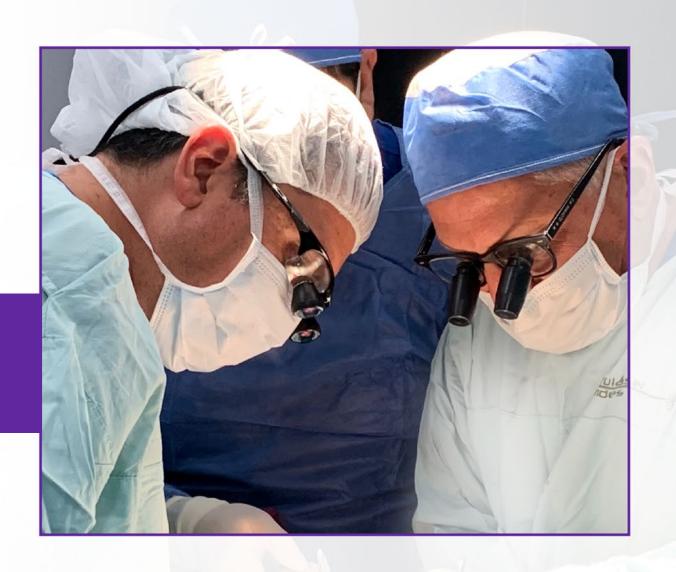


Setting New Standards for Venous Care

October 2021 Investor Presentation

Nasdaq: NVNO enVVeno.com



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This presentation and any statements of stockholders, directors, employees, representatives and partners of enVVeno Medical, Inc. (the "Company") related thereto contain, or may contain, among other things, certain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements involve significant risks and uncertainties. Such statements may include, without limitation, statements identified by words such as "projects," "may," "will," "could," "would," "should," "believes," "expects," "anticipates," "estimates," "intends," "plans," "potential" or similar expressions. These statements are based upon the current beliefs and expectations of the Company's management and are subject to significant risks and uncertainties, including those detailed in the Company's filings with the Securities and Exchange Commission. Actual results (including, without limitation, with respect to our name change, our progress with the VenoValve® and the expected timeline related to the SAAVE U.S. pivotal trial, including the timing of beginning patient enrollment, the VenoValve®'s ability to fill the unmet medical needs of CVI sufferers and our development of a second device for the treatment of venous disease) may differ significantly from those set forth or implied in the forward-looking statements. These forward-looking statements involve certain risks and uncertainties that are subject to change based on various factors (many of which are beyond the Company's control). The Company undertakes no obligation to publicly update any forward-looking statements, whether as a result of new information, future presentations or otherwise, except as required by applicable law.



Investment Highlights



Lead product candidate, VenoValue® being evaluated for the treatment of lower limb deep venous Chronic Venous Insufficiency (CVI)

Demonstrated efficacy and safety in first-in-human trial

Ongoing SAVVE pivotal trial with data expected Q4 2022

Sufficient capital to fund operations through pivotal data readout

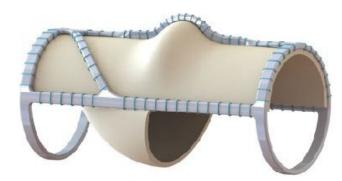




Potential to redefine the standard of care in lower limb Chronic Venous Insufficiency (CVI)

Breakthrough Device Designation

Significant opportunity with ~2.4 million potential patients in the U.S.



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Chronic Venous Insufficiency (CVI)

Occurs as a result of increased venous pressure (venous hypertension) within the veins of the leg, most often caused by failure of valves within the veins



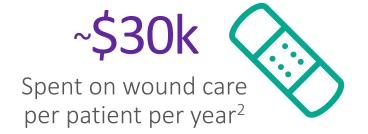
Leads to:

- Reflux blood flows in the wrong direction
- Blood pooling in the lower leg
- Venous hypertension
- Pain
- Edema
- Ulceration



CVI Patients Need an Effective Treatment

People in the U.S.¹



20-40% (

recurrence¹



~\$30B Direct medical costs²



~40% More workdays missed³

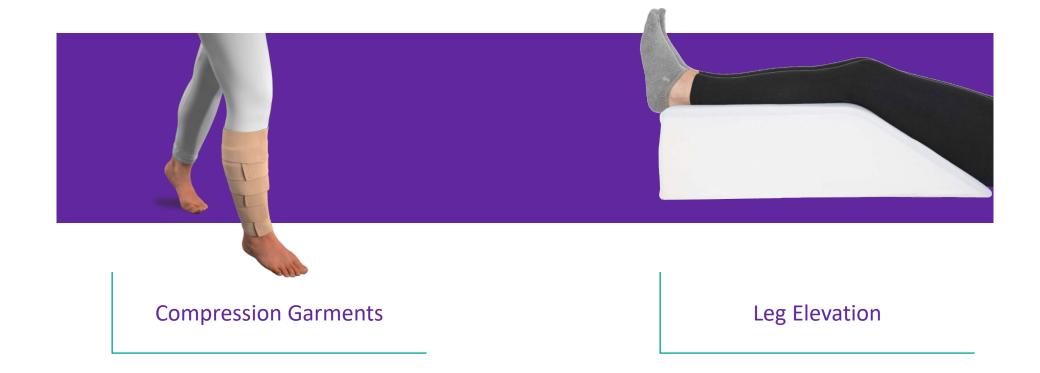


Sachdev, Ulka, et. al. Suppressed Networks of Inflammatory Mediators Characterize Chronic Venous Insufficiency, Journal of Vascular Surgery: Venous and Lymphatic Disorders, May 2018
 Rice, J. Bradford, Burden of Venous Leg Ulcers in the United States, Journal of Medical Economics, Volume 17, 2014



^{1.} Yost, Mary, The Sage Group, Chronic Venous Disease, Epidemiology, Costs, and Consequences, 2016

Deep Venous CVI: Current Standard of Care



CVI: Trial Endpoints

Safety



Number device related adverse events

Reflux



Backwards flow of blood measured via a duplex scan

rVCSS

(Venous Clinical Severity Score)



Progressive ranking of disease manifestations and severity

Pain VAS

(Visual Analogue Score)

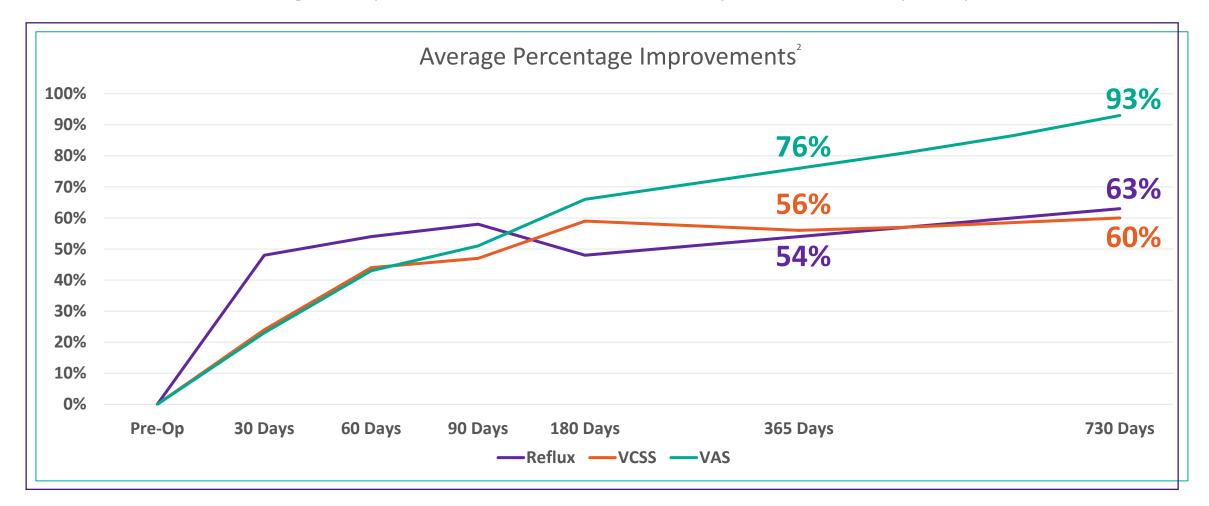


Numerical score of the severity of the perception of pain



Positive Results from First-In-Human Trial¹

Demonstrated Meaningful Improvements Across All Primary and Secondary Endpoints at Two Years



^{1.} No device related adverse events. Safety issues in first year included 1 seroma (which was aspirated), 3 minor wound infections, 1 over anticoagulation and 1 occlusion due to patient non-compliance. No reported safety event between years 1 and 2.



^{2.} One year results for 11 patients compared to Pre-VenoValve® implantation. Two year results for 8 patients compared to Pre-VenoValve® implantation

VenoVolve Venous Ulcer Healing

Results from First-in-Human Trial







AFTER



BEFORE



AFTER





Full Enrollment Expected 1H 2022

Prospective, Non-Blinded, Single Arm, Multi-Center Study





Up to **20 Sites** across the U.S.

Primary Safety Endpoint

30 Days

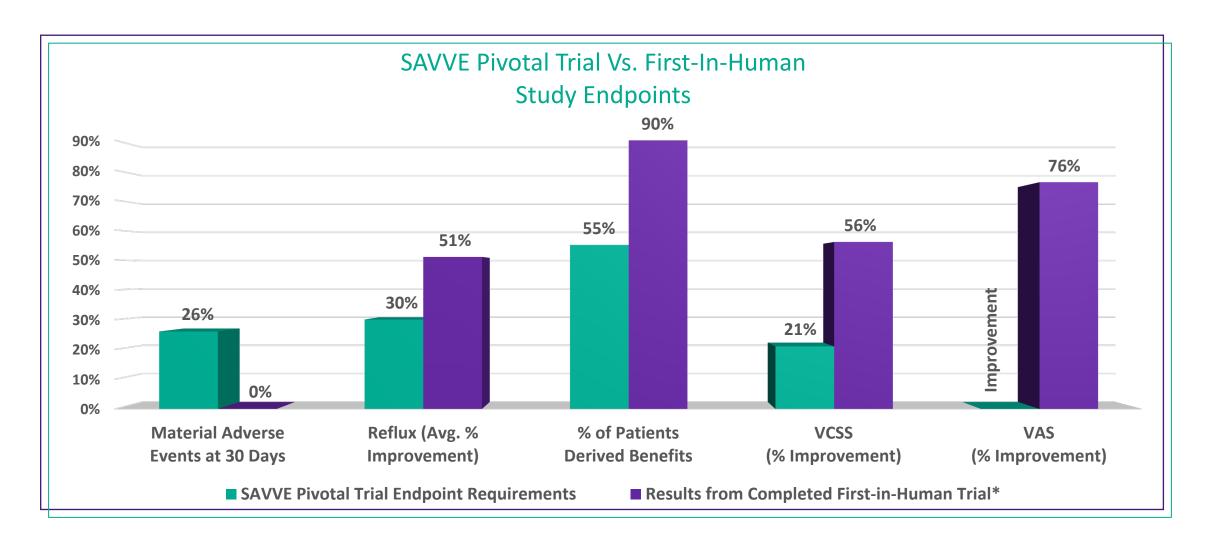
Primary Efficacy Endpoint

6 Months

Expect to Have Topline Safety and Efficacy Data Q4 2022



SAW/E Pivotal Trial Compared to First-In-Human





Commercial Strategy

Stakeholder Appeal

Patients



- Potential to cure debilitating disease
- No effective alternatives

Doctors



- No existing treatment
- Short learning curve
- Incremental revenue

Hospital (VAC)



- No capital investment
- Profitable procedure
- Eliminate wound care

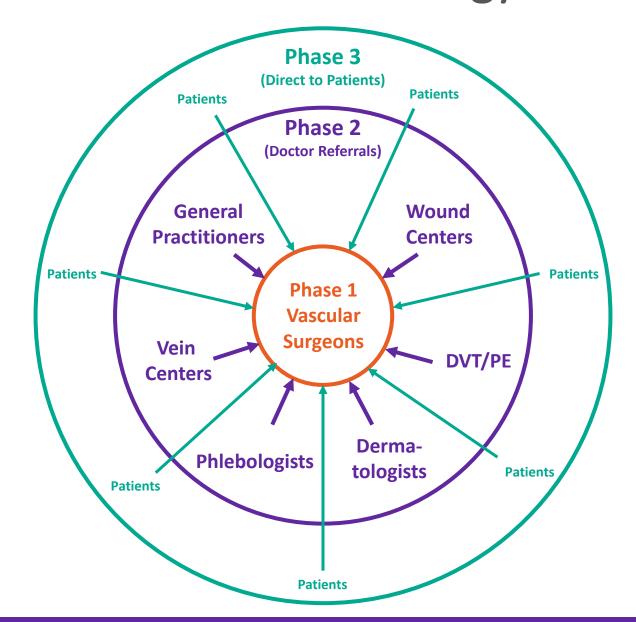
Payers



- \$30,000-year wound care
- High recurrence
- Society and KOL support



Focused Commercial Rollout Strategy





Commercial Manufacturing

14,000 square foot facility in Irvine, CA

Capacity to support at least first 5 years of commercialization

Limited capital investment in plant and equipment for commercialization

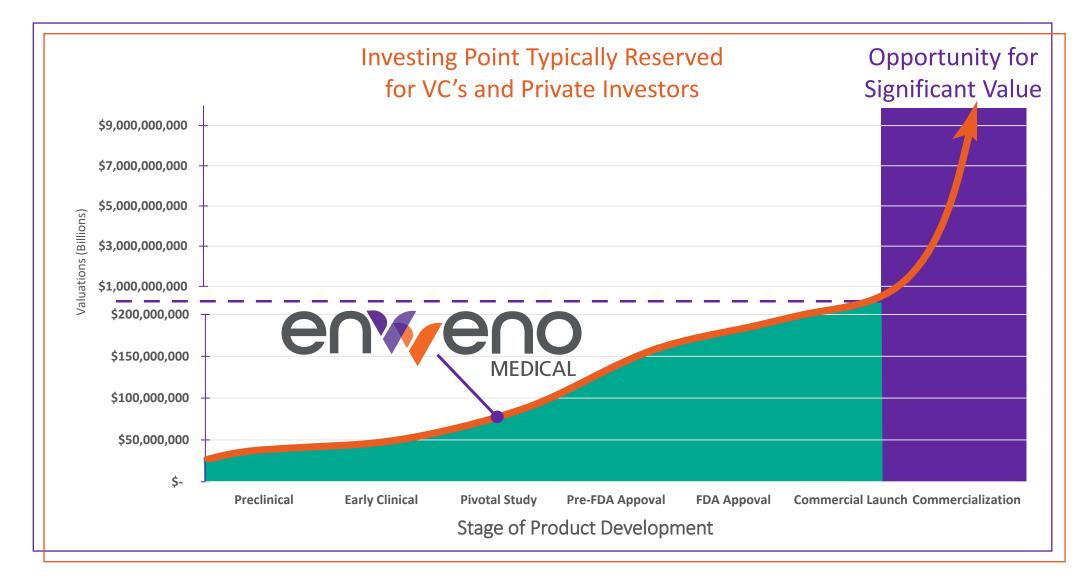




Corporate Overview

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Potential for Significant Value Creation



Financial Overview

Sufficient Capital to Fund Operations Through Topline Data of SAVVE Pivotal Trial



\$4.99 (low) \$9.82¹ (current) \$17.68 (high)

Cash Balance

\$43M

as of June 30, 2021

\$20M

Does not include net proceeds from Perceptive Advisors September 7, 2021

\$0

Debt

~\$93M

Market Cap¹

~9.5M

Shares Outstanding ~16.1M

Fully Diluted

Management Team



ROBERT BERMAN

Chief Executive Officer, Director

- Former CEO Anixa Biosciences (Nasdag:ANIX)
- Former COO Acacia Research Corporation (Nasdag:ACTG)
- B.S. Wharton, Univ. of Pennsylvania, JD Northwestern Law



DR. MARC GLICKMAN

Senior VP and Chief Medical Officer

- Board Certified Vascular Surgeon
- Director of Vascular Services Sentara Health Care
- Past President Vascular Society of America



DR. HAMED ALAVI

VP Research and Development

- Edwards Lifesciences, Medtronic
- PhD Biomedical Engineering U.C. Irvine
- M.S. Biomedical Engineering, B.S. Mechanical Engineering



CRAIG GLYNN

Chief Financial Officer

- Over 30 years financial experience
- M.S. and B.S. Accounting California State University Northridge
- Member American Institute of CPAs

Collective Industry Experience













Board of Directors



DR. FRANCIS DUHAY Director

- Former Chief Medical Officer Edwards Lifesciences
- Expert in surgical and transcatheter heart valves
- General manager Acendra business unit



DR. SANJAY SHRIVASTAVA Director

- Business Development Johnson and Johnson
- 18 years VP Marketing and Strategy, R&D
- BTG, Medtronic, Abbott Vascular, Edwards Lifesciences



MATTHEW JENUSAITIS

Director

- Chief of Staff and Chief of Innovation and Transformation – UC San Diego Health System
- Former President Boston Scientific Peripheral Division
- Four successful vascular company exits



BOB GRAY

Director*

- Former Chief Financial Officer Highmark, Inc.
- Health insurer with over 20 years subscribers
- Rate setting and reimbursement negotiations

*Chairman, Audit Committee

Collective Industry Experience











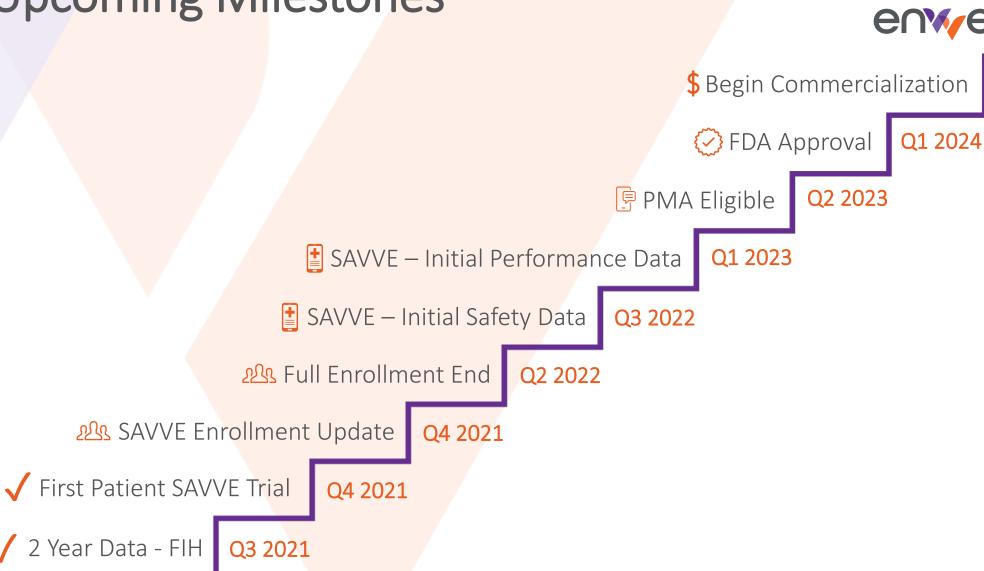




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Q2 2024

Upcoming Milestones





Investment Summary

Potential for Huge Upside with Managed/Limited Risk We Believe Upside Far Outweighs the Risk

Clinical

Demonstrated efficacy and safety in first-in-human trial

Capital

Sufficient capital to fund operations through topline data of SAVVE pivotal trial

Execution

World-class team of executives and advisors driving execution





Setting New Standards for Venous Care



Cap Table

Common Stock Outstanding		9,466,240
Warrants		
Perceptive Pre-Funded Warrants*		1,759,035
Other Warrants		
Exercise Price:		
\$7	2,957,142	
\$7 - \$10	906,917	
\$10 - \$50	536,812	
> \$50	153,600	
Total Warrants		4,554,471
Equity Incentive Plan		386,096
Total Common Stock, Warrants and Options		16,165,842
Outstanding		
Total Authorized Shares		250,000,000
Preferred		10,000,000

