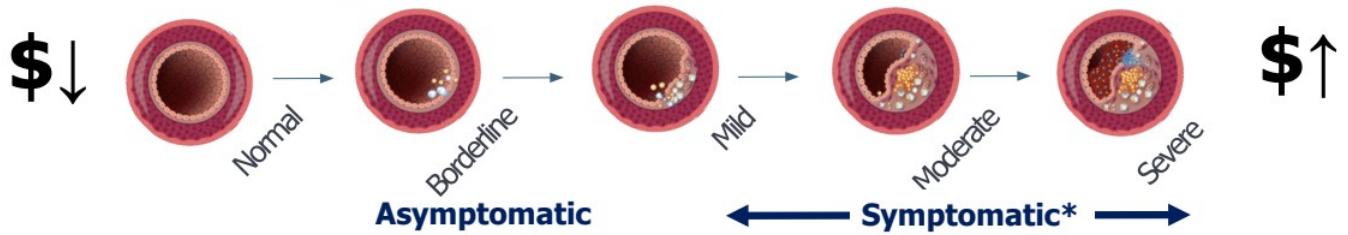
- **Start preventive care to avoid acute care costs down the road**
- **Improved economics to mitigate the financial costs of heart attacks, strokes and chronic disease**
- **Opportunity to promote health equity and improve disparities for underserved patients**

- PAD is highly underdiagnosed
- **>30% of patients over age 65** screen positive for PAD<sup>3</sup>
- **75%** of PAD patients are **asymptomatic**<sup>4</sup> - primary MDs often miss the diagnosis
- PAD sufferers have a **21% increased risk** of a heart attack, stroke, hospitalization or death within one year<sup>5</sup>
- Co-morbidity and cost of asymptomatic PAD are **similar to that of symptomatic PAD**<sup>6</sup>
- **Significant annual costs** to the U.S. Government and payors



- **PAD screening** is a reasonable medical intervention with an **acceptable cost in a CMS patient population.**<sup>7</sup>

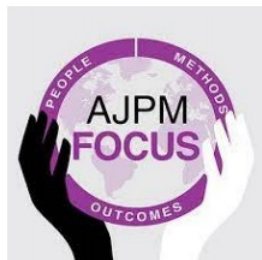
## Arterial Disease Progression



- **There is enormous potential to realize cost-savings by reducing cardiovascular event rates and deploying population-based PAD risk management strategies.**<sup>8</sup>

\* Illustration

Two independently conducted; peer-reviewed studies published in 2022 analyzed screening tests using QuantaFlo® to aid in the diagnosis of PAD



- The “**HouseCalls Program**” published in the *AJPM Focus*<sup>9</sup> tested **192,500 patients** in their home
- The “**Nevada Paper**” published in the *Journal of Vascular Surgery*<sup>10</sup> tested **13,971 patients** in clinics
- **~30% of asymptomatic patients tested positive** for PAD
- The **risk** associated with detecting PAD was **substantial** with increased risk of all-cause mortality or morbidity at one to three years
- The studies **underscore the potential for nationwide screening programs in clinics and at home**, allowing stratification for further cardiovascular risk management



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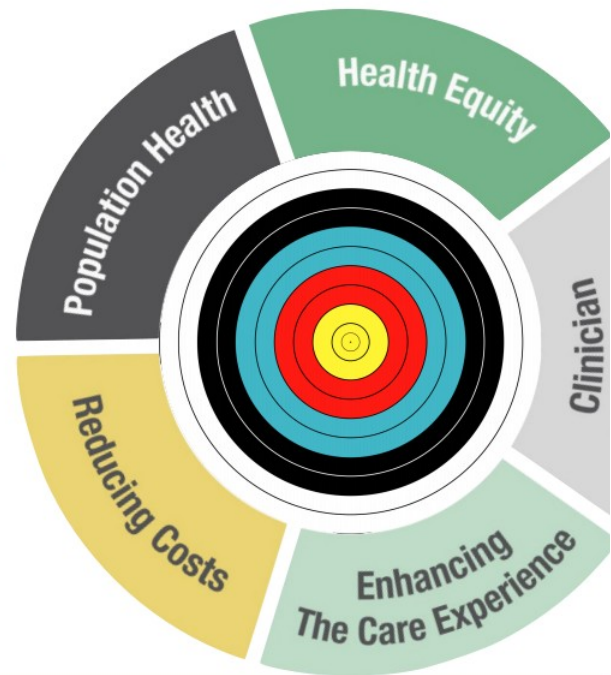
- Heart failure is highly underdiagnosed. **Prevalence rate of identifying patients over age 65 of asymptomatic pre-heart failure** with a structural or functional abnormality is **30-40%**<sup>11</sup>
- The number of patients with asymptomatic heart failure exceeds the number of patients with symptomatic heart failure by 4-fold<sup>12</sup>
- **Mortality rates** after hospitalization for heart failure are **31%** within one year after diagnosis<sup>13</sup>
- Over **one million hospitalizations** per year in the US from heart failure<sup>14</sup> and the annual cost of care exceeds **\$30 billion**<sup>15</sup>

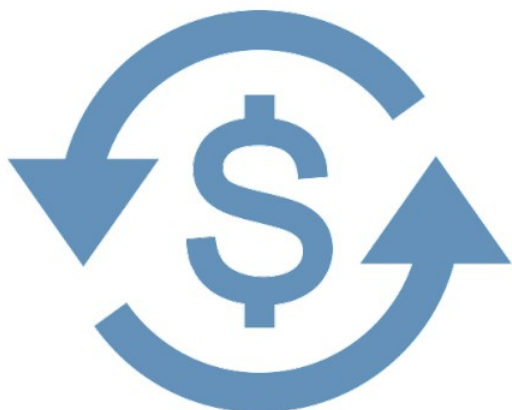
## Dr. Wayne Pan, CEO

An elephant is shown from behind, sitting on a simple wooden bench. The elephant is positioned in the center of a room with light gray walls and a white floor. In the background, there is a large window with a grid pattern. The lighting is soft, creating a calm atmosphere. The text is overlaid on the image in a white, sans-serif font.

**CMS 2024 Final Rate Announcement for  
Medicare Advantage (MA) Capitation Rates**

1. Clinical Messaging
2. Value Base Care and Potential to Reduce Healthcare Costs
3. Expanding our Target Patient Population
4. Health Equity
5. New Products including QuantaFlo HD and Insulin Insights





- **Remain flexible and nimble.** Main an organization that can react quickly to changes in any direction.
- **Reinvest in core business – reinforce clinical message,** add additional customers, invest in **QuantaFlo® HD** and new products
- **Diversify Product Range** – through license deals, investments and acquisitions
- **Share Buybacks** – \$20m total share buyback authorization; \$15m remaining

# Sources Appendix

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3. Smolderen K, Heath K, et al. Clinical Research Study Screening for Peripheral Artery Disease: *Journal of Vascular Surgery*, 06/01/2022: Vol 75, Issue 6, P2054-2064. [https://www.jvascsurg.org/article/S07415214\(22\)00340-8/fulltext](https://www.jvascsurg.org/article/S07415214(22)00340-8/fulltext)
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5. Steg PG, Bhatt DL, Wilson PW, et al. One-year cardiovascular event rates in outpatients with atherothrombosis. *JAMA*. 2007;297(11):1197-1206. doi:10.1001/jama.297.11.1197
6. a) Criqui The epidemiology of peripheral arterial disease: importance of identifying the population at risk *Vasc Med* 1997;2:221-226  
b) Reach Study: One-Year Costs in patients with a History of or at risk for atherothrombosis in the United States *Circ Cardiovasc Qual Outcomes*, 2008;1:38-45  
c) Vascular Hospitalization Rates and Costs in Patients with Peripheral Artery Disease in the United States *Cardiovascular Qual Outcomes* 2010;3:642-65
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10. [https://www.jvascsurg.org/article/S0741-5214\(22\)00340-8/fulltext](https://www.jvascsurg.org/article/S0741-5214(22)00340-8/fulltext)
11. Adapted from *Circulation* 2007 Prevalence and Prognostic Significance of Heart Failure Stages Application of the American College of Cardiology/American Heart Association Heart Failure Staging Criteria in the Community; Khawaja Afzal Ammar, MD.
12. Frigerio M, Oliva F, Turazza FM, et al. Prevention and management of chronic heart failure in management of asymptomatic patients. *Am J Cardiol*. 2003 May 8;91(9A):4F-9F. doi: 10.1016/s0002-9149(02)03335-0. PMID: 12729846.
13. Lan T, Liao YH, Zhang J, Yang ZP, Xu GS, Zhu L, Fan DM. Mortality and Readmission Rates After Heart Failure: A Systematic Review and Meta-Analysis. *Ther Clin Risk Manag*. 2021 Dec 7;17:1307-1320. doi: 10.2147/TCRM.S340587. PMID: 34908840; PMCID: PMC8665875..
14. Heidenreich PA, Albert NM, Allen LA, et al. American Heart Association Advocacy Coordinating Committee; Council on Arteriosclerosis, Thrombosis and Vascular Biology; Council on Cardiovascular Radiology and Intervention; Council on Clinical Cardiology; Council on Epidemiology and Prevention; Stroke Council. Forecasting the impact of heart failure in the United States: a policy statement from the American Heart Association. *Circ Heart Fail*. 2013 May;6(3):606-19. doi: 10.1161/HHF.0b013e318291329a. Epub 2013 Apr 24. PMID: 23616602; PMCID: PMC3908895.
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**Semler Scientific**

Contact: [ir@semilerscientific.com](mailto:ir@semilerscientific.com)

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