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FOR FURTHER INFORMATION

VASCULAR & ENDOVASCULAR SURGERY SOCIETY
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Kristine Orion, MD

SVS Strategic Board of Directors
Kelly Kempe, MD

PAST PRESIDENTS & MEETINGS

Date	Location	President
1976	Chicago, IL	Organizational Meeting
1977	Dallas, TX	Steven M. Dosick
1978	San Francisco, CA	Robert G. Scribner
1979	Chicago, IL	William S. Gross
1980	Chicago, IL	Charles A. Andersen
1981	Dallas, TX	Larry H. Hollier
1982	Boston, MA	G. Edward Bone
1983	San Francisco, CA	Robert C. Batson
1984	Atlanta, GA	Lee C. Bloemendal
1985	Baltimore, MD	George J. Collins, Jr.
1986	New Orleans, LA	Jonathan B. Towne
1987	Toronto, Canada	Thomas S. Riles
1988	Chicago, IL	Paul T. McDonald
1989	New York, NY	Anthony J. Comerota
1990	Los Angeles, CA	John W. Hallett, Jr.
1991	Boston, MA	Paul M. Orecchia
1992	Chicago, IL	David L. Rollins
1993	Washington, DC	Frank T. Padberg, Jr.
1994	Seattle, WA	Peter G. Kalman
1995	New Orleans, LA	William J. Quinones-Baldrich
1996	Chicago, IL	Joseph L. Mills
1997	Boston, MA	Gary Giangola
1998	San Diego, CA	J. Gordon Wright
1999	Washington, DC	Jeffrey R. Rubin
2000	Toronto, Canada	Donald L. Akers, Jr.
2001	Baltimore, MD	Thomas F. Lindsay
2002	Boston, MA	R. Clement Darling, III

Date	Location	President
2003	Chicago, IL	Jeffrey L. Ballard
2004	Anaheim, CA	Samuel R. Money
2005	Chicago, IL	Lewis B. Schwartz
2006	Philadelphia, PA	Robert A. Cambria
2007	Baltimore, MD	William D. Jordan, Jr.
2008	San Diego, CA	W. Charles Sternbergh, III
2009	Denver, CO	Tina R. Desai
2010	Boston, MA	Karl A. Illig
2011	Chicago, IL	Marc A. Passman
2012	Baltimore, MD	Martin R. Back
2013	Park City, UT	Ruth L. Bush
2014	Steamboat Springs, CO	W. Darrin Clouse
2015	Vail, CO	Vikram S. Kashyap
2016	Park City, UT	Sean P. Roddy
2017	Steamboat Springs, CO	Thomas S. Maldonado
2018	Vail, CO	Peter R. Nelson
2019	Snowbird, UT	Jonathan Eliason
2020	Steamboat Springs, CO	James H. Black
2021	Sun Valley, ID/Virtual	Matthew A. Corriere
2022	Snowmass, CO	Jason T. Lee
2023	Whistler, BC Canada	Ravi Veeraswamy
2024	Sun Valley, ID	Mark Conrad
2025	Breckenridge, CO	Misty Humphries

AWARD HISTORY

2011

Academic Award - Faculty	Guillermo A. Escobar
Academic Award - Fellow	Bjoern Suckow
Travel Award	Judith C. Lin

2012

Academic Award—Faculty	John Curci
Academic Award—Fellow	Kathleen Lamb
Travel Award	Karen Woo
Norman M. Rich Military Award	Cpt. Carole Villamaria

2013

Norman M. Rich Military Award	Cpt. Marlin Wayne Causey

2014

Norman M. Rich Military Award	Cpt. Daniel Scott
Young Faculty Research Award	Dawn M. Coleman

2015

Early Career Faculty Research Award	Ryan McEnaney
W. L. Gore Travel Award	Matthew Mell

2016

Best Paper Award	Diego Ayo
W. L. Gore Travel Award	Justin Hurie

2017

Early Career Faculty Award	Jean Marie Ruddy
Medtronic Resident Research Award	Gayan de Silva
W. L. Gore Travel Award	Ying Wei Lum

2018

Early Career Faculty Award	Jeffrey Siracuse
Medtronic Resident Research Award	Frank Davis
W. L. Gore Travel Award	Nicolas Mouawad

2019

Early Career Faculty Award	Andrea Obi
Medtronic Resident Research Award	Elizabeth Chou

2020

Early Career Faculty Award	Sam C. Tyagi
Medtronic Resident Research Award	Christopher Audo
W. L. Gore Travel Award	Gregory A. Magee

2021

Early Career Faculty Award	Tammy Nguyen
Medtronic Resident Research Award	Kenneth Tran
Travel Award	Tze-Woei Tan

2022

Best Paper	Amir Ghaffarian
BSCI Early Career Investigator Award	Katherine Hekman
Medtronic Resident Research Award	Kevin Mangum
VESS Resident Research Award	Amanda Philips
Travel Award	Jonathan Bath

2023

Best Paper	Kaohinani Longwolf
BSCI Early Career Investigator Award	Frank Davis
Medtronic Resident Research Award	Tyler Bauer
VESS Resident Research Award	Calvin Chao
Travel Award	Elizabeth Genovese

2024

Travel Award	Nathan Liang
VESS Resident Research Award	Sabina Sorondo
BSCI Early Career Investigator Award	Jocelyn Beach

2025

Travel Award	Adam Tanious
VESS Resident Research Award	Tiffany Bellomo
BSCI Early Career Investigator Award	Melinda Schaller
Best Paper Award	Elonay Yehualashet

GENERAL INFORMATION

Registration

For security reasons, the scientific session hall and exhibit hall will be monitored for conference badges and/or hotel staff badges. Please wear your conference badge to all events. The VESS registration desk will be in the Ballroom Foyer. Registration hours are as follows:

Thursday, February 5	7:00 am – 5:00 pm
Friday, February 6	6:00 – 9:30 am
	3:00 – 6:15 pm
Saturday, February 7	6:00 – 9:30 am
	3:00 – 6:00 pm

Scientific Sessions

All scientific sessions will be conducted in the Grand Sierra A/B Ballroom.

Speaker Ready Area

An A/V technician table will be located in the back of Grand Sierra A/B. A technician will be available during the following hours:

Thursday, February 5	7:00 am – 6:00 pm
Friday, February 6	6:00 – 9:30 am
	3:00 – 4:00 pm
Saturday, February 7	6:00 – 9:30 am
	3:00 – 6:00 pm

Technology Forum

The 2026 Technology Forum will be in the Pyramid/Castle Peak Rooms. **Note:** This program is not eligible for CME credits. The Technology Forum is open to all registered attendees.

DATE	Thursday, February 5
TIME	1:30 - 4:00 pm

Special Programming

The following programs/courses will be held during the 2025 Annual Meeting on Thursday February 5, 2026:

Vascular Fellows Program	7:30 am – 12:15 pm
	Fellows – Grand Sierra C
General Surgery Resident Vascular Interest Program	7:30 am – 12:15 pm
	Monument Peak
Early Career Surgeon Program	7:30 am – 12:15 pm
	Grand Sierra D
Next Generation Medical Student Mentor Program	Didactic Session 7:30 am – 2:30 pm
	Emigrant Peak
	Hands-on Session 12:30 – 2:30 pm
	Emigrant Peak

ACCREDITATION INFORMATION

Joint Accreditation Statement

In support of improving patient care, this activity has been planned and implemented by Amedco LLC and Vascular and Endovascular Surgery Society. Amedco LLC is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team. Amedco Joint Accreditation #4008163.

Physicians (ACCME) Credit Designation

Amedco LLC designates this live activity for a maximum of 18.00 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Overall Learning Objectives

This activity is designed for physicians, surgeons and allied health care workers who manage patients with vascular disease. By participating in this activity, attendees will be able to:

- Identify novel research outcomes in endovascular and open surgical treatment of vascular disease.
- Discuss developments and limitations of artificial intelligence as it applies to vascular surgical planning, research methodology and imaging analysis.
- Explore up-to-date management of vascular trauma.
- Understand applications for robotic surgery in vascular disease.
- Consider improvements in intraoperative imaging modalities and techniques to lower radiation exposure.
- Learn tricks of the trade from seasoned vascular experts pertaining to complex case situations.
- Liaise with a broad array of industry partners and gain hands-on knowledge about technological and device advances.

EXHIBIT INFORMATION

Exhibit Hall

Exhibits by our industry partners will be featured in the Alpine Ballroom. The VESS asks that members and meeting attendees take some time to visit the exhibits during scheduled exhibit hall hours to acknowledge the generous support of the companies participating in the 2026 Annual Meeting.

All food functions (Breakfasts, Coffee Breaks & Welcome Reception) will take place in the Exhibit Hall – Check program for timing)

Set-Up	
Thursday, February 5, 2026	10:00 am – 5:00 pm

Scheduled Breaks in the Exhibit Hall	
Friday, February 6, 2026	6:00 – 9:30 am
	3:00 – 6:30 pm
Saturday, February 7, 2026	6:00– 9:30 am
	3:00 – 4:30 pm

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NOTES

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SCHEDULE AT A GLANCE

WEDNESDAY, FEBRUARY 4, 2026

6:00 pm – 9:00 pm	**Executive Council Meeting**

THURSDAY, FEBRUARY 5, 2026

7:00 am – 5:00 pm	**Registration**
7:00 am	**Continental Breakfast**
7:30 am – 12:15 pm	**Vascular Fellow Program** Moderator: Mimmie Kwong
7:30 am – 12:15 pm	**General Surgery Resident Program** Moderator: David Laczynski
7:30 am – 12:15 pm	**Early Career Faculty Program** Moderator: Anna Boniakowski
7:30 am – 2:30 pm	**Next Generation Student Mentor Program** Moderator: Zachary Wanken
12:30 – 1:30 pm	**Lunch Break /** **Industry Sponsored Symposium**
1:30 – 4:00 pm	**Technology Forum – Didactic & Hands On** Moderator: Michael Barfield

4:15 – 6:15 pm **SCIENTIFIC SESSION 1**
Moderators: Ravi Rajani & Lindsey Korepta & Rae Rokosh

4:15 – 4:27 pm	1	**Enhancing Air Force Vascular Surgeon Readiness Through Underserved Community Care**
		Brandon Propper[1], James Sampson[1], Justin F Fox[1], Larissa F Weir[2], Eric Elster[1], John J Degoes[2] *[1]USU, Bethesda, MD; [2]US Air Force, Washington, DC*
4:27 – 4:39 pm	2	**Peripheral Arterial Infections: Experience With Cryopreserved Allografts**
		Michael Youngjin Lee, Mouhammad Halabi, Alexander Shepard, Loay Kabbani, Mitchell Weaver, Andi Peshkepija, Timothy Nypaver, Kevin Onofrey, Yasaman Kavousi *Henry Ford Hospital, Detroit, MI*
4:39 – 4:51 pm	3	**A Dynamic Neural Network Approach For Risk Stratification And Treatment Optimization In Intermittent Claudication Patients**
		Bharadhwaj Ravindhran, Georgina Hatfield-Chetter, Bharadhwaj Morris-Jarvis, Josephine Hatfield, Anna Firth, Amy Keld, Louise Mclean, Jonathon Prosser, Sean Pymer, Ian Chetter *Hull York Medical School, Hull, United Kingdom*
4:51 – 5:03 pm	4	**Functional Popliteal Artery Entrapment Syndrome In Athletes: Insights From The Patient Perspective**
		Mary C Cain, John Cabot, Sri Sai L Akkineni, Chidyaonga Shalita, Lucy Yang, Jason T Lee *Stanford University, Stanford, CA*
5:03 – 5:11 pm	5 (RF)	**Combat-related Vascular Reconstructions: Missed Opportunities For Limb Salvage**
		Erin Greenleaf[1], Nader Zamani[1], Paul White[2], Natasha Mohan[1] *[1]Baylor College of Medicine, Houston, TX; [2]Uniformed Services University School of Medicine, Bethesda, MD*
5:11 – 5:19 pm	6 (RF)	**Fluoroscopic Guidance As An Adjunctive Technique For Retrograde Tunneling Of An Obturator Bypass: The Maine Health Experience**
		Colby P Meinke, Luke P Keffer, Anna Boniakowski, Sarah E Gray, Kristina A Giles, Brian W Nolan, Scott Robinson *Maine Health, Portland, ME*

5:19 – 5:27 pm	7 (RF)	**Naples Prognostic Score Impacts Outcomes For Chronic Limb-threatening Ischemia**
		Mark G Davies[1], Joseph P Hart[2] *[1]Ascension Health, Waco, TX; [2]MCW, Milwaukee, WI*
5:27 – 5:39 pm	8	**Preoperative Thrombectomy/thrombolysis And Timing Of Perioperative Venous Angioplasty Do Not Influence Rates Of Re-angioplasty Following First Rib Resection**
		Mitchell S Jay, Courtenay M Holscher, Joseph White, Thomas Reifsnyder, Ying Wei Lum *Johns Hopkins University School of Medicine, Baltimore, MD*
5:39 – 5:51 pm	9	**Local Referral Of Peripheral Arterial Disease Patients To Improve Surgical Outcomes**
		Shahmeer Kazi, Zhixin Lun, Margaret Smith *University of Colorado, Aurora, CO*
5:51 – 6:03 pm	10	**Risk Scores For Loss Of Secondary Patency And Major Amputation After Successful Thrombectomy Of An Infra-inguinal Arterial Bypass**
		Ashley Penton Peters[1], Nabeeha Khan[1], Jericho Hallare[1], Paula Pinto Rodriguez[1], Lily Darman[1], Trissa Babrowski[2], Carlos F Bechara[3], Matthew Blecha[1] *[1]Loyola University Chicago, Maywood, IL; [2]University of Chicago Medical Center, Chicago, IL; [3]Rush University Medical Center, Chicago, IL*
6:03 – 6:15 pm	11	**External Validation Of Best Endovascular Versus Best Surgical Therapy Major Adverse Cardiac Event Model In The Vascular Quality Initiative And Vascular Implant Surveillance And Interventional Outcomes Network Registry**
		Nathan TP Patel[1], Gregory Mouradian[1], Mead B Ferris[1], Xinyan Zheng[2], Jialin Mao[2], Daniel Bertges[1] *[1]University of Vermont Medical Center, Burlington, VT; [2]Weill Cornell Medicine, New York City, NY*

6:15 – 7:30 pm **Welcome Reception**
All attendees, guests & exhibitors are welcome

SCHEDULE AT A GLANCE

FRIDAY, FEBRUARY 6, 2026

6:00 – 7:00 am	**Continental Breakfast in the Exhibit Hall**
6:00 – 9:30 am	**Registration**

7:00 – 9:12 am	**SCIENTIFIC SESSION II** Moderators: Jaime Benarroch, Jean Marie Ruddy & Stephanie Rodriguez

7:00 – 7:12 am	12	**Outcomes In Grade II Blunt Thoracic Aortic Injury**
		Shelby Willis, Phillip Jenkins, Victor Andujo, Tiffany Lian, Sheila Markwardt, Kay Smith, Gregory L Moneta, Justin Regner, Castigliano Bhamidipati, Cherrie Z Abraham, Julie Doberne *Oregon Health and Sciences University, Portland, OR*
7:12 – 7:24 am	13	**National Trends In Aneurysm Care: Rising Volumes, Greater Efficiency, And Shrinking Surgeon Reimbursement**
		Priya Joshi[1], Aryan Gupta[1], Kristina Lowndes[1], Glade Adams[1], Alyster Alcudia[1], William Moser[2], Subodha Kumar[3], Sharvil U Sheth[4], Suyog Mokashi[2] *[1]Lewis Katz School of Medicine at Temple University, Philadelphia, PA; [2]Temple University Hospital, Philadelphia, PA; [3]Fox School of Business at Temple University, Philadelphia, PA; [4]St. Luke's University Health Network, Bethlehem, PA*
7:24 – 7:36 am	14	**Sex-based Differences In Macrophage Activation In Abdominal Aortic Aneurysms**
		Ryan Wahidi, Santiago Elizondo-Benedetto, Brigida Rusconi, Mohamed Zayed *Washington University School of Medicine, St. Louis, MO*

7:36 – 7:48 am	15	**Outcomes Of Carotid Endarterectomy Versus Transcarotid Artery Revascularization In Patients With Cardiac Comorbidities**
		Aidin Baghbani, Harleen K Sandhu, Akiko Tanaka, Arash Keyhani, Kourosh Keyhani, Naveed U Saqib, Charles C Miller, III, S. Keisin Wang *University of Texas Health Science Center at Houston, McGovern Medical School, Houston, TX*
7:48 – 8:00 am	16	**Clinical Outcomes Of Early Peripheral Vascular Intervention For Claudication Are Poor: A Target Trial Emulation Analysis**
		Chen Dun[1], Andrew Wu[1], Midori White[1], Jamie Schwartz[1], Jesse A Columbo[2], M. Libby Weaver[3], YingWei Lum[1], James H Black, III[1], Harold P Lehmann[1], Caitlin W Hicks[1] *[1]Johns Hopkins University, Baltimore, MD; [2]Dartmouth Hitchcock Medical Center, Lebanon, NH; [3]Spencer Fox Eccles School of Medicine, Salt Lake City, UT*
8:00 – 8:08 am	17 (RF)	**Long-term Outcomes Of The Acellular Tissue Engineered Vessel In Extremity Arterial Trauma Repair: Results From The V005 Trial**
		Michael Curi[1], Sophia Bou-Ghannam[2], Zak Khondker[2], Shamik Parikh[2], Laura Niklason[2] *[1]Rutgers-New Jersey Medical School, Newark, NJ; [2]Humacyte Global Inc, Durham, NC*
8:08 – 8:16 am	18 (RF)	**Clopidogrel Resistance Is Not Associated With Adverse Outcomes In Transcarotid Artery Revascularization: A Prospective Single-Center Pilot Study**
		Junette Yu[1], Lilian M. Tran[2], Christina L. Cui[2], Zachary F. Williams[2], Young Kim[2] *[1]Duke-NUS Medical School, Singapore, Singapore; [2]Duke University, Durham, NC*
8:16 – 8:28 am	19	**Transcarotid Artery Stenting Using Flow Reversal For Non-atherosclerotic Carotid Artery Disease**
		Christopher Blackstock[1], Sai Divya Yadavalli[2], Gabriel Jabbour[2], Marc Schermerhorn[2], Samuel Money[1] *[1]Ochsner Medical Center, New Orleans, LA; [2]Beth Israel Deaconess Medical Center, Boston, MA*

8:28 – 8:40 am	20	**Outcomes Following Endovascular Versus Open Management Of Carotid Artery Injury In The National Trauma Data Bank**
		Maha H Haqqani[1], Gurbani Suri[1], Nitin Jethmalani[1], Patricia E Chan[1], Eshani Pareek[2], Christopher J Agrusa[1], Peter H Connolly[1], Brian G Derubertis[1], Sharif H Ellozy[1], Jordan R Stern[1] *[1]Division of Vascular & Endovascular Surgery, Weill Cornell Medicine, New York, NY; [2]Department of Population Health Sciences, Weill Cornell Medicine, New York, NY*
8:40 – 8:52 am	21	**Incentives Run Counter To Cost Effective Management Of Carotid Disease**
		Andrew Pan Huang, Luciano Delbono, Jessica Kipfmiller, Peter Henke *University of Michigan, Ann Arbor, MI*
8:52 – 9:00 am	22 (RF)	**Comparison Of Interventions For Symptomatic Carotid Artery Stenosis Among Nonagenarians**
		Randall A Bloch, Elisa Caron, Scott G Prushik, Katie E Shean, Mark F Conrad *Boston Medical Center Brighton, Boston, MA*
9:00 – 9:12 am	23 (RF)	**Perioperative Antiplatelet And Anticoagulation Outcomes After Trans Carotid Artery Revascularization**
		Ali Hakimi, Tarik Ali, Shreya Rawat, Christina Schweitzer, Leana Dogbe, Ahsan Zil-E-Ali, Faisal Aziz *Penn State Hershey, Hershey, PA*

9:15 – 10:15 am	**SPECIAL SESSION: Review of CREST**
Moderators	Mel Sharafuddin & Lindsey Korepta
Invited Guest Speaker	Wesley S. Moore, MD
10:30 – 11:30 am	**Industry Sponsored Session**

1:00 – 3:00 pm **CASE REPORT SESSION with My Worst Case Invited Speakers**
Moderator: Donald Baril

1:00 pm	C1	**Novel Use Of The Enroutetm System For Total Endovascular Aortic Arch Repair**
		Nicole Hatala, Jennifer Huffman, Jonathan Bath, Todd Vogel, Steven Cheung, Uttara Nag *University of Missouri, Columbia, MO*
1:08 pm	C2	**An Amateur Boxer With A Covered Aortic Stent Graft For A Retrohepatic Caval Injury: Long Term Outcomes**
		Ashley Wang[1], Brianna-Marie Riu[1], Justin Rodriguez[1], Eric Robinson[1], Aldin Malkoc[1], Salma Memon[2]2, Elias Wassel[1], Samuel Schwartz[1] *[1]Arrowhead Regional Medical Center, Colton, CA; [2]Saint George's University, St George's, Grenada*
1:16 pm	C3	**Long-term Durability Of Kissing Covered Aortic Stent Grafts For Treatment Of Iatrogenic Left Common Iliac Vein Injury During Anterior Lumbar Interbody Fusion**
		Justin A Rodriguez[1], Brianna-Marie A Riu[1], Ashley Wang[2], Eric Robinson[2], Aldin Malkoc[2], Angel Guan[2], Elias Wassel[2], Samuel Schwartz[1] *[1]Arrowhead Regional Medical Center, Colton, CA; [2]Arrowhead Regional Medical Center, Colton, CA*
1:24 pm	C4	**Percutaneous Repair Of Access-related Femoral Artery Pseudoaneurysms Using A Suture-mediated Closure Repair Device With Ultrasound-only Guidance – A Case Series**
		Dominic Facciponte[1], Jenaya Goldwag[2], Mark Eid[1], Brianna Krafcik[1], Thomas Cheng[1], Matthew Alef[1] *[1]Dartmouth-Hitchcock Medical Center, Lebanon, NH; [2]Concord Hospital, Concord, NH*
1:32 pm	C5	**Novel Use Of The Venous Inari Protrieve Sheath For Embolic Protection In The Endovascular Treatment Of A Symptomatic Descending Aortic Thrombus**
		Maria Coluccio, Manasa Kanneganti, Patricia Yau *Montefiore Medical Center, Bronx, NY*

1:40 pm	C6	**Extra-anatomic Endovascular Bypass With Venous Stent After External Iliac Vein Ligation During Robotic Inguinal Hernia Repair**
		Fatima Mustansir, Erin McIntosh, Shir LI Tay, Zachary J. Wanken *Washington University in St. Louis (WashU Medicine), St. Louis, MO*
		Worse Case Presentations from Invited Faculty
		Mark Conrad, MD Boston Medical Center **Gabriela Velazquez, MD** Wake Forest University **Misty Humphries, MD** UC Davis

3:00 – 3:45 pm	**Industry Sponsored Session**
3:00 pm	**Registration Re-Opens**
3:00 – 4:00 pm	**Coffee/Snacks – Visit Exhibitors**

4:00 – 6:00 pm

SCIENTIFIC SESSION III

Moderators: S. Keisin Wang, Karan Garg & Mark Eid

4:00 – 4:12 pm	24	**Temporal Artery Biopsy And Its Impact On Glucocorticoid Management In Patients With Suspected Giant Cell Arteritis**
		Amelia Grace Fogle[1], Adriana Gutierrez Yllu[2], Ysabel Munoz[1], Vienna Wang[1], Rae S Rokosh[3], Olamide Alabi[3] *[1]Emory University School of Medicine, Atlanta, GA; [2]Emory University School of Public Health, Atlanta, GA; [3]Emory University Hospital, Atlanta, GA*
4:12 – 4:24 pm	25	**The Impact Of AAA Sac Thrombus Burden On Outcomes After EVAR**
		Cole C Pickney, James F Bena, Courtney Hanak, Ali Khalifeh, Ravi Ambani, Francis J Caputo, Lee Kirksey, Sean P Lyden, Jon G Quatromoni *Cleveland Clinic, Cleveland, OH*
4:24 – 4:36 pm	26	**Bridging The Gap: Vascular Surgery And Primary Care Partnership For Improving Resident Physician Competency In Peripheral Artery Disease Management**
		Natalie Hmeluk, Wato Nsa, Juell Homco, Peter Nelson, Blake Lesselroth, Kimberly Zamor, Kelly Kempe *The University of Oklahoma, Tulsa, OK*
4:36 – 4:48 pm	27	**Association Of Vascular Surgery Interest Groups With Applicant Volume And Match Outcomes: A Multi-year Analysis Of National Residency Match Program Data**
		Calvin Chao, Margaret Reilly, Lara Lopes, Deena El-Gabri, Mark Eskandari, Anand Brahmandam, Tadaki Tomita *Northwestern University, Chicago, IL*
4:48 – 4:56 pm	28 (RF)	**Who Gets Feedback? Predictors Of Receiving Narrative Feedback In Vascular Surgery Epas**
		Katie Glasgow[1], Ting Sun[1], Brigitte K Smith[2], M Libby Weaver[1] *[1]University of Utah, Salt Lake City, UT; [2]University of Wisconsin, Madison, WI*

4:56 – 5:04 pm	29 (RF)	**Rethinking Ketamine: No Opioid-Sparing Effect After Major Amputation**
		Demitra Chavez, Diana Otoya, Austin Nguyen, Andrew Mchale, Michael Kazior, Erik Baker, Kathryn Fong, Michael F Amendola, Kedar S. Lavingia *Virginia Commonwealth University, Richmond, VA*
5:04 – 5:12 pm	30 (RF)	**Percutaneous Bedside Decannulation Of Femoral-femoral VA ECMO In A High-Volume Center**
		Julia Fayanne Chen, Adel Barkat, Prashanth Iyer, Rachel Posey, Daniel Hopkins, Adam Betz *Oklahoma Heart Institute, Tulsa, OK*
5:12 – 5:24 pm	31	**Bioengineered Scaffold Seeded With Adipose-derived Stem Cells For Arterial Reconstruction In A Swine Model: A Step Toward On-demand Regenerative Vascular Grafts**
		Grzegorz Jodlowski[1], May Dvir[1], Patrick F Walker[2], John Chi[3], Michel Haddad[3], Zhipeng Liang[4], Eric Bennett[4], Jonathan Morrison[2], Samand Pashneh-Tala[4] *[1]Mayo Clinic, Rochester, MN; [2]Uniformed Services University, Bethesda, MD; [3]Synova Life, Pasadena, CA; [4]Frontier Bio, Hayward, CA*
5:24 – 5:36 pm	32	**Regional Variations In Training Programs And Practice Location Among Vascular Qualifying Exam Examinees**
		Nikhil Pallem, Colleen McMullen, Daniel Davenport, Tana Repella *University of Kentucky, Lexington, KY*

5:36 – 5:48 pm	33	**Comparative Perioperative Outcomes Of Rescue FEVAR Vs Open Repair For Previous EVAR**
		Daniel Gage, Patrick Quinn, Matthew Corriere, Michael R Go, Xiaoyi Teng, Kristine Orion, Bryan Tillman, Xin K Peng, Babatunde Oriowo, Kyongjune B Lee *The Ohio State University, Columbus, OH*
5:48 – 6:00 pm	34	**Long-term Outcomes After Medical And Surgical Management Of Blunt Traumatic Aortic Injury**
		Mohyee Ayouty[1], Joseph J DuBose[2], Donna Bahroloomi[1], Adam Surti[1], Robert Matthews[1], Donald Baril[1], Elizabeth Chou[1], Cassra Arbabi[1], NavYash Gupta[1], Ali Azizzadeh[1] *[1]Cedars-Sinai Medical Center, Los Angeles, CA; [2]University of Texas at Austin, Austin, TX*

6:00 pm **VESS Member Business Meeting**

6:15 pm **Industry Sponsored Symposia**

SCHEDULE AT A GLANCE

SATURDAY, FEBRUARY 7, 2026

6:00 – 7:00 am	**Continental Breakfast in the Exhibit Hall**
6:00 – 9:30 am	**Registration**

7:00 – 8:08 am **SCIENTIFIC SESSION IV**
Moderators: Bjoern Suckow, Young Kim & Marissa Jarosinski

7:00 – 7:12 am	35	**Lp-182 As A Novel Therapeutic Drug For Abdominal Aortic Aneurysms**
		Brennan Callow, Xiaobing He, Nicholas Juriga, Kevin Heist, Youngsoon Jang, Dominique Pierre-Louis, Brian Ross, Frank Davis *University of Michigan, Ann Arbor, MI*
7:12 – 7:20 am	36 (RF)	**Top-down Vs. Bottom-up Approach In Open Thoracoabdominal Aortic Reconstruction**
		David P Stonko[1], Robert Aru[2], Li T Tan[1], Qingwen Kawaji[1], Kimberly A Gerling[1], Ying Wei Lum[1], Caitlin W Hicks[1], James H Black, III[1] *[1]Johns Hopkins, Baltimore, MD; [2]Jefferson Health, Philadelphia, PA*
7:20 – 7:32 am	37	**Volume Adjusted Calcium Analysis Of Aortoiliac Atherosclerosis As A Predictor Of Mortality**
		Rujul Kumar[1], Joel Kruger[1], Mario Matabele[1], Franziska Röder[2], Doran Mix[1], Michael Stoner[1], Karina Newhall[1] *[1]University Of Rochester School of Medicine and Dentistry, Rochester, NY; [2]University of Groningen Medical Center, Groningen, Netherlands*

7:32 – 7:44 am	38	**Novel Device For Safe Endovascular Aortic Endograft Explantation**
		Richard Longfei LI, Mohamed Zayed, John W. Ohman *WashU Medicine, Saint Louis, MO*
7:44 – 7:52 am	39 (RF)	**A Novel Total Transfemoral Approach For W.l. Gore Tambe Device That Minimizes Precannulated Wires**
		Mark Eid[1], Jenaya Goldwag[1], Sukgu Han[2], Bjoern Suckow[1] *[1]Dartmouth Hitchcock Medical Center, Lebanon, NH; [2]USC Keck School of Medicine, Los Angeles, CA*
7:52 – 8:00 am	40 (RF)	**Initial Experience With A Frozen Elephant Trunk (FET) Device For A Two-stage Repair Of Extensive Aortic Aneurysms And Dissections**
		Jessica Lee Efird, Dina Obed, Robert Matthews, Adam Surti, Donna Bahroloomi, Elizabeth Chou, Donald Baril, Tyler Gunn, Dominick Megna, Pedro Catarino, Ali Azizzadeh *Cedars Sinai Medical Center, Los Angeles, CA*
8:00 – 8:08 am	41 (RF)	**Feasibility Of Early Detection Of Non-compressible Torso Hemorrhage Utilizing Contrast-enhanced Ultrasound: Development Of A Swine Model**
		Yun Beom Lee, Michael Olson, Micaela Cuneo, Christian Goei, Pranav Singh, Jessica Saul-Mcbeth, Jason Rall, Kenneth Bogenberger, Marlin Causey, Theodore Hart *Brooke Army Medical Center, Fort Sam Houston, TX*

8:08 – 9:00 am	**AWARD SESSION** Moderators: Ravi Rajani & Michael Soult
	UPDATE FROM 2025 AWARD WINNERS **Travel Award:** Adam Tanious, MD **Resident Research Award:** Tiffany Bellomo, MD **BSCI Early Career Investigator Award:** Melinda Schaller, MD
	2026 AWARD WINNERS ANNOUNCEMENT **Travel Award** **Resident Research Award** **Early Career Faculty Award**
9:00 – 9:15 am	**Introduction of the President** Todd Berland, MD
9:15 – 10:00 am	**PRESIDENTIAL ADDRESS** Ravi Rajani, MD

10:30 – 12:30 pm **SPECIAL SESSION: Advocacy/CMS 2026 Update**
Moderators: Nathan Aranson & Natalie Sridharan

10:30 am	SS1	**How State Economics And Hospital Status Create A Two-tiered Vascular Reimbursement Phenomenon**
		Alyster Alisla Alcudia[1], Glade Adams[1], Aryan Gupta[1], Kristina Lowndes[1], Priya Joshi[1], William Moser[2], Subodha Kumar[3], Sharvil U Sheth[4], Suyog Mokashi[2] *[1]Lewis Katz School of Medicine, Philadelphia, PA; [2]Temple University Hospital, Philadelphia, PA; [3]Fox School of Business at Temple University, Philadelphia, PA; [4]St. Luke's University Health Network, Bethlehem, PA*
10:38 am	SS2	**Acute Limb Ischemia: Medicare And Medicaid Reimbursement Gaps Threaten Sustainability Of Care**
		Mouhammad Halabi1, Michael Lee[1], Loay Kabbani[1], Hassan Chamseddine[2], Donald D. Chang[1], Timothy Nypaver[1], Mitchell Weaver[1], Yasaman Kavousi[1], Ilan Rubinfeld[1], Alexander Shepard[1] *[1]Henry Ford Hospital, Detroit, MI; [2]University Hospitals Cleveland - Case Western Reserve University, Cleveland, OH*
10:46 am	SS3	**Medicaid Expansion Is Associated With Reduced Hospital Costs For Patients Presenting With Chronic Limb-threatening Ischemia**
		Oluwasegun A Akinyemi, Kaelyn Gordon, Kakra Hughes *Howard University College of Medicine, Washington DC*

10:54 am		**INVITED SPEAKERS**
		Introduction to Advocacy Olamide Alabi, MD **Feedback from the Inaugural SVS Advocacy and Leadership Conference** Katherine McMackin, MD **Understanding the Medicare Fee Schedule and the Normal Legislative Process** Natalie Sridharan, MD **Proposed CMS Changed to the MPFS for 2026 - What to Expect** Mounir Haurani, MD **Beyond Payment Reform: Wellness, Training, Prior Auth & Other Policy Priorities** Nathan Aranson, MD
		PANEL DISCUSSION

1:00 – 3:00 pm **CASE REPORT SESSION**
Moderator: Katherine Hekman

1:00 pm	C7	**Salvage Of Exposed Autogenous Leg Bypass Using Biodegradable Temporizing Matrix (BTM)**
		Morgan Colling[1], Thomas Reifsnyder[2] *[1]Johns Hopkins University School of Medicine, Baltimore, MD; [2]Johns Hopkins Bayview Medical Center, Baltimore, MD*
1:08 pm	C8	**Left Renal And Ovarian Vein Transposition For Posterior Nutcracker Syndrome**
		Cole Pickney[1], Sam Laczynski[2], John Taaffe[1], David Laczynski[1] *[1]Cleveland Clinic, Cleveland, OH; [2]Florida State University College of Medicine, Tallahassee, FL*
1:16 pm	C9	**Repurposing The Thoracic Branch Endoprosthesis Side Branch For Endovascular Repair Of Aneurysmal And Stenotic Aortic Pathology**
		Arash Fereydooni, Arielle Lee, Camille Rogine, Shaunak Adkar, Kenneth Tran *Stanford, Stanford, CA*

1:24 pm	C10	**Trans-iliac Vein Embolization Of A Previously Excluded Left Internal Iliac Artery Aneurysm With A Type II Endoleak**
		Sabrina Sevilla[1], Sarah Kang[1], Damon S Pierce[2], Carlos E Pineda[2] *[1]Virginia Mason Franciscan Health, Seattle, WA; [2]Virginia Mason Franciscan Health, Seattle, WA*
1:32 pm	C11	**Endovascular Repair Of Extent V Thoracoabdominal Aortic Aneurysm With No Access Option, An Innovative Technique**
		Dongjin Suh, Priyam K Vyas, Animesh Rathore *Eastern Virginia Medical School at Old Dominion University, Norfolk, VA*
1:40 pm	C12	**Endovascular Management Of A Complicated Type B Aortic Dissection In A Pediatric Patient**
		Tara Zielke[1], Andres Fajardo[1], Joel S Corvera[2], Raghunandan L Motaganahalli[1] *[1]Indiana University, Indianapolis, IN; [2]Indiana University, Indianapolis, IN*
1:48 pm		**Worse Case Presentations from Invited Faculty**
		Bernadette Aulivola, MD *Loyola University* **Niten Singh, MD** *University of Washington* **Matthew Corriere** *The Ohio State University*

3:00 pm	**Registration Re-Opens**
3:00 – 4:00 pm	**Coffee/Snacks – Last Chance to Visit Exhibitors**

4:00 – 6:00 pm **SCIENTIFIC SESSION V**
Moderators: Dawn Coleman & Todd Berland

4:00 – 4:12 pm	42	**30 Year Experience With The Management Of Upper Extremity Iatrogenic Pseudoaneurysm: Nonoperative Therapy For < 2cm**
		Patrick Stone *Vanderbilt, Nashville, TN*
4:12 – 4:20 pm	43 (RF)	**Information Preferences Of Vascular Surgery Patients**
		Joshua Garrett, Caleb McCabe, Tracy Si, Henry Styron, Jatin Dhamrait, David Gosser, Bhanuteja Pujari, David Ebertz, Michael Williams, Catherine Wittgen, Matthew R Smeds *Saint Louis University School of Medicine, Saint Louis, MO*
4:20 – 4:32 pm	44	**Endovascular Management Of Aortic Coarctation Using Innovative Stent Technology**
		Peter Foster, Ivory Crittendon, III, Samuel Money *Ochsner, New Orleans, LA*
4:32 – 4:44 pm	45	**Suprarenal Vs. Infrarenal Fixation In Endovascular Repair Of Abdominal Aortic Aneurysm: A Systematic Review And Meta-analysis**
		ali reza sattari[1], shahab aldin Sattari[2], Robert Dabek[1], mueen megdadi[1], Omar Karim[1], Vladimir Coca-Soliz[1], Michael Zatina[1], Margaret W Arnold[3] *[1]Ascension St. Agnes, Baltimore, MD; [2]University of Missouri-Kansas City, Kansas City, MO; [3]MedStar Health Baltimore, Baltimore, MD*
4:44 – 4:52 pm	46 (RF)	**Calf And Femoral-popliteal Deep Venous Thrombus Is Associated With The Highest Risk Of Venous Ulceration**
		Anne Pugmire[1], Lorena P De Marco Garcia[2], Julie B Hales[1], Benjamin S. Brooke[1] *[1]University of Utah, Salt Lake City, UT; [2]Northwell Health, Valley Stream, NY*

4:52 – 5:00 pm	47 (RF)	**Impact Of Pre-hemodialysis Nephrology Care And Comorbidity Burden On Type Of Vascular Access At Dialysis Initiation**
		Crystal Diaz[1], Nancy C Edwards[1], Matthew P Goldman[1], Ross P Davis[1], Mariana Murea[1], Jeanette Stafford[2], Timothy Craven[2], Gabriela A Velazquez[1] *[1]Atrium Health Wake Forest Baptist, Winston Salem, NC; [2]Wake Forest University School of Medicine, Winston Salem, NC*
5:00 – 5:08 pm	48 (RF)	**Mid-term Outcomes Of Asymptomatic And Symptomatic Isolated Mesenteric Artery Dissections**
		Alejandro Pizano, Nakia Sarad, Varuna Sundaram, Andy Lee, Rajeev Dayal *NewYork Presbyterian Queens, Flushing, NY*
5:08 – 5:20 pm	49	**Tibial Artery Stenting In The VQI Database**
		Nicholas Wells[1], Martin D Slade[2], Yuan Huang[3], Jonathan Cardella[4], Britt Tonnessen[4], Raul J Guzman[4], Cassius Iyad Ochoa Chaar[4] *[1]Yale School of Medicine, New Haven, CT; [2]Yale School of Medicine, Yale School of Public Health, New Haven, CT; [3]Yale School of Public Health, New Haven, CT; [4]Yale School of Medicine, Department of Vascular Surgery and Endovascular Therapy, New Haven, CT*
5:20 – 5:32 pm	50	**Early Outcomes Of Open Aortic Enhanced Recovery After Surgery Program**
		Joseph R Chitwood, C. Adam Banks, Zdenek Novak, Courtney Busby, Jarrad W Rowse, Danielle C Sutzko, Benjamin J Pearce, Adam W Beck, Emily L Spangler *University of Alabama Birmingham Medical Center, Birmingham, AL*
5:32 – 5:40 pm	51 (RF)	**Impact Of Socioeconomic Vulnerability On Outcomes Following Repair Of Chronic Mesenteric Ischemia**
		Mackenzie K Madison, Aniffa Kouton, Geneva Frank, Hanaa Aridi, Rohan Basu, Andres Fajardo, Greg Westin, Raghu Motaganahalli *Indiana University School of Medicine, Indianapolis, IN*

5:40 – 5:48 pm	52 (RF)	**Factors Associated With Same-day Cancellations In Dialysis Access Surgery**
		Shaunak Adkar, Andrea Fisher, Ashley Griffin, Michael Sgroi, David S. Kauvar *Stanford University, Stanford, CA*
5:48 – 5:56 pm	53 (RF)	**Hypercoagulability In Acute Limb Ischemia: A Rising Diagnosis With Increased Amputation Risk**
		Sahar Alimohamadi, Katherine Reitz, Elizabeth Andraska, Edith Tzeng, Natalie Sridharan, Marissa Jarosinski *UPMC, Pittsburgh, PA*

7:00 – 10:00 pm **Presidents Reception & Dinner**
50th Anniversary Celebration

NOTES

FULL PROGRAM & ABSTRACTS

WEDNESDAY, FEBRUARY 4, 2026

6:00 pm – 9:00 pm	**Executive Council Meeting**

THURSDAY, FEBRUARY 5, 2026

7:00 am – 5:00 pm	**Registration**
7:00 am	**Continental Breakfast**
7:30 am – 12:15 pm	**Vascular Fellow Program** Moderator: Mimmie Kwong
7:30 am – 12:15 pm	**General Surgery Resident Program** Moderator: David Laczynski
7:30 am – 12:15 pm	**Early Career Faculty Program** Moderator: Anna Boniakowski
7:30 am – 2:30 pm	**Next Generation Student Mentor Program** Moderator: Zachary Wanken
12:30 – 1:30 pm	**Lunch Break /** **Industry Sponsored Symposium**
1:30 – 4:00 pm	**Technology Forum – Didactic & Hands On** Moderator: Michael Barfield

4:15 – 6:15 pm **SCIENTIFIC SESSION 1**
Moderators: Ravi Rajani & Lindsey Korepta & Rae Rokosh

4:15 – 4:27 pm	1	**Enhancing Air Force Vascular Surgeon Readiness Through Underserved Community Care**
		Brandon Propper[1], James Sampson[1], Justin F Fox[1], Larissa F Weir[2], Eric Elster[1], John J Degoes[2] *[1]USU, Bethesda, MD; [2]US Air Force, Washington, DC*

Introduction and Objectives: The Military Health System (MHS) recognizes the critical need to maintain a competent surgical force, yet struggles to meet the required case volumes, particularly for specialized groups like Vascular Surgeons. To address this, the Air Force Surgeon General implemented the Medics Advancing Community Healthcare for Readiness (MACH-R) program, allowing surgeons more opportunities and flexibility for "moonlighting," but adding a supervisory and tracking mechanism to assess readiness impact.

Methods: Between 2021 and 2025 vascular surgeons prospectively collected case logs and readiness activity using Air Force specific mobile applications. Results from case collection were then run through the readiness scoring metrics which are weighted to support wartime related vascular injury (arterial reconstruction). Data was then compared against historic comparisons and case logs from the military treatment facilities (MTF).

Results: Prior to MACH-R (2021-2025), no Air Force vascular surgeons (20 of 23 assigned to clinical duties) met readiness thresholds, and overall case volumes from MTF alone fell short by 75%. With MACH-R, 14 surgeons participated, leading to an increase of at least 60 cases per surgeon annually. Surgeons averaged 5 cases over a 4-day period, with significantly increased complexity. The operative rate was nine times higher than MTF volumes. Monthly individual readiness scores, though still below threshold, improved from 25% to 75%. Importantly, this work was concentrated in medically underserved areas of the United States.

Conclusions: The MACH-R program demonstrates that allowing Air Force vascular surgeons flexibility to work in underserved areas not only translates into improved military readiness but also provides much-needed specialized care to small communities. This mutually beneficial relationship between military readiness goals and community health support highlights the MACH-R program as a valuable tool for achieving and maintaining medical personnel readiness. This model may be applicable to major universities and large organizations seeking to engage in underserved areas.

4:27 – 4:39 pm	2	**Peripheral Arterial Infections: Experience With Cryopreserved Allografts**
		Michael Youngjin Lee, Mouhammad Halabi, Hassan Chamseddine, Alexander Shepard, Loay Kabbani, Mitchell Weaver, Andi Peshkepija, Timothy Nypaver, Kevin Onofrey, Yasaman Kavousi *Henry Ford Hospital, Detroit, MI*

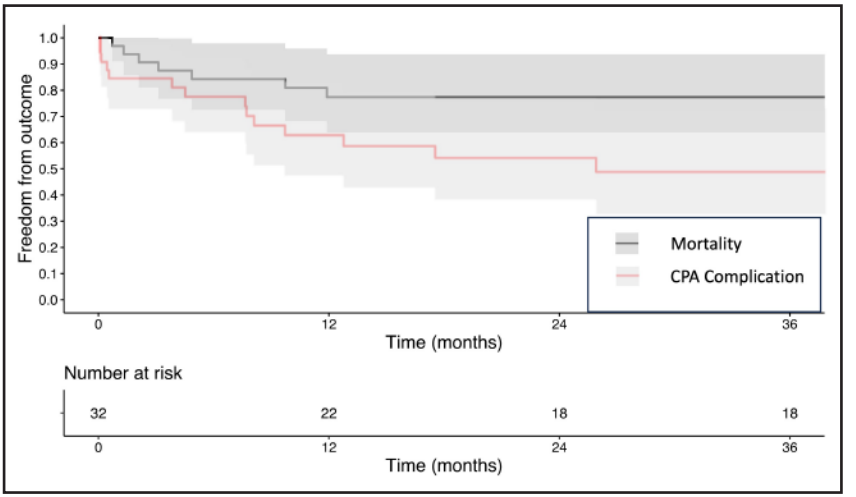
Introduction and Objectives: This study aims to assess outcomes of peripheral arterial reconstruction using cryopreserved allograft (CPA) in infected or contaminated operative fields.

Methods: A retrospective review was performed on patients at a quaternary medical center (2000-2025) who underwent peripheral CPA arterial reconstruction in infected/contaminated fields. CPA venous reconstruction, dialysis access, or bypass for non-infectious indications were excluded. Outcomes assessed included overall survival, CPA-related reinterventions, and CPA-related complications (graft reinfection, stenosis/thrombosis, degeneration, dehiscence, and blowout).

Results: Thirty-one patients (19 male) with median age 67 years were included across 32 operations. Indications were secondary graft or stent infection (78%), native arterial infections (19%), and contaminated traumatic reconstruction (3%). Reconstructions were lower extremity (81%), upper extremity (12%), extra-anatomic (3%), and carotid (3%). Thirty-day and 1-year mortality rates were 3% and 23%, respectively. CPA blowout / dehiscence occurred twice and degeneration once, all within 30 days (Table 1). Overall, rates of reinfection, stenosis, and thrombosis were 16%, 16%, and 13% , respectively. Freedom from CPA-related reinterventions at 1 and 3 years were 64% and 56%, respectively (Table 1). Amputation free survival at 3-years was 91% with limb-loss in 3 patients: two secondary to thrombosis and one from dehiscence.

Conclusions: CPA provides a safe, feasible option for peripheral arterial reconstruction in infected or contaminated fields. Most graft-related complications occurred within the first year, underscoring the need for close surveillance and aggressive follow-up during this period. These findings support CPA as a useful conduit in complex cases in which alternative options are limited with high amputation-free survival, though risk of reintervention is not insignificant.

Figure 1. Kaplan Meier curve combining Mortality vs Any Complication (n=30).



4:39 – 4:51 pm	3	**A Dynamic Neural Network Approach For Risk Stratification And Treatment Optimization In Intermittent Claudication Patients**
		Bharadhwaj Ravindhran, Georgina Hatfield-Chetter, Bharadhwaj Morris-Jarvis, Josephine Hatfield, Anna Firth, Amy Keld, Louise Mclean, Jonathon Prosser, Sean Pymer, Ian Chetter *Hull York Medical School, Hull, United Kingdom*

Introduction and Objective: Intermittent claudication (IC) affects millions worldwide and presents a significant healthcare challenge due to its complex risk stratification needs, which traditional statistical methods struggle to address effectively. This study aims to develop a dynamic approach to identify high-risk IC patients prone to progression to severe claudication, chronic limb-threatening ischemia (CLTI), or cardiovascular death.

Methods: Analysis of a prospective research registry (June 2021-June 2024) was conducted on 638 patients with IC. Baseline cardiovascular risk factors, treadmill distances, and smoking cessation and medication compliance were collected. Two neural network models were employed: a multilayer perceptron (MLP) with 16 units in the hidden layer and 4 units in the output layer, and a radial basis function (RBF) network. The MLP utilized a sigmoid activation function and was trained using backpropagation and the RBF network employed Gaussian basis functions and was trained using a two-stage algorithm. An in-depth independent variable importance analysis was performed to identify key predictors for IC progression and mortality. Model performance was evaluated using cross-entropy and prediction accuracy metrics.

Results: Of 638 patients diagnosed with classical IC, 469 had complete follow-up data and were included in the final analysis. Among these, 65% (n=305) improved or stabilized, while 29.4% (n=138) deteriorated. 5% developed CLTI, and 0.8% required amputation. Mortality rate was 5.3% over a median follow-up of 18 months. The models achieved a cross-entropy of <0.1 and an incorrect prediction rate of <10%. For IC progression, the models identified Initial Claudication Distance (100% normalized importance), Maximum Walking Distance (92.7%), and ABPI at rest (91.0%) as critical predictors. For mortality, ABPI at rest (100%), BMI (99.4%), and Maximum Walking Distance (97.9%) were most important.

Conclusions: This dynamic neural network-based approach, incorporating 25 baseline and compliance data points, demonstrates significant potential for providing nuanced, real-time risk assessments in the complex cohort of IC patients.

4:51 – 5:03 pm	4	**Functional Popliteal Artery Entrapment Syndrome In Athletes: Insights From The Patient Perspective**
		Mary C Cain, John Cabot, Sri Sai L Akkineni, Chidyaonga Shalita, Lucy Yang, Jason T Lee *Stanford University, Stanford, CA*

Introduction and Objective: Functional Popliteal Artery Entrapment Syndrome (fPAES) is a rare cause of exertional leg pain in athletes. We aimed to capture the patient perspective to better understand symptom presentation, recovery, and long-term impact on return to sport.

Methods: We conducted a mixed-methods study of patients undergoing fPAES surgery. The Tegner Activity Scale validated in sports medicine literature was assessed to measure function (0 = no activity, 10 = full ability). Structured interviews were thematically analyzed to identify domains of patient experience, including symptoms, delayed diagnosis, activity modification, and psychological impact.

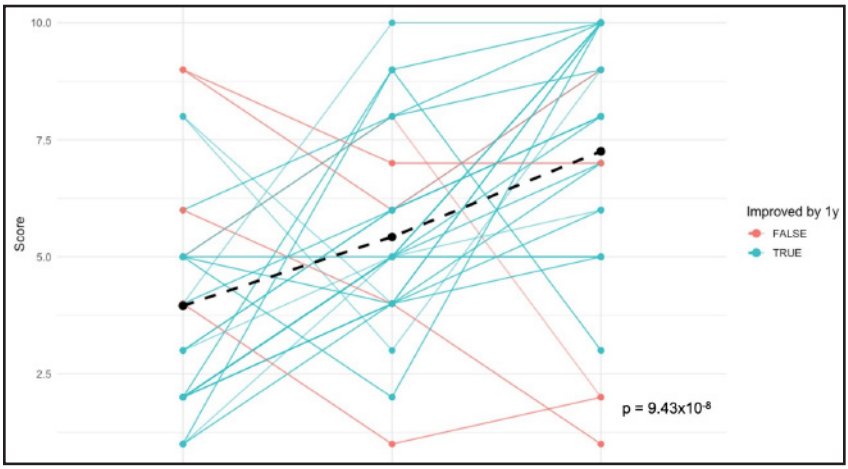
Results: Thirty-six patients representing 64 limbs (8.3 years mean follow-up) completed 45-min structured interviews. Average time of symptom onset to diagnosis was 57.5 months. Disabling symptoms described were most commonly calf pain (89%), neurologic symptoms (50%), calf pain at rest (33%), cold sensation (31%), and swelling (19%). Neurological symptoms were associated with improved likelihood of full recovery; rest pain was linked to incomplete improvement in two-thirds of cases.

Improvement from preoperative scores to 1 year is 80%. Individual score trajectories highlighted in Figure1. In logistic regression, higher preoperative score was significantly associated with lower odds of improvement at 1 year (p=0.0017).

Age influenced outcomes: 60% of patients <20 years reported partial/no improvement versus 26.7% in their 20s and 27.3% ≥30. However, all younger patients with incomplete recovery still returned to sport and adjunctive botulinum toxin appeared beneficial..

Conclusions: Surgical treatment for fPAES provides high return to sport rates, though younger athletes have risk for incomplete recovery. Delayed diagnosis underscores need for earlier recognition. Patient interviews highlighted novel insights into symptom burden and adjunctive therapies, with better outcomes in neurologic cases than rest pain.

Figure 1. Tegner Score Trajectories (Scale 0-10, 10 signifies no impairment) Dashed line shows group mean at each timepoint.



5:03 – 5:11 pm	5 (RF)	**Combat-related Vascular Reconstructions: Missed Opportunities For Limb Salvage**
		Erin Greenleaf[1], Nader Zamani[1], Paul White[2], Natasha Mohan[1] *[1]Baylor College of Medicine, Houston, TX; [2]Uniformed Services University School of Medicine, Bethesda, MD*

Introduction and Objective: Extremity injuries comprise nearly 80% of combat wounds on the modern battlefield, with vascular involvement occurring at five times higher rate than in previous conflicts. We hypothesized that US service members with combat-related vascular injury (CVI) and reconstructions (CVR) are missing opportunities for longitudinal vascular care.

Methods: Using the Department of Defense Trauma Registry (DoDTR), we identified 94 patients who experienced vascular injury in a combat theater between 2007 and 2021. Retrospective chart review was performed, marrying data from the DoDTR with data from the VA EMR. Univariate analyses were performed to characterize surgical management for CVI and facets of longitudinal care post-CVR.

Results: Of 94 US service members, all were male with a median age of 21 years at time of CVI. 4 service members expired as a result of combat-related injuries. Mechanism of injury included gunshot wound (n=28), improvised explosive device (n=60), and motor vehicle collision (n=2). Excluding service members with traumatic amputation (n=22), CVI were isolated to arterial anatomy (n=40), venous anatomy (n=8), and combined arterial and venous anatomy (n=20). Of the 48 arterial CVR that would have benefited from regular vascular surveillance, 32 (67%) were seen by a vascular specialist at least once and 19 (32%) were seen more than once. Imaging was performed at least once for 37 (77%) service members and more than once for 28 (58%) service members. Among service members with arterial reconstructions, 29 (60%) were prescribed an antiplatelet and 4 were prescribed a statin (8%). At last documentation pertaining to the affected limb, 29 (60%) service members with arterial CVR had documented functional limbs.

Conclusions: Loss to follow-up of US service members with CVR and inconsistent guidelines are a challenge to limb salvage for this deserving population and would benefit from a dedicated program to ensure longitudinal surveillance.

5:11 – 5:19 pm	6 (RF)	**Fluoroscopic Guidance As An Adjunctive Technique For Retrograde Tunneling Of An Obturator Bypass: The Maine Health Experience**
		Colby P Meinke, Luke P Keffer, Anna Boniakowski, Sarah E Gray, Kristina A Giles, Brian W Nolan, Scott Robinson *Maine Health, Portland, ME*

Introduction and Objectives: The obturator bypass is an excellent option for lower extremity revascularization in a setting of an isolated graft infection or mycotic aneurysm of the groin. This case review highlights our contemporary institutional experience with the obturator bypass, demonstrating key surgical steps through operative video presentation.

Methods: We present a small case series of patients from 2023-2025 who underwent an obturator bypass at our institution. Patient demographics and operative details were captured through retrospective chart review. The procedure was documented on video, capturing critical technical maneuvers such as tunneling through the obturator foramen and techniques for preserving profunda perfusion. Creating a tunnel through the obturator canal can be challenging due to anatomic constraints of the pelvis which obscure visualization and limit instrument maneuverability. To overcome this obstacle, we perform a retrograde tunnel with fluoroscopic guidance, simplifying passage of the tunneler through the obturator canal and allowing for accurate graft positioning in the appropriate tissue plane. These cases emphasize the obturator bypass as an extra-anatomic approach favored for its deep anatomical pathway and low risk of reinfection.

Results: We report on 5 cases performed at Maine Health. The distal target was most frequently the superficial femoral artery. Successful revascularization with preservation of limb viability was achieved in all cases, with no early postoperative complications. Video review highlights crucial steps including safe obturator foramen access, careful avoidance of neurovascular structures, secure graft tunneling, and management of profunda perfusion.

Conclusions: The obturator bypass is a valuable surgical option for managing infected bypass grafts, particularly when prior groin infections preclude conventional bypass routes. Our case review reinforces the obturator bypass's role in complex revascularization strategies for infected vascular grafts.

5:19 – 5:27 pm	7 (RF)	**Naples Prognostic Score Impacts Outcomes For Chronic Limb-threatening Ischemia**
		Mark G Davies[1], Joseph P Hart[2] *[1]Ascension Health, Waco, TX; [2]MCW, Milwaukee, WI*

Introduction and Objective: The aim of this study was to investigate the impact of varying degrees of inflammatory and Nutritional status on the outcomes of patients undergoing lower extremity interventions for chronic limb-threatening ischemia (CLTI).

Methods: Between 2018 and 2024, all patients undergoing a primary intervention for CLTI (endovascular intervention-EV, bypass BYP, major amputation-AMP) or Wound Care (WOUND) were analyzed. Inflammatory and nutritional status was measured by the Naples Prognostic Score (NPS), a composite marker, which incorporates Age, Serum Albumin (ALB), Total Cholesterol (TC), Neutrophil-to-Lymphocyte Ratio (NLR) and the Lymphocyte-to-Monocyte Ratio (LMR) and has three categories: Good prognosis (0-1 points), Intermediate prognosis (2-3 points) and Poor prognosis (4-5 points). Amputation-free survival (AFS; survival without major amputation) and freedom from major adverse limb events (MALE; Above ankle amputation of the index limb or major re-intervention, new bypass graft, jump/interposition graft revision) were evaluated.

Results: 2118 patients (56% male, age 65±11years, mean ± SD) underwent EV (52%), a BYP (29%), AMP (13%), or WOUND (6%). The majority of patients had WIfI stage 3 or 4 disease. 22% scored as Good prognosis; 32% scored as Intermediate prognosis; 45% scored as Poor prognosis (Table 1). Increasing severity of NPS impacts 30-day outcomes and negatively influences Freedom from MALE and AFS (**Table 1**).

Conclusions: The majority of patients presenting with CLTI can be categorized as having poor inflammatory and nutritional risk based on the NPS. The increasing severity of NPS is associated with poorer outcomes in both the short term and the long term. Identifying patients with increasing Inflammatory and nutritional risk can help stratify the risk of CLTI interventions.

Table I. Outcomes.

NPS	Good	Intermediate	Poor	P-Value
Patients (n)	475	684	959	
WIfI stage 3/4	65%	65%	64%	0.2
30-day MACE	3%	10%*	15%**	0.001
30-day MALE	4%	11%*	19%**	0.001
30-day Amputation‡	3%	7%*	11%**	0.001
Ulcer Healing @3 months	83%	53%*	40%**	0.02
Freedom from MALE @5 yrs	63±5%	38±5%**	23±4%**	0.01
Amputation Free Survival @5yrs	59±5%	36±5%**	25±4%**	0.01

*p<0.05, **p<0.01 compared to Good NPS group
‡excludes planned major amputation

5:27 – 5:39 pm	8	**Preoperative Thrombectomy/thrombolysis And Timing Of Perioperative Venous Angioplasty Do Not Influence Rates Of Re-angioplasty Following First Rib Resection**
		Mitchell S Jay, Courtenay M Holscher, Joseph White, Thomas Reifsnyder, Ying Wei Lum *Johns Hopkins University School of Medicine, Baltimore, MD*

Introduction and Objective: Venous thoracic outlet syndrome (vTOS) often requires first rib resection (FRR) and angioplasty, yet the optimal timing of preoperative thrombolysis and perioperative or postoperative angioplasty relative to FRR remains uncertain. We evaluated reintervention rates after FRR with preoperative thrombectomy/thrombolysis versus no preoperative intervention, and with same-day versus delayed angioplasty.

Methods: Patients who underwent FRR and angioplasty between 2015 and 2025 were identified in a national electronic medical record-derived database. Cohorts were defined as FRR with preoperative thrombectomy/thrombolysis and FRR without preoperative thrombectomy/thrombolysis, as well as FRR with same-day angioplasty and FRR with delayed angioplasty within 8 weeks of the index operation. Propensity score matching was performed on age, sex, and comorbidities including thrombophilic disorders. One-, 3-, and 5-year rates of repeat angioplasty were compared using conditional logistic regression and Kaplan-Meier analysis.

Results: Of 574 patients undergoing FRR and angioplasty, 147 (25.61%) received preoperative thrombectomy/thrombolysis and 342 (59.58%) received delayed angioplasty. From these, 159 patients were matched for the thrombectomy comparison and 225 were matched for the angioplasty timing comparison. At 5 years, repeat angioplasty occurred in 17 of 147 preoperative thrombectomy/thrombolysis patients (11.57%) and 17 of 147 patients without preoperative intervention (11.57%) (p=1.00). Among angioplasty-timing cohorts, 20 delayed patients (8.89%) and 34 same-day patients (15.11%) required re-angioplasty at 5 years (p=0.08).

Conclusions: Preoperative thrombectomy/thrombolysis did not reduce re-angioplasty through 5 years. Outcomes were also similar between same-day and delayed angioplasty. These findings suggest limited benefit of preoperative thrombectomy or same-day angioplasty for improving vTOS outcomes.

Table I. Re-angioplasty Rates No Preop vs. Preop Thrombectomy/Thrombolysis.

Re-Angioplasty (Years Follow-Up)	No Preop Thrombectomy/ lysis CIR (%)	Preop Thrombectomy/ lysis CIR (%)	P-Value
1	9.52	8.84	0.84
3	11.57	10.20	0.58
5	11.57	11.57	1.00

Table 2. Re-angioplasty Rates Delayed vs. Same Day Venous Angioplasty.

Re-Angioplasty (Years Follow-Up)	Delayed CIR (%)	Same-Day CIR (%)	P-Value
1	7.56	12.44	0.09
3	8.89	14.22	0.11
5	8.89	15.11	0.08

5:39 – 5:51 pm	9	**Local Referral Of Peripheral Arterial Disease Patients To Improve Surgical Outcomes**
		Shahmeer Kazi, Zhixin Lun, Margaret Smith *University of Colorado, Aurora, CO*

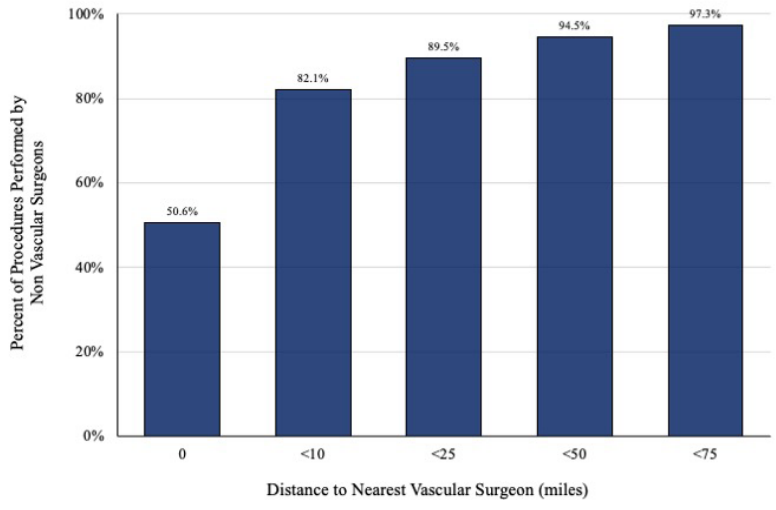
Introduction and Objectives: Surgical bypass has demonstrated superior outcomes compared to an endovascular-first approach in select patients with peripheral artery disease (PAD). Evaluation by vascular surgeons, over other providers who only offer endovascular procedures, may optimize patient care. However, limited access to vascular surgeons may hinder implementation of bypass-first strategies. This study aimed to evaluate the geographic availability of vascular surgeons relative to other specialties performing lower extremity endovascular procedures and assess the potential travel burden of transitioning care.

Methods: We analyzed the Centers for Medicare & Medicaid Services (CMS) Provider Utilization and Payment Data Public Use Files from 2021-2023. Providers performing lower extremity (LE) endovascular procedures—including diagnostic angiography, percutaneous transluminal angioplasty, stenting, and atherectomy—were identified and categorized as cardiologists (IC), interventional radiologists (IR), or vascular surgeons (VS). Procedures were aggregated at the provider level. Spatial analysis was performed to assess trends in procedural volume and the distance between provider zip codes.

Results: Between 2021 and 2023, a total of 1,268,062 LE endovascular procedures were performed. IC and IR accounted for 50.7% of these interventions. Notably, 50.6% of endovascular procedures by IC/IR occurred in zip codes where a vascular surgeon also practiced. Furthermore, 90% of these procedures were performed within 25 miles of a vascular surgeon. (Figure 1)

Conclusions: The majority of LE revascularization procedures performed by cardiology and radiology occur in the same zip code or within an acceptable travel distance to a vascular surgeon. Given the potential benefits of surgical bypass in PAD patients with suitable anatomy, policies that promote evaluation by vascular surgeons, without imposing significant travel burdens, could enhance treatment outcomes and support more comprehensive, patient-centered care.

Figure 1.


Percent of Procedures Performed by Non Vascular Surgeons
100%
80%
60%
40%
20%
0%
50.6%
82.1%
89.5%
94.5%
97.3%
0
<10
<25
<50
<75
Distance to Nearest Vascular Surgeon (miles)

5:51 – 6:03 pm	10	**Risk Scores For Loss Of Secondary Patency And Major Amputation After Successful Thrombectomy Of An Infra-inguinal Arterial Bypass**
		Ashley Penton Peters[1], Nabeeha Khan[1], Jericho Hallare[1], Paula Pinto Rodriguez[1], Lily Darman[1], Trissa Babrowski[2], Carlos F Bechara[3], Matthew Blecha[1] *[1]Loyola University Chicago, Maywood, IL; [2]University of Chicago Medical Center, Chicago, IL; [3]Rush University Medical Center, Chicago, IL*

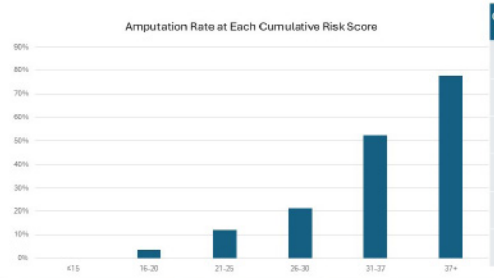
Introduction and Objective: Create VQI based internally validated risk scores for loss of secondary patency and major lower extremity amputation after successful thrombectomy of infra-inguinal arterial bypasses.

Methods: Patients were randomly placed into 70% testing (N=1980) and 30% validation (N=989) cohorts. Binary logistic regression was performed for the outcomes of loss of secondary patency and major amputation utilizing variables with univariable P value < .05. Variables with a significant (P<.05) association with the outcomes from the above-mentioned multivariable regressions were included in the risk scores and weighted based on their respective regression beta-coefficient in a point scale. Multivariable significant variables with a beta-coefficient of less than .25 were assigned 1 point, and then a point was added for each rise in beta-coefficient at .25 intervals. Thus, a variable with a beta coefficient of .75 would receive a score of 3 etc. A cumulative score for each patient was created by adding up their significant variable point totals.

Results: Figures 1, 2 and 3 display significant (multivariable P<.05) variables with their point assignments; validation information; AUC analysis; and rates of major amputation and loss of secondary patency at the various risk score bundles.

Conclusions: The critical modifiable variables in preventing loss of secondary patency and major amputation are smoking cessation, anticoagulation, surveillance imaging in follow-up, and single segment vein conduit utilization.

Figure 1. Risk Score for Limb Amputation After Having Secondary Patency of Infra-inguinal Arterial Bypass Achieved.

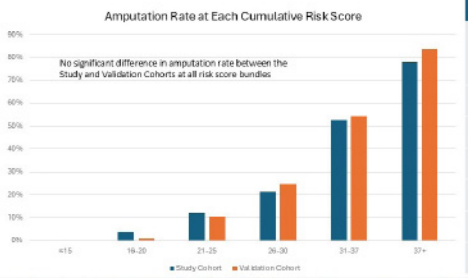


Cumulative Risk Score	Percent within Risk Score Group (n/N)	Odds Ratio (95% CI)	P-Value
≤15	0% (0/583)	Reference	N/A
16-20	3.7% (8/215)	47.8 (2.74-831)	0.008
21-25	11.9% (48/402)	159 (9.81-2597)	0.0004
26-30	21.2% (70/330)	315 (19.49-5119)	0.0001
31-37	52.4% (151/288)	1285 (80-20781	<0.0001
37+	77.8% (126/162)	4045 (247-66338)	<0.0001

Risk Factor	Points	Risk Factor	Points	Risk Factor	Points	Risk Factor	Points
Prior aneurysm repair	-4	Top 20% ADI	3	Original indication rest pain	3	Non-ambulatory at LTFU	9
BMI >35	-3	BMI <20	3	Multiracial	4	Unknown smoking status at LTFU	13
On anticoagulation at LTFU	-2	Diet Controlled DM	3	IDDM	5	Smoking at LTFU	19
Female	2	NIDDM on Meds	3	Tibial Bypass Target	5	Original indication ischemic tissue loss	23
On anticoagulation at discharge	2	Anemia	3	Occluded bypass at LTFU	5		

BMI = body mass index, LTFU = long-term follow up, ADI = area deprivation index, DM = diabetes mellitus, NIDDM= non-insulin dependent DM, IDDM = insulin dependent DM

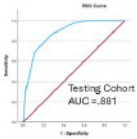
Figure 2. Risk Score for Amputation in Infra-inguinal Bypass Patients After Having Had Secondary Bypass Patency Achieved– Study vs Validation Cohort.



Risk Score for Amputation in Patients with Infrainguinal Bypass After Having Secondary Bypass Patency Achieved Study vs Validation Cohort

Risk Score	Percent within Risk Score Group in Study Cohort (n/N)	Percent within Risk Score Group in Validation Cohort (n/N)	Odds Ratio (95% CI)	P-Value
<15	0% (0/583)	0% (0/275)	0.47 (0.01-23.9)	0.71
16-20	3.7% (8/215)	0.9% (1/106)	0.25 (0.03-2.00)	0.19
21-25	11.9% (48/402)	10.4% (18/173)	0.85 (0.48-1.52)	0.60
26-30	21.2% (70/330)	24.6% (44/179)	1.21 (0.79-1.86)	0.38
31-37	52.4% (151/288)	54.2% (84/155)	1.07 (0.72-1.59)	0.72
37+	77.8% (126/162)	83.7% (72/86)	1.47 (0.74-2.91)	0.27

Risk Factor	Points	Risk Factor	Points	Risk Factor	Points	Risk Factor	Points
Prior aneurysm repair	-4	Top 20% ADI	3	Original indication rest pain	3	Non-ambulatory at LTFU	9
BMI >35	-3	BMI <20	3	Multiracial	4	Unknown smoking status at LTFU	13
On anticoagulation at LTFU	-2	Diet Controlled DM	3	IDDM	5	Smoking at LTFU	19
Female	2	NIDDM on Meds	3	Tibial Bypass Target	5	Original indication ischemic tissue loss	23
On anticoagulation at discharge	2	Anemia	3	Occluded bypass at LTFU	5		



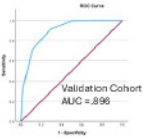
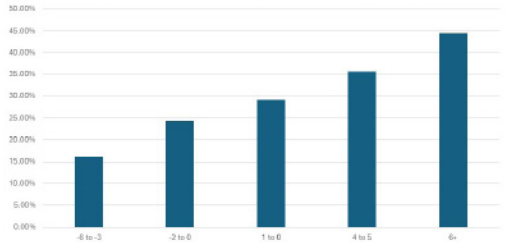


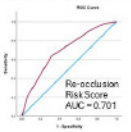
Figure 3. Risk Score for Loss of Infra-inguinal Artery Bypass Secondary Patency.

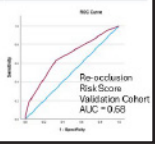


Risk Factor	Points	Risk Factor	Points
Single Segment Vein Graft	-2	Initial Occlusion After 30 days	2
DAPT at Long Term Follow Up (LTFU)	-2	Tibial Bypass Target	2
On Anticoagulation at LTFU	-2	LTFU Smoking	2
Prior Ipsilateral PAD endovascular intervention	1	Insulin Dependent Diabetes	1

DAPT = dual antiplatelet therapy, AC = anticoagulation, LTFU = long-term follow up, PAD = peripheral arterial disease

Cumulative Risk Score	Percent within Risk Score Group (n/N)	Odds Ratio (95% CI)	P-Value
-6 to -3	16.1% (5/31)	Reference	N/A
-2 to 0	24.3% (126/519)	1.66 (0.62-4.43)	0.31
1-3	29.1% (276/948)	2.13 (0.81-5.62)	0.12
4-5	35.7% (131/367)	2.88 (1.08-7.70)	0.03
6+	44.4% (28/63)	4.16 (1.41-12.23)	0.01





6:03 – 6:15 pm	11	**External Validation Of Best Endovascular Versus Best Surgical Therapy Major Adverse Cardiac Event Model In The Vascular Quality Initiative And Vascular Implant Surveillance And Interventional Outcomes Network Registry**
		Nathan TP Patel[1], Gregory Mouradian[1], Mead B Ferris[1], Xinyan Zheng[2], Jialin Mao[2], Daniel Bertges[1] *[1]University of Vermont Medical Center, Burlington, VT; [2]Weill Cornell Medicine, New York City, NY*

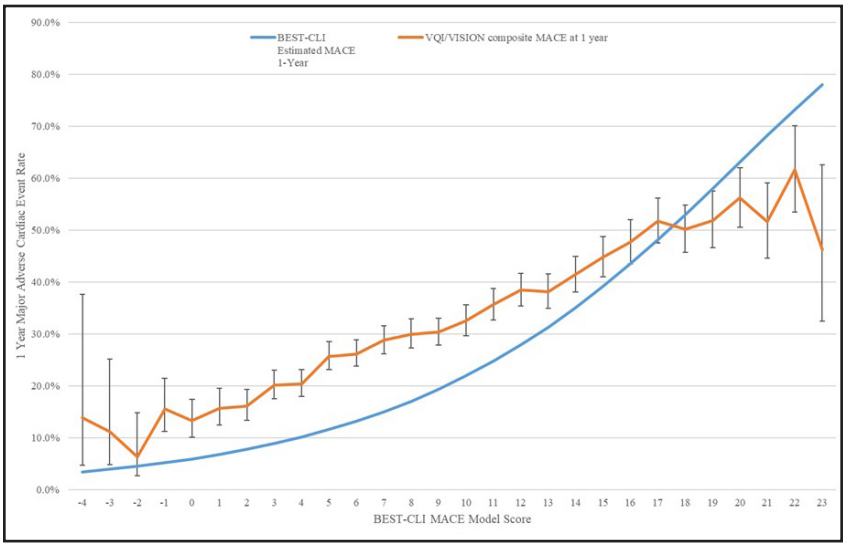
Introduction and Objective: To externally validate a 1-year Major Adverse Cardiac Event (MACE) Model developed using Best Endovascular versus Best Surgical Therapy in Patients with Critical Limb Ischemia (BEST-CLI) within the Vascular Quality Initiative (VQI) and Vascular Implant Surveillance and Interventional Outcomes Network (VISION).

Methods: We applied the BEST-CLI MACE model to estimate an integer score for VQI-VISION patients to estimate 1-year MACE (death, MI, and CVA) based on age, revascularization strategy, BMI, hypertension, diabetes, coronary artery disease, heart failure, CVA, stage ≥ 3 kidney disease, and pre-operative statin use. The VQI Infra-inguinal Bypass and Peripheral Vascular Intervention Registries were supplemented with matching VISION data. Patients were stratified by BEST-CLI MACE score and Kaplan-Meier analysis was performed to calculate 1-year rate of MACE. Model calibration and discrimination were assessed with calibration slope, intercept, and c-index.

Results: F19,588 patients (endovascular n=15,456, 78%; open n=4,332, 25.5%) with VQI-VISION data were identified. 1-year Kaplan-Meier estimated mortality was 25.5% (95% CI 24.8%-26.2%), MI 10.2% (95% CI 9.7%-10.7%), and CVA 4.9% (95% CI 4.6%-5.3%) with a composite MACE of 32.7% (95% CI 32.0%-33.4%). BEST-CLI MACE scores ranged between -4-23 (median 658, interquartile range, 305-1100 patients). The mean deviation between the observed 1-year MACE from VQI-VISION compared to BEST-CLI MACE Model was 9.8% (95% CI: 7.6% - 12.0%). 14 patients had a score less than -4 and 32 patients had scores greater than 23. Calibration slope = 0.41; intercept = 0.31; discrimination = 0.62.

Conclusions: Cardiac complications after revascularization for chronic limb threatening ischemia remain significant. This external validation of the BEST-CLI 1-year MACE model suggests modest predictive ability in real-world vascular practice with the model underestimating 1-year MACE on average by 9.8%.

Figure 1. 1 Year Major Adverse Cardiac Event Rate.



6:15 – 7:30 pm **Welcome Reception**
All attendees, guests & exhibitors are welcome

FRIDAY, FEBRUARY 6, 2026

6:00 – 7:00 am	**Continental Breakfast in the Exhibit Hall**
6:00 – 9:30 am	**Registration**

7:00 – 9:12 am **SCIENTIFIC SESSION II**
Moderators: Jaime Benarroch, Jean Marie Ruddy & Stephanie Rodriguez

7:00 – 7:12 am	12	**Outcomes In Grade II Blunt Thoracic Aortic Injury**
		Shelby Willis, Phillip Jenkins, Victor Andujo, Tiffany Lian, Sheila Markwardt, Kay Smith, Gregory L Moneta, Justin Regner, Castigliano Bhamidipati, Cherrie Z Abraham, Julie Doberne *Oregon Health and Sciences University, Portland, OR*

Introduction and Objectives: Current guidelines recommend surgical management for all > grade I blunt thoracic aortic injuries (BTAI). Previous work from the Aortic Trauma Foundation (ATF), a multicenter prospective registry, combining grade I and II BTAIs has demonstrated no difference in 30-day mortality between BTAI patients managed nonoperatively vs. with thoracic endovascular aortic repair (TEVAR). We sought to analyze outcomes specifically for grade II injuries to determine if guideline suggested TEVAR treatment of all grade II injuries is potentially overly aggressive.

Methods: ATF data from 2014 to 2025 was retrospectively analyzed for demographics and outcomes based on treatment strategy. Outcomes of 30-day mortality, hospital length of stay, ventilator days, in-hospital mortality, death directly related to complication of aortic treatment, or aortic related in hospital mortality were determined for patients with grade II injuries with outcomes stratified for those managed medically vs TEVAR and medical management.

Results: There were 246 grade I injuries and 114 grade II injuries with 91.9% of grade I injuries managed medically. Grade II injuries were managed medically in 36.8% and TEVAR in 62.3%, and with open repair in 0.9%. Patients with grade II BTAIs managed medically alone vs medically with addition of TEVAR had no significant differences in hospital length of stay (p=0.836), ventilator days (p=0.960), in-hospital mortality (p=0.174), 30-day mortality (p=0.308), or aortic related in hospital mortality (p=0.998).

Conclusions: TEVAR in addition to medical management provides no short-term 30-day mortality benefit over medical management alone in patients with grade II BTAIs. Guideline suggested TEVAR treatment of all grade II BTAIs appears overly aggressive. This data should spur longer term follow-up and cost effectiveness studies for management of grade II BTAI.

Table 1. Patient outcomes according to treatment type for grade II injury.

	Grade II	
	N=114	P-Value[1]
N%		
Surgical	72 (63.2%)	
Medical	42 (36.8%)	
Hospital Length of Stay, median (IQR)		0.836
Surgical	11.0 (8.0-26.0)	
Medical	14.5 (6.0-23.0)	
Ventilator Days, median (IQR)		0.960
Surgical	2.0 (0.0-7.0)	
Medical	1.0 (0.0-9.0)	
Ischemic or Hemorrhagic stroke, n (column %)		–
Surgical	0 (0.0%)	
Medical	0 (0.0%)	
In-hospital Mortality, n (column %)		0.174
Surgical	8 (11%)	
Medical	9 (21%)	

[1]P-Values from Wilcoxon's rank sum test for continuous variables or Fisher's exact test for categorical variables
[2]Denominator: In-hospital deceased
[3]Denominator: Aortic-related in-hospital deceased

	Grade II	
	N=114	P-Value[1]
30-day mortality, n (column %)[2]		0.308
Surgical	6 (86%)	
Medical	5 (56%)	
Aortic related in-hospital mortality, n (column %)[2]		0.998
Surgical	1 (14%)	
Medical	1 (11%)	
Death occurred prior to opportunity for endovascular, n (column %)[3]		–
Surgical	0 (0%)	
Medical	1 (100%)	

[1]P-Values from Wilcoxon's rank sum test for continuous variables or Fisher's exact test for categorical variables
[2]Denominator: In-hospital deceased
[3]Denominator: Aortic-related in-hospital deceased

7:12 – 7:24 am	13	**National Trends In Aneurysm Care: Rising Volumes, Greater Efficiency, And Shrinking Surgeon Reimbursement**
		Priya Joshi[1], Aryan Gupta[1], Kristina Lowndes[1], Glade Adams[1], Alyster Alcudia[1], William Moser[2], Subodha Kumar[3], Sharvil U Sheth[4], Suyog Mokashi[2] *[1]Lewis Katz School of Medicine at Temple University, Philadelphia, PA; [2]Temple University Hospital, Philadelphia, PA; [3]Fox School of Business at Temple University, Philadelphia, PA; [4]St. Luke's University Health Network, Bethlehem, PA*

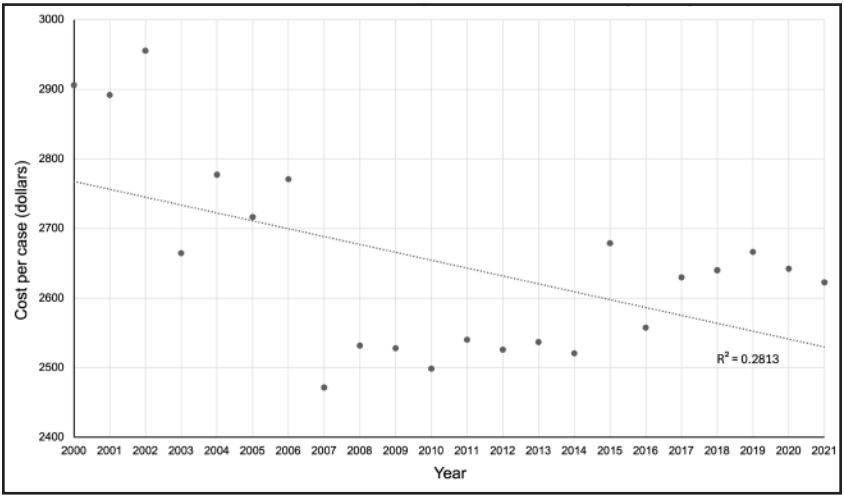
Introduction and Objective: Over the past two decades, aortic, peripheral, and visceral artery aneurysm management has been transformed by endovascular adoption, leading to more patients undergoing treatment. Yet, vascular surgeons have faced steadily declining reimbursement. Against this backdrop, we evaluated national expenditure trends for aneurysm care relative to U.S. Gross Domestic Product (GDP) and healthcare sector output to contextualize the evolving economic landscape facing vascular surgeons.

Methods: We analyzed nationally representative data from the Medical Expenditure Panel Survey (MEPS), which captures patient-level expenditures, and the National Income and Product Accounts (NIPA), which track national healthcare spending, from 2000-2021. Outcomes included annual aneurysm-related episodes, total expenditures, per capita spending, and cost per case. Trends were evaluated using least squares regression. Expenditures were net of drug rebates and were examined through indices of per capita spending, overall medical care expenditures, and a derived Prevalence Index (treated prevalence = per capita index / medical care expenditure index), reflecting the proportion of patients treated over time. Medicare reimbursement data (2011-2021) were incorporated to provide surgeon-level payment context.

Results: From 2000-2021, aneurysm-related episodes rose by ~41,000 annually ($p<0.0001$). Total expenditures increased by $98M/year ($p<0.0001$), while cost per case declined $11.33 annually ($p=0.011$). Per capita spending increased steadily (0.0263/year, $p<0.0001$), whereas the Medical Care Expenditure Index declined (-0.0039/year, $p=0.011$). The Prevalence Index increased 0.0335/year ($p<0.0001$), indicating that more patients were treated over time.

Conclusions: National aneurysm care has expanded with greater efficiency and lower per-case costs. Yet surgeon reimbursements have eroded and hospital margins are strained, underscoring a growing disconnection between clinical efficiency and surgeon reimbursement. It is essential for vascular surgeons to secure equitable reimbursement and preserve high-quality aneurysm care.

Figure 1. Annual Cost Per Case for Aortic, Peripheral, and Visceral Artery Aneurysms.



7:24 – 7:36 am	14	**Sex-based Differences In Macrophage Activation In Abdominal Aortic Aneurysms**
		Ryan Wahidi, Santiago Elizondo-Benedetto, Brigida Rusconi, Mohamed Zayed *Washington University School of Medicine, St. Louis, MO*

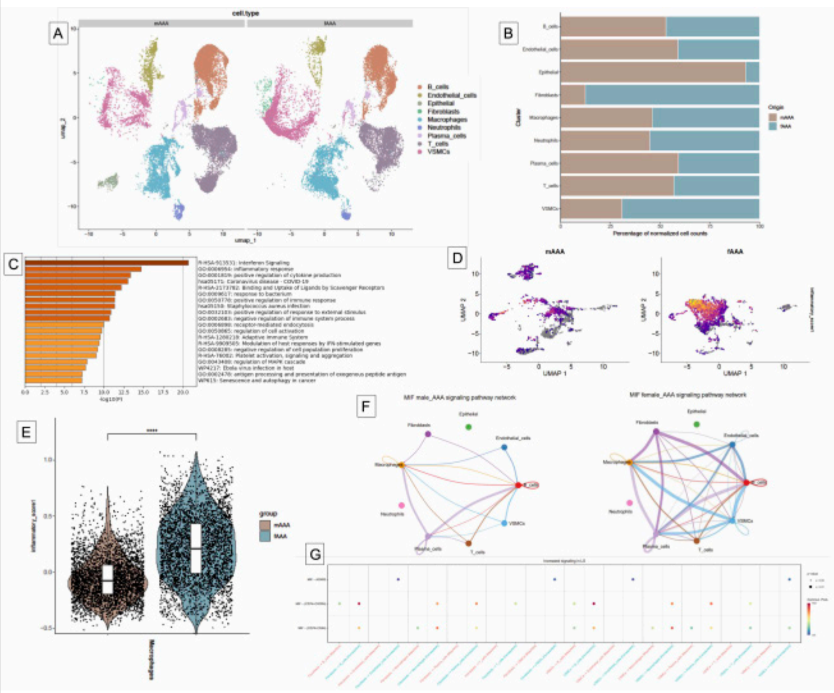
Introduction and Objectives: Abdominal aortic aneurysms (AAAs) have differences in prevalence and progression between males and females, reflected in society guidelines. Pro-inflammatory signaling pathways play a central role in the chronic degeneration of AAAs. We aimed to characterize sex-based differences in AAA macrophage gene expression profiles through integrated multi-institutional single-cell RNA sequencing (scRNA-seq) datasets.

Methods: Three scRNA datasets (GSE166676, GSE213740, and GSE237230) comprised of 11 male AAA (mAAA) and 4 female AAA (fAAA) samples were integrated using Seurat software package. Unbiased clustering and marker gene expression analysis was used for cell classification, and pathway enrichment of differentially expressed genes (DEGs) within macrophage cellular cluster using Metascape. CellChat package was used to develop high-resolution ligand-receptor interaction networks.

Results: Nine unique clusters were identified, with a higher proportion of fibroblasts and vascular smooth muscle cells (VSMCs) in fAAA (Fig.1A&B). Sex-based DEG analysis revealed upregulation of genes leading to interferon signaling and inflammatory response elements in females (Fig.1C-E, $p<0.01$), specifically including CD68, CD163 and S100A12 genes (Fig.1D-E). Furthermore, the signaling network for macrophage migration inhibitory factor (MIF) was substantially altered between mAAA and fAAA (Fig.1 F&G, $p<0.01$).

Conclusions: Macrophage activation in AAAs appears to significantly vary by sex, and in females demonstrates specific increase in interferon and MIF signaling. These findings suggest sex-specific immune mechanisms may contribute to known differences in AAA disease progression and provide future opportunities for therapeutic targeting.

Figure 1.


A
B
C
D
E
F
G
mAAA
fAAA
B_cells
Endothelial_cells
Epithelial
Fibroblasts
Macrophages
Neutrophils
Plasma_cells
T_cells
VSMCs
Percentage of normalized cell counts
MIF male_AAA signaling pathway network
MIF female_AAA signaling pathway network
UMAP 1
UMAP 2

7:36 – 7:48 am	15	**Outcomes Of Carotid Endarterectomy Versus Transcarotid Artery Revascularization In Patients With Cardiac Comorbidities**
		Aidin Baghbani, Harleen K Sandhu, Akiko Tanaka, Arash Keyhani, Kourosh Keyhani, Naveed U Saqib, Charles C Miller, III, S. Keisin Wang *University of Texas Health Science Center at Houston, McGovern Medical School, Houston, TX*

Introduction and Objective: Patients with low ejection fraction (EF) or persistent arrhythmia are considered at elevated surgical risk for carotid revascularization. We aimed to compare the outcomes of CEA versus TCAR in this high-risk population.

Methods: We performed a retrospective review of a prospectively maintained, systemwide database of CEA and TCAR procedures between December 2015 and August 2025. High cardiac risk was defined as EF <30% and/or persistent arrhythmia. Baseline characteristics, intraoperative details, perioperative complications, and long-term outcomes were analyzed using stratified contingency testing, Breslow-Day and Cochran-Mantel-Haenszel methods, and Kaplan-Meier and competing-risk survival analyses (Gray's test).

Results: Among 2,466 patients, 405 (16.4%) were high risk (CEA: n=200; TCAR: n=205). Compared with low-risk patients, high-risk patients were older (75.4 vs 71.7 years, p<0.01), had more coronary artery disease (64.4% vs 42.0%, p<0.01) and COPD (18.0% vs 12.4%, p<0.01), and were more often anticoagulated (39.4% vs 5.6%, p<0.01). Protamine use was more common in high-risk TCAR patients (93.7% vs 88.9%, p=0.04). Perioperative outcomes, including ipsilateral stroke (2.0% vs 3.4%), myocardial infarction (4.0% vs 3.4%), and 30-day mortality (3.0% vs 2.4%), were not significantly different between CEA and TCAR in high-risk patients. Median follow-up was 20 months after CEA and 11 months after TCAR. Kaplan-Meier and competing-risk analyses showed no difference in survival or death-adjusted stroke rates (Gray's test p=0.35).

Conclusions: In patients with significant cardiac comorbidities, both CEA and TCAR are safe and durable, with no difference in perioperative or long-term outcomes. Either strategy represents a feasible revascularization option in this high-risk population.

Table 1. Baseline characteristics and medication use in patients with high and low cardiac risk.

Variable	High Cardiac Risk (n=405)	Low Cardiac Risk (n=2061)	Total (n=2466)	P-Value
Age (mean ± SD)	75.4 ± 8.6	71.7 ± 8.8	72.3 ± 8.8	**<0.01**
Female sex	240 (59.3%)	1147 (55.7%)	1387 (56.2%)	0.18
Active smoker	60 (14.8%)	480 (23.3%)	540 (21.9%)	**<0.01**
Body mass index (mean ± SD)	28.7 ± 5.9	28.4 ± 5.8	28.4 ± 5.8	0.34
Hypertension	388 (95.8%)	1942 (94.2%)	2330 (94.5%)	0.20
Hyperlipidemia	317 (78.3%)	1561 (75.7%)	1878 (76.2%)	0.27
Coronary artery disease	261 (64.4%)	866 (42.0%)	1127 (45.7%)	**<0.01**
Diabetes mellitus	164 (40.5%)	854 (41.4%)	1018 (41.3%)	0.73
COPD	73 (18.0%)	255 (12.4%)	328 (13.3%)	**<0.01**
Prior carotid revascularization	10 (2.5%)	80 (3.9%)	90 (3.7%)	0.17
Prior neck dissection	10 (2.5%)	92 (4.5%)	102 (4.1%)	0.07
Prior neck radiation	4 (1.0%)	34 (1.7%)	38 (1.5%)	0.32
Spine immobility	3 (0.7%)	16 (0.8%)	19 (0.8%)	0.94
Medications				
Aspirin	304 (75.3%)	1803 (87.8%)	2107 (85.7%)	**<0.01**
Clopidogrel	264 (65.3%)	1478 (71.9%)	1742 (70.9%)	**<0.01**
Other antiplatelet	10 (2.5%)	50 (2.4%)	60 (2.4%)	0.96
Anticoagulants	159 (39.4%)	115 (5.6%)	274 (11.2%)	**<0.01**
Statins	353 (87.4%)	1818 (88.3%)	2171 (88.0%)	0.52
Beta-blockers	252 (64.1%)	924 (45.0%)	1183 (48.1%)	**<0.01**

Table 2. Postoperative outcomes of patients based on surgical techniques.

Variable	CEA			TCAR			P-Value*
	High cardiac risk group (n=200)	Low cardiac risk group (n=1256)	Total (n=1456)	High cardiac risk group (n=205)	Low cardiac risk group (n=805)	Total (n=1009)	
Follow-up duration (months)	22.9 (2.5-56.6)	19.3 (0.3-59.0)	20.3 (0.4-58.8)	11.6 (1.8-31.9)	11.1 (0.6-29.6)	11.3 (0.9-30.7)	0.44#
Reintervention	5 (2.5)	47 (3.7)	52 (3.6)	7 (3.4)	23 (2.9)	30 (3.0)	0.35* [0.9 (0.47-1.66)]
Ipsilateral stroke	4 (2.0)	60 (4.8)	64 (4.4)	7 (3.4)	29 (3.6)	36 (3.6)	0.20* [0.6 (0.33-1.19)]
Contralateral stroke	4 (2.0)	26 (2.1)	30 (2.1)	1 (0.5)	8 (1.0)	9 (0.9)	0.56* [0.8 (0.32-2.10)]
Myocardial infarction	8 (4.0)	58 (4.6)	66 (4.5)	7 (3.4)	23 (2.9)	30 (3.0)	0.57* [1.0 (0.56-1.74)]
Thrombosis	1 (0.5)	2 (0.2)	3 (0.2)	1 (0.5)	7 (0.9)	8 (0.8)	0.25* [1.0 (0.21-4.48)]
Hospital Length of Stay, days	2 (1-3)	1 (1-3)	2 (1-3)	1 (1-3)	1 (1-2)	1 (1-3)	0.27#
Death 30	6 (3.0)	32 (2.6)	38 (2.6)	5 (2.4)	6 (0.8)	11 (1.1)	0.17* [1. 7 (0.83-3.29)]

*P-Values reflect the Breslow-Day test for homogeneity of odds ratios between TCAR and CEA strata. A non-significant result indicates that odds ratios for high- vs low-risk comparisons are consistent across strata. When applicable, pooled odds ratios from the Cochran-Mantel-Haenszel (CMH) test are reported in parentheses.
#P-Values for continuous variables are derived from an interaction term in a general linear model testing for heterogeneity across treatment strata (TCAR vs CEA).
Continuous data are presented as median with interquartile ranges (IQR) in parentheses.

7:48 – 8:00 am	16	**Clinical Outcomes Of Early Peripheral Vascular Intervention For Claudication Are Poor: A Target Trial Emulation Analysis**
		Chen Dun[1], Andrew Wu[1], Midori White[1], Jamie Schwartz[1], Jesse A Columbo[2], M. Libby Weaver[3], YingWei Lum[1], James H Black, III[1], Harold P Lehmann[1], Caitlin W Hicks[1] *[1]Johns Hopkins University, Baltimore, MD; [2]Dartmouth Hitchcock Medical Center, Lebanon, NH; [3]Spencer Fox Eccles School of Medicine, Salt Lake City, UT*

Introduction and Objective: Patients frequently undergo early peripheral vascular interventions (PVI) within six months of a new diagnosis of claudication, despite uncertain long-term benefits. We applied an emulated target-trial approach to evaluate the association of early PVI for claudication with clinical outcomes.

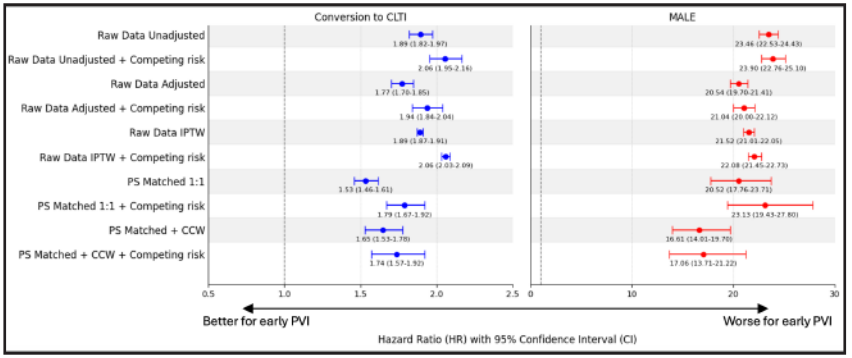
Methods: We conducted an emulated target trial study using 100% Medicare fee-for-service claims (Jan 2017-Dec 2024) to compare patients ≥65 years with newly diagnosed claudication who underwent early PVI vs early medical management only. Outcomes included progression to CLTI and major adverse limb events (MALE, per SVS Objective Performance Goals). We used Kaplan-Meier analysis to estimate the cumulative incidences of the outcomes. For risk adjustment, we created propensity-score matched groups and analyzed them in a clone-censor-weight target trial emulation in our primary analysis. We used Cox regression, inverse propensity-score weighting, and competing-risk methods as sensitivity analyses.

Results: Of 562,561 patients with a new diagnosis of claudication, 14,216 (2.5%) underwent an early PVI. After matching, 14,216 patient pairs were formed with balanced covariates (mean age 74.6, 50.9% male, 67.0% White). At 3 years of follow-up, the cumulative incidence of conversion to CLTI (13.5±1.1% vs. 8.4±0.9% and MALE (22.1±1.1% vs. 1.2±0.4%) were higher for patients who were treated with early PVI vs. medical management (both, $p<0.001$). Early PVI was associated with a persistently increased risk of CLTI (HR 1.65, 95% CI 1.53-1.78) and MALE (HR 16.61, 95% CI 14.01-19.70). Results were consistent across all sensitivity analyses (**Figure**).

Conclusions: In this claims-based emulated trial, early PVI for claudication was consistently associated with higher risks conversion to CLTI and MALE when compared with conservative management. Proceduralists should exercise caution when considering PVI for patients with claudication.

Figure 1. Hazard ratios (95% confidence intervals) for the association of atherectomy with conversion to CLTI (blue bars) and MALE (red bars) among patients undergoing index PVI for claudication across a series of Cox proportional-hazards models.

IPTW, inverse probability of treatment weighting; PS, propensity-score; CCW, clone-censor-weighting.



8:00 – 8:08 am	17 (RF)	**Long-term Outcomes Of The Acellular Tissue Engineered Vessel In Extremity Arterial Trauma Repair: Results From The V005 Trial**
		Michael Curi[1], Sophia Bou-Ghannam[2], Zak Khondker[2], Shamik Parikh[2], Laura Niklason[2] *[1]Rutgers-New Jersey Medical School, Newark, NJ; [2]Humacyte Global Inc, Durham, NC*

Introduction and Objective: To evaluate the long-term safety and efficacy of the Acellular Tissue Engineered Vessel (ATEV) in extremity arterial trauma repair, reporting outcomes through 36 months (M) of follow-up.

Methods: CLN-PRO-V005, a prospective, multicenter, single-arm trial, enrolled 54 patients with extremity arterial injuries in the US and Israel for whom repair with autologous vein was not feasible. Patients underwent implantation of an ATEV as an arterial conduit and were followed out to 36M.

Results: As of April 2025, 23 patients had at least 12M of follow-up. Kaplan-Meier estimated primary patency was 58.3% and 50.8% at 12M and 24M, respectively; secondary patency was 65.7% at 12M and 24M. Limb salvage was 87.3% at 12M, and 82.5% at 24M and 36M. Five of 7 limb loss cases occurred before day 30 post-implant. Estimated survival was 86.8% at 36M. Three conduit infections occurred in 3 patients (5.6%) over the 3-year period, all prior to day-40. Four cases of ATEV bleeding or anastomotic failure occurred, all within 2M, with conduit infection in 3 of the 4 cases; these cases were associated with overlying skin/soft tissue necrosis, conduit exposure to air, and/or localized infection. Conduit thrombosis was experienced in 17 patients (31.5%), 14 of which occurred in year one. Eight patients (14.8%) experienced clinically significant stenosis, 6 of which occurred in year one. Pseudoaneurysm and aneurysm occurred in 2, and 1 patients, respectively, with no new cases reported beyond the first year. Ultrasound imaging demonstrated stable mid-graft diameters without evidence of progressive dilation or narrowing out to 36M.

Conclusions: Long-term V005 outcomes show the ATEV provides durable performance in extremity arterial trauma through 36M, with low infection events, no late ruptures, and stable graft morphology, supporting its long-term safety and durability as a biologic alternative in extremity trauma repair when vein is not feasible.

8:08 – 8:16 am	18 (RF)	**Clopidogrel Resistance Is Not Associated With Adverse Outcomes In Transcarotid Artery Revascularization: A Prospective Single-Center Pilot Study**
		Junette Yu[1], Lilian M. Tran[2], Christina L. Cui[2], Zachary F. Williams[2], Young Kim[2] *[1]Duke-NUS Medical School, Singapore, Singapore; [2]Duke University, Durham, NC*

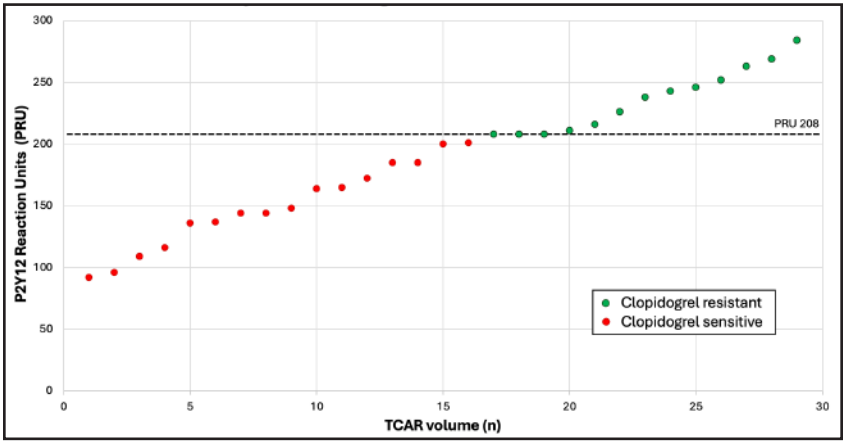
Introduction and Objectives: Patients undergoing transcarotid artery revascularization (TCAR) are started on dual antiplatelet therapy, commonly aspirin and clopidogrel, to maintain stent patency. However, the impact of clopidogrel resistance (CR) on patient outcomes in TCAR is unclear. There are no evidence-based recommendations regarding routine CR testing and subsequent adjustment of antiplatelet therapy.

Methods: All patients undergoing TCAR between 2023-2025 at a single institution were tested for CR via the VerifyNow Assay at time of admission. CR was defined as P2Y12 Reaction Units (PRU) ≥ 208, with five or more days of clopidogrel use. The primary outcomes of interest were stroke and postoperative stent occlusion at 90 days.

Results: A total of 29 consecutive patients undergoing TCAR were included, of which 13 (44.8%) met criteria for CR. Median patient age was 78 years. The majority of patients were male (72.4%) and White race (72.4%). Medical comorbidities were similar between clopidogrel sensitive (CS) and CR groups. Half of patients (48.3%) underwent TCAR for symptomatic stenosis. After a median follow-up period of 307 days, complication rates were low, including postoperative (90-day) stroke (0%), stent occlusion (0%), and mortality (0%). There was no difference in postoperative stroke and stent occlusion rates between CS and CR groups (p=NS each).

Conclusions: Clopidogrel resistance is highly prevalent among patients undergoing TCAR. Resistance to clopidogrel was not associated with adverse outcomes in this single-center analysis, likely owing to the low incidence of postoperative stroke after TCAR procedure. Routine testing for clopidogrel resistance among patients undergoing TCAR may not be judicious use of healthcare resources.

Figure 1. Variability in PRU among Patients after TCAR Procedure.



8:16 – 8:28 am	19	**Transcarotid Artery Stenting Using Flow Reversal For Non-atherosclerotic Carotid Artery Disease**
		Christopher Blackstock[1], Sai Divya Yadavalli[2], Gabriel Jabbour[2], Marc Schermerhorn[2], Samuel Money[1] *[1]Ochsner Medical Center, New Orleans, LA; [2]Beth Israel Deaconess Medical Center, Boston, MA*

Introduction and Objectives: We aimed to explore the use of transcarotid artery stenting under flow reversal (TCAR) in the treatment of non-atherosclerotic carotid artery pathology. Additionally, we made a limited comparison of major adverse outcomes and procedural characteristics of TCAR to transfemoral carotid stenting (TFCAS) for each indication.

Methods: Using the *Vascular Quality Initiative* (VQI) database, we identified patients who underwent TCAR, based on lesion type. We excluded all patients with a lesion type coded as "atherosclerosis" or "restenosis" (of prior CEA, stent, graft, or unspecified). Using the same criteria, we identified patients who underwent TFCAS for non-atherosclerotic lesion type. We then compared procedural characteristics and perioperative outcomes using Wilcoxon test or Chi-squared tests of TCAR vs TFCAS within each lesion type.

Results: A total of 541 patients underwent TCAR for non-atherosclerotic disease, consisting of the following groups defined by lesion type: "spontaneous dissection" (n=206), "trauma" (n=21), "fibromuscular dysplasia" (FMD, n=30), or "other" (as per VQI, which includes aneurysms, n=284). There was no significant difference in total procedure time of TCAR vs TFCAS within any of the groups. Compared to TFCAS, TCAR significantly reduced contrast usage and fluoroscopy time in each group; $p<0.001$ for each comparison. There were no events of stroke or death in patients undergoing TCAR in Trauma or FMD. TCAR had a significantly lower rate of the combined endpoint of stroke or death in both Spontaneous Dissection (7.1% vs 1.9%, $p=0.006$) and Other (8.7% vs 2.1%, $p<0.001$), which remained significant after stratifying for symptomatic status (7.3% vs 1.0%, $p=0.028$; 11.3% vs 3.7%, $p=0.031$).

Conclusions: The indication for TCAR can be extended to include the treatment of non-atherosclerotic carotid pathology. Additionally, TCAR may be favorable to TFCAS in non-atherosclerotic phenotypes by reducing contrast usage and fluoroscopy time as well as lowering the risk of perioperative stroke or death.

8:28 – 8:40 am	20	**Outcomes Following Endovascular Versus Open Management Of Carotid Artery Injury In The National Trauma Data Bank**
		Maha H Haqqani[1], Gurbani Suri[1], Nitin Jethmalani[1], Patricia E Chan[1], Eshani Pareek[2], Christopher J Agrusa[1], Peter H Connolly[1], Brian G Derubertis[1], Sharif H Ellozy[1], Jordan R Stern[1] *[1]Division of Vascular & Endovascular Surgery, Weill Cornell Medicine, New York, NY; [2]Department of Population Health Sciences, Weill Cornell Medicine, New York, NY*

Introduction and Objectives: We analyze contemporary management of blunt and penetrating carotid injuries and compare outcomes following endovascular and open repair.

Methods: The National Trauma Data Bank (2017-2023) was queried for carotid injuries in patients aged ≥16 managed with endovascular or open repair. Baseline characteristics, associated injuries, and in-hospital outcomes were compared between ENDO and OPEN, stratified by mechanism [(BLUNT vs. penetrating (PEN)]. Primary outcomes were stroke and mortality. Multivariable analysis identified independent predictors of stroke and composite stroke-mortality.

Results: Of 3,339 carotid injuries, 54.5% were treated ENDO and 45.5% OPEN. ENDO group were predominantly BLUNT (81%), and OPEN mostly PEN (66%; P<0.0001). ENDO were more likely to have high injury severity (ISS≥15; 74% vs. 69%; P<0.001), longer time to intervention (41h vs. 3h; P<0.001), and interfacility transfer (30% vs. 23%; P<0.0001). Most common ENDO modalities were stenting (60%), embolization (18%), and angioplasty (5.6%); OPEN were primary repair (31%), interposition/bypass (27%), ligation (9.7%), and patch angioplasty (4.7%). On unadjusted analysis, ENDO were more likely to suffer stroke (31% vs. 26%; P=0.025), with no mortality difference (14% vs. 12%; P=0.2). Among PEN injuries, there was no difference between ENDO vs. OPEN for stroke (24% vs. 25%; P=0.9) or mortality (14% vs. 14%; P=0.9). For BLUNT, ENDO had greater mortality (14% vs. 9.0%; P=0.004) but not stroke (33% vs. 29%; P=0.2). On multivariable analysis, ENDO/OPEN/BLUNT/PEN were not independently associated with stroke or stroke-mortality. Predictors of stroke were male gender (OR 0.67; 0.49-0.92; P=0.012), smoking (OR 1.50; 1.09-2.06; P=0.012), and hypertension (OR 1.74; 1.20-2.52; P=0.004). Predictors of stroke-mortality included concomitant TBI (OR 2.49; 1.69-3.68; P<0.001), hypertension (OR 1.71; 1.20-2.44; P=0.003), cardiac complication (OR 2.43; 1.52-3.91; P<0.001), and ISS≥15 (OR 2.03; 1.43-2.90; P<0.001).

Conclusions: Carotid trauma carries significant morbidity, with over a quarter of patients experiencing stroke. Mechanism or operative approach do not seem to predict stroke or stroke-mortality, which is more likely driven by overall injury burden.

8:40 – 8:52 am	21	**Incentives Run Counter To Cost Effective Management Of Carotid Disease**
		Andrew Pan Huang, Luciano Delbono, Jessica Kipfmiller, Peter Henke *University of Michigan, Ann Arbor, MI*

Introduction and Objectives: With the proliferation of different carotid interventions, there is a need to understand the fundamental costs, incentives, and reimbursements for each.

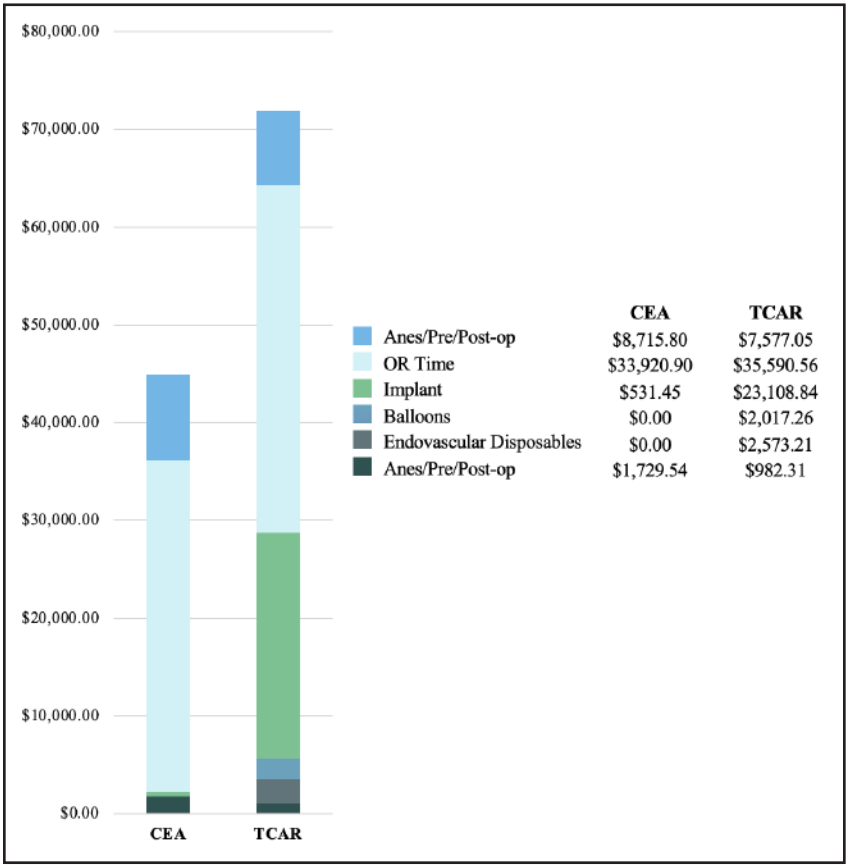
Methods: Using Epic Systems reporting tools, procedural charges, reimbursements (hospital and professional), and patient characteristics were extracted from our institution from 1/1/2014 to 7/1/2025. The US Bureau of Labor Statistics inflation calculator standardized prices to 1/2025. Statistical analysis was performed using packages in Python 3.13.5.

Results: 695 Carotid Endarterectomies (CEA) (31 jaw subluxation) and 159 Transcervical carotid Artery Revascularizations (TCAR) were performed at our institution. Hospital reimbursements favored TCAR (TCAR $65,697.57 > CEA $35,527) and professional reimbursements favored CEA (CEA $1,763 > TCAR $1,397). LOS was similar (CEA 1.53 ± 2.05 days vs TCAR 1.79 ± 3.88 days).

The higher TCAR OR charges are driven by the higher cost of the TCAR system **(Figure 1)**. The average TCAR system charge was $13,318.67 and stent charge was $9,147.30 ($22,465.97 for a single stent case). The consumables outweigh the cost savings from shorter TCAR OR cases (TCAR 164.60 vs CEA 221.79), with the cost savings encompassing a charge of $12,414.81 for an average OR time of $217.08/min. In comparison, the average charge of a patch is $567.71. Jaw subluxation increased OR time by ~45 minutes (+$9,768.60 in OR time) with no change in post-op length of stay (average 1.6 days), increasing hospital reimbursement by $6,246 and professional reimbursement by $1,299.

Conclusions: Our institution is incentivized to perform TCARs by reimbursements greatly outstripping CEA despite device costs outweighing OR time savings. CEA remains a significantly cheaper means of managing carotid stenosis compared to TCAR, even with adjuncts such as jaw subluxation or neuromonitoring.

Figure I. The higher TCAR OR charges are driven by the higher cost of the TCAR system.



	CEA	TCAR
Anes/Pre/Post-op	$8,715.80	$7,577.05
OR Time	$33,920.90	$35,590.56
Implant	$531.45	$23,108.84
Balloons	$0.00	$2,017.26
Endovascular Disposables	$0.00	$2,573.21
Anes/Pre/Post-op	$1,729.54	$982.31

8:52 – 9:00 am	22 (RF)	**Comparison Of Interventions For Symptomatic Carotid Artery Stenosis Among Nonagenarians**
		Randall A Bloch, Elisa Caron, Scott G Prushik, Katie E Shean, Mark F Conrad *Boston Medical Center Brighton, Boston, MA*

Introduction and Objective: Due to an aging population, the prevalence of carotid stenosis among elderly patients will continue to rise. While previous studies report that carotid interventions can be safely performed in octogenarians, there are limited data describing outcomes among patients aged 90 years or older(nonagenarians). This study compares carotid interventions among symptomatic nonagenarians.

Methods: This was a retrospective review of all carotid endarterectomy (CEA), trans-carotid artery revascularization (TCAR), and trans-femoral carotid stenting (TFCAS) procedures performed for symptomatic patients 90 years or older within Vascular Quality Initiative (VQI) from 2017-2023. The primary endpoint was a composite of any in-hospital neurologic event (all strokes or transient ischemic attacks [TIA]) or 30-day mortality (stroke/TIA/death).

Results: 878 procedures were included (559 CEA, 193 TCAR, 126 TFCAS). Relative to CEA, TFCAS was associated with significantly greater odds of stroke/TIA/death (20.6% vs 5.9%, OR [95% CI] = 3.872 [1.787-8.391]), but there was no difference in stroke/TIA/death between CEA and TCAR (5.9% vs 4.2%, O R[95% CI] = 1.196 [0.449-3.188]). Excluding TIA, TFCAS was still associated with significantly greater odds of in-hospital stroke or 30-day mortality (15.9% vs 3.8%, OR [95% CI] = 5.527 [2.466-12.388]) whereas this was similar between CEA and TCAR (3.8% vs 3.6%, OR [95% CI] = 1.764 [0.629-4.944]). The difference in stroke/TIA/death between CEA and TFCAS was primarily due to significantly greater odds of 30-day mortality among the TFCAS group (2.0% vs 11.9%, OR[95% CI] = 6.638 [2.302-19.141]), but TFCAS was also associated with significantly greater odds of ipsilateral stroke/TIA (7.9% vs 3.2%, OR [95% CI]=2.427 [1.020-5.772]) and contralateral stroke (2.4% vs 0.2%, OR [95% CI]=11.158 [1.135-109.685]).

Conclusions: TFCAS for nonagenarians with symptomatic carotid stenosis should be avoided due to exceedingly high rates of stroke/TIA/death and stroke/death. CEA and TCAR are better options due to similarly low stroke/death rates.

Table I. Comparison of outcomes by intervention.

Outcome	CEA, N = 559 (63.7%)	TCAR, N = 193 (22.0%)	TFCAS, N = 126 (14.4%)
Stroke/TIA/Death	5.9%, Ref	4.2%, 1.196 (0.449-3.188)	**20.6%, 3.872 (1.787-8.391)**
Stroke/Death	3.8%, Ref	3.6%, 1.764 (0.629-4.944)	**15.9%, 5.527 (2.466-12.388)**
30-day Death	2.0%, Ref	1.0%, 1.077 (0.209-5.547)	**11.9%, 6.638 (2.302-19.141)**
Ipsilateral Stroke/TIA	3.2%, Ref	3.6%, 1.225 (0.476-3.152)	**7.9%, 2.427 (1.020-5.772)**
Contralateral Stroke/ TIA	0.5%, Ref	1.0%, 2.462 (0.402-15.064)	2.4%, 3.334 (0.541-20.556)
Ipsilateral Stroke	1.6%, Ref	3.1%, 1.961 (0.689-5.582)	3.2%, 2.004 (0.607-6.613)
Contralateral Stroke	0.2%, Ref	1.0%, 6.381 (0.570-71.422)	**2.4%, 11.158 (1.135-109.685)**
Cerebral Hyperperfusion	0.4%, Ref	0.0%, N/A	**4.0%, 10.534 (1.877-59.105)**

9:00 – 9:12 am	23 (RF)	**Perioperative Antiplatelet And Anticoagulation Outcomes After Trans Carotid Artery Revascularization**
		Ali Hakimi, Tarik Ali, Shreya Rawat, Christina Schweitzer, Leana Dogbe, Ahsan Zil-E-Ali, Faisal Aziz *Penn State Hershey, Hershey, PA*

Introduction and Objectives: While dual antiplatelet therapy (DAPT) remains standard for transcarotid artery revascularization (TCAR), many patients require anticoagulation for comorbid conditions. Limited data exists comparing alternative antithrombotic strategies. We aimed to evaluate the outcomes of different regimens in patients undergoing TCAR.

Methods: We performed a retrospective cohort study using the Society for Vascular Surgery Vascular Quality Initiative TCAR Surveillance Project database (2016-2025). Among 75,813 TCAR patients, we compared four groups: DAPT (n=63,206, 83.4%), single antiplatelet plus anticoagulation (SAPT+AC, n=5,111, 6.7%), triple therapy (TT, n=6,105, 8.1%), and anticoagulation alone (AC, n=1,391, 1.8%). Primary outcomes included 30-day mortality, neurologic events, and composite death/stroke. Secondary outcomes evaluated major cardiac events, bleeding complications, and restenosis. Multivariate logistic regression controlled for confounders including age, gender, race, BMI, comorbidities, and procedural factors.

Results: DAPT demonstrated superior outcomes with lowest 30-day mortality (0.3%), neurologic events (1.30%), and composite death/stroke (1.59%). After adjustment, SAPT+AC had significantly higher odds of neurologic events (AOR 1.49, 95% CI 1.19-1.88, p=0.001) and composite death/stroke (AOR 1.53, 95% CI 1.25-1.88, p<0.001) compared to DAPT. AC alone showed highest risk for neurologic events (AOR 2.32, 95% CI 1.68-3.19, p<0.001) and composite death/stroke (AOR 2.03, 95% CI 1.51-2.74, p<0.001). Triple therapy showed comparable outcomes to DAPT with no significant differences in adjusted analyses. Bleeding rates increased progressively: DAPT (1.6%), SAPT+AC (2.0%), TT (2.5%), AC alone (2.7%). Within SAPT+AC, P2Y12 inhibitors demonstrated significantly lower intracranial bleeding than aspirin (0.37% vs 1.12%, p=0.005). Severe restenosis (≥70%) was rare but highest in AC alone (0.58% vs 0.05% for DAPT, p<0.001)..

Conclusions: DAPT remains optimal for patients undergoing TCAR. For those requiring anticoagulation, triple therapy appears preferable to SAPT+AC, achieving outcomes comparable to DAPT despite marginally higher bleeding risk. When single antiplatelet therapy with anticoagulation is required, P2Y12 inhibitors are safer than aspirin, particularly regarding intracranial bleeding risk.

9:15 – 10:15 am	**SPECIAL SESSION: Review of CREST**
Moderators	Mel Sharafuddin & Lindsey Korepta
Invited Guest Speaker	Wesley S. Moore, MD
10:30 – 11:30 am	**Industry Sponsored Session**

1:00 – 3:00 pm **CASE REPORT SESSION with My Worst Case Invited Speakers**
Moderator: Donald Baril

1:00 pm	C1	**Novel Use Of The Enroutetm System For Total Endovascular Aortic Arch Repair**
		Nicole Hatala, Jennifer Huffman, Jonathan Bath, Todd Vogel, Steven Cheung, Uttara Nag *University of Missouri, Columbia, MO*

Introduction and Objective: Endovascular techniques offer an alternative to conventional open repair for patients with aortic arch pathology; however, there remain challenges in maintaining cerebral blood flow and avoiding perioperative stroke. In this report, we describe an approach to total endovascular aortic arch repair using in situ laser fenestration and the Enroute™ system to maintain antegrade cerebral perfusion.

Methods: A 73-year-old man with multiple medical co-morbidities presented with symptomatic expanding aortic arch aneurysm following prior ascending repair for acute type A dissection. Residual dissection extended from zone 0-11 with entry tear within the arch. Options for repair were discussed in a multidisciplinary fashion and he was deemed to not be a candidate for extensive open surgery. Total endovascular arch repair was performed using a Medtronic Valiant device. In situ laser fenestration of the left common carotid followed by innominate and left subclavian arteries was performed utilizing a co-axial system with a 7F steerable sheath followed by placement of bridging stents. The Enroute system was used to maintain distal perfusion to the left common carotid artery until bridging stent was placed and flow restored.

Results: The patient had no immediate complications and was discharged home three days post operatively without any major cardiac or cerebrovascular events within the first 90 days.

Conclusions: TEVAR is an accepted minimally invasive option for aneurysm. However, when disease extends into the aortic arch, consideration for arch vessel perfusion is required. Historic approaches include arch debranching via a median sternotomy or other extra thoracic debranching techniques. This novel use of the Silk Road flow reversal system facilitated minimally invasive repair, while maintaining perfusion to the brain while performing in-situ laser fenestration.

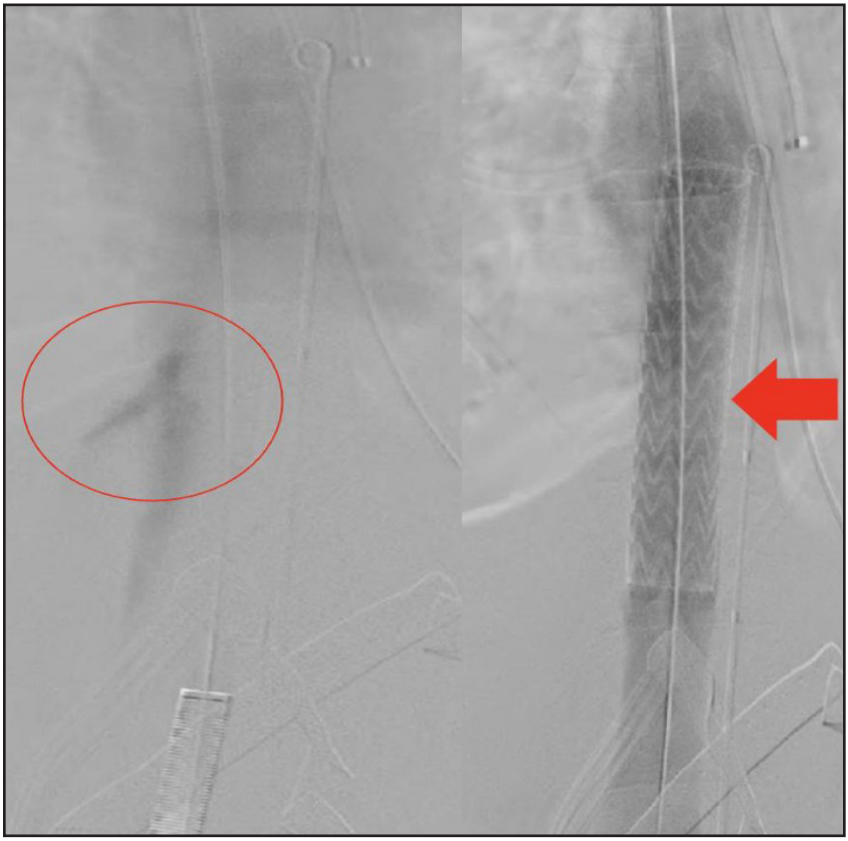
1:08 pm	C2	**An Amateur Boxer With A Covered Aortic Stent Graft For A Retrohepatic Caval Injury: Long Term Outcomes**
		Ashley Wang[1], Brianna-Marie Riu[1], Justin Rodriguez[1], Eric Robinson[1], Aldin Malkoc[1], Salma Memon[2]2, Elias Wassel[1], Samuel Schwartz[1] *[1]Arrowhead Regional Medical Center, Colton, CA; [2]Saint George's University, St George's, Grenada*

Introduction and Objective: An 18-year-old amateur boxer sustained a retrohepatic caval gunshot wound and presented at a level I trauma center. The patient also had a 3-liter right hemothorax and hepatobiliary penetrating injuries. We present the successful management of an emergent retrohepatic inferior vena cava injury using novel technique.

Methods: Due to the patient's hemodynamic instability, a GORE cTAG (21 x 21 x 100 mm) was placed to control bleeding. Post-procedurally, the stent migrated 1.5 cm cephalad into the right atrium, but hemorrhagic control was obtained. A second stent graft was placed more caudally (cTAG 28 x 28 x 100 mm) to anchor the first stent graft in place while the patient recovered from his other traumatic injuries.

Results: Using a multi-disciplinary approach with Cardiothoracic Surgery, the patient underwent open fixation and trimming of the initial stent graft while on cardiopulmonary bypass one month after initial presentation. The retrohepatic cava was not replaced with a prosthetic conduit due to concern from an infectious standpoint, as the patient's traumatic injuries included a bile leak that was treated with a bile stent.

Conclusions: Two years post-procedure, the patient has returned to boxing and has no long-term morbidity. Serial CT scans have revealed resolution of his biliary/hepatic injuries. The aortic stent grafts are stable without any radiographic evidence of infection. This is the first documented case in the literature of long-term follow-up of a retrohepatic caval injury treated with a hybrid endovascular and open cardiac approach.



1:16 pm	C3	**Long-term Durability Of Kissing Covered Aortic Stent Grafts For Treatment Of Iatrogenic Left Common Iliac Vein Injury During Anterior Lumbar Interbody Fusion**
		Justin A Rodriguez[1], Brianna-Marie A Riu[1], Ashley Wang[2], Eric Robinson[2], Aldin Malkoc[2], Angel Guan[2], Elias Wassel[2], Samuel Schwartz[1] *[1]Arrowhead Regional Medical Center, Colton, CA; [2]Arrowhead Regional Medical Center, Colton, CA*

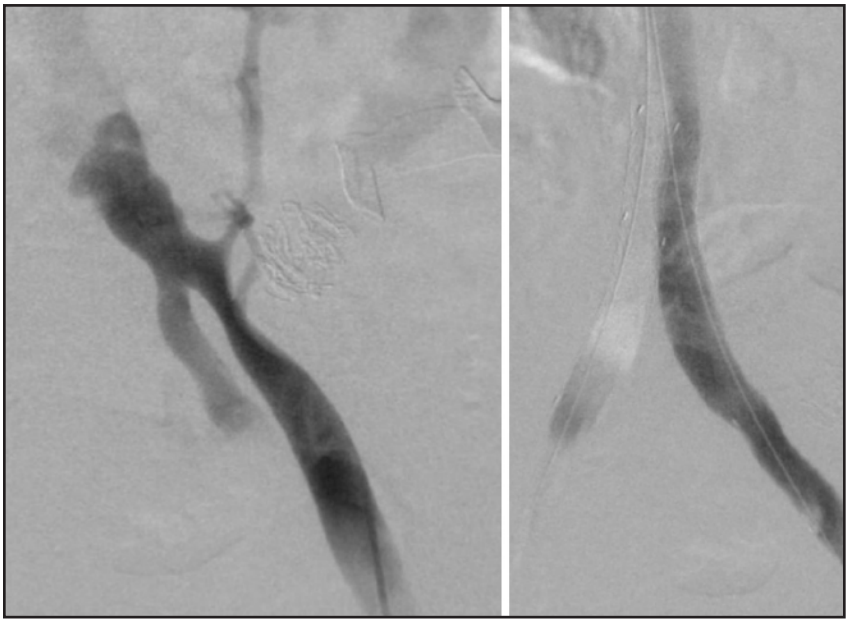
Introduction and Objective: A 57 year old morbidly obese female underwent a L4-L5 anterior lumbar interbody fusion (ALIF) at a community hospital. During the procedure, the Cobb elevator inadvertently transected the left common iliac vein. Only two PRBCs were available in the blood bank (post COVID pandemic). A decision was made to manage the injury endovascularly to avoid massive blood loss

Methods: Arterial and venous femoral access was obtained. An arteriogram revealed no arterial injuries. A venogram identified the injury at the origin of the left common iliac vein. A wire and support catheter were able to cross the injury. Intravascular ultrasound was used to obtain appropriate sizes for stent deployment. Since the injury involved the inferior vena cava bifurcation, kissing aortic stent grafts were deployed (Gore Excluder iliac limbs - 18 and 16 mm diameter). Successful hemorrhage control was obtained (Figure 1).

Results: The patient survived the hospitalization but was minimally ambulatory from concomitant nerve injury during her spine procedure. The patient was placed on anticoagulation for life.

Conclusions: The patient has had nearly three years of follow-up with axial imaging. The patient has had modest recovery and can stand with assistance for prolonged periods of time. The stents have been stable radiographically without migration. Hemorrhage from major truncal venous injury can be fatal, especially in the setting of blood bank exhaustion. Endovascular solutions are available with long-term durable results. Figure 1: Before (A) and after (B) kissing aortic stent graft deployment.

Figure 1.



1:24 pm	C4	**Percutaneous Repair Of Access-related Femoral Artery Pseudoaneurysms Using A Suture-mediated Closure Repair Device With Ultrasound-only Guidance – A Case Series**
		Dominic Facciponte[1], Jenaya Goldwag[2], Mark Eid[1], Brianna Krafcik[1], Thomas Cheng[1], Matthew Alef[1] *[1]Dartmouth-Hitchcock Medical Center, Lebanon, NH; [2]Concord Hospital, Concord, NH*

Introduction and Objective: Iatrogenic femoral artery pseudoaneurysms (PSAs) are a known complication following endovascular access procedures. Traditionally, PSAs that meet criteria for intervention can be managed with open surgical repair, compression, thrombin injection, or endovascular covered stent-grafting depending on anatomic characteristics and patient factors. In this series we review three cases to discuss an uncommon, minimally invasive approach to consider in the treatment algorithm.

Methods: We describe a limited case series of co-morbid patients (n=3) who developed post-procedural common femoral artery (CFA) PSAs that were repaired using a percutaneous suture-mediated closure repair (SMCR) device with ultrasound alone for imaging guidance. Longitudinal axis ultrasound views were used in each instance to better define access and SMCR in real-time. Intraoperative and formal post-operative duplex ultrasound were used to assess repair.

Results: Technical success was 100% for the three cases (SMCR without open CFA exposure). Ultrasound-guided needle access was performed via longitudinal view with placement of a 0.018 wire through the PSA neck. A Cook Medical microsheath was inserted with upsizing to a 0.035 wire through the PSA neck into the external iliac artery. Two Abbott Perclose Prostyle devices were deployed through the PSA neck and cinched down successfully. In each case on color doppler mode the PSA was immediately noted to be thrombosed. Formal duplex ultrasonography confirmed a thrombosed PSA with no flow into the neck as well as normal, triphasic CFA waveforms.

Conclusions: In high-risk surgical patients this technique is expedient, eliminates radiation/ contrast exposure, and obviates the risks associated with open vascular reconstruction. In the management algorithm for CFA PSAs, this technique should be considered as a durable repair option for similar risk-profile patients.

1:32 pm	C5	**Novel Use Of The Venous Inari Protrieve Sheath For Embolic Protection In The Endovascular Treatment Of A Symptomatic Descending Aortic Thrombus**
		Maria Coluccio, Manasa Kanneganti, Patricia Yau *Montefiore Medical Center, Bronx, NY*

Introduction and Objective: Primary aortic thrombi are rare but carry a high risk of morbidity and mortality due to distal embolization. While endovascular treatment can be effective, the risk of embolization is high. We present a novel use of the Inari Protrieve Sheath for distal embolic protection during endovascular treatment of a large descending thoracic aortic thrombus. A 67-year-old woman with recently diagnosed endometrial cancer presented with acute hypoxic respiratory failure and right lower extremity rest pain. CTA demonstrated a near-occlusive thrombus in the descending thoracic aorta, occlusions of the right common and superficial femoral arteries, splenic infarcts, and a pulmonary embolism. Given her lower extremity ischemia and ongoing embolic risk, she was offered lower extremity thrombectomy and endovascular aortic thrombectomy and repair.

Methods/Results: An open thromboembolectomy of the right femoral vessels returned chronic and subacute thrombus. The Inari Protrieve sheath was deployed just above the celiac artery for distal embolic protection. Aspiration thrombectomy was performed using the Inari Triever20, resulting in embolization of a large amount of thrombus, which was successfully captured by the Protrieve basket. A Cook Alpha (28 x 155 mm) endograft was deployed in the proximal descending thoracic aorta to exclude residual thrombus. She was extubated and discharged home uneventfully on Lovenox.

Conclusions: This case demonstrates the novel use of the Protrieve sheath as an effective embolic protection tool in the endovascular treatment of symptomatic descending aortic thrombus.

Figure 1. Aortic Thrombus.

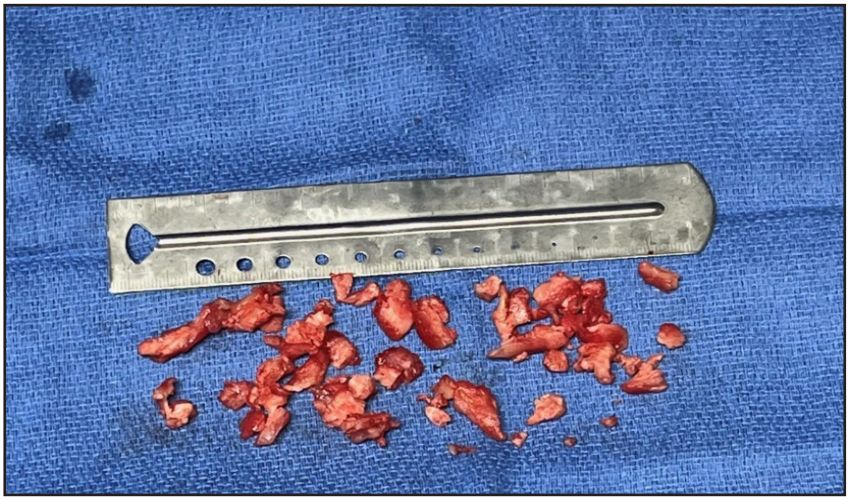
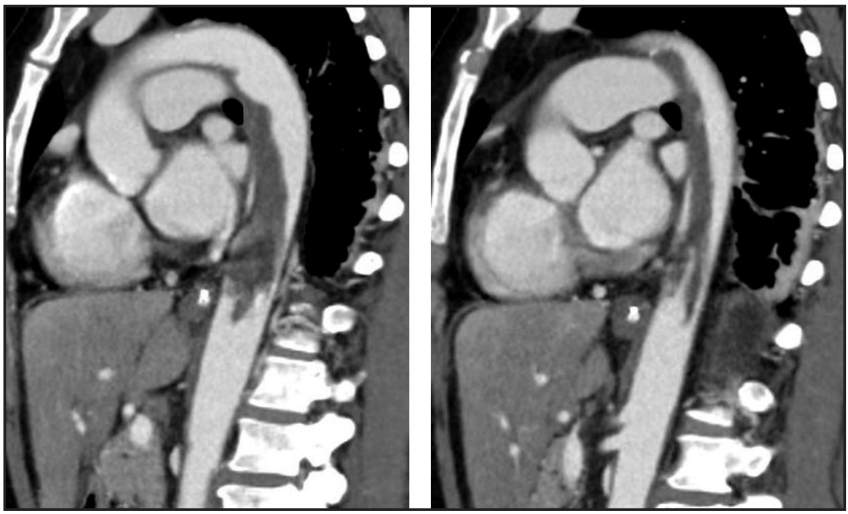


Figure 2. CTA of Thoracic Aortic Thrombus.



1:40 pm	C6	**Extra-anatomic Endovascular Bypass With Venous Stent After External Iliac Vein Ligation During Robotic Inguinal Hernia Repair**
		Fatima Mustansir, Erin McIntosh, Shir LI Tay, Zachary J. Wanken *Washington University in St. Louis (WashU Medicine), St. Louis, MO*

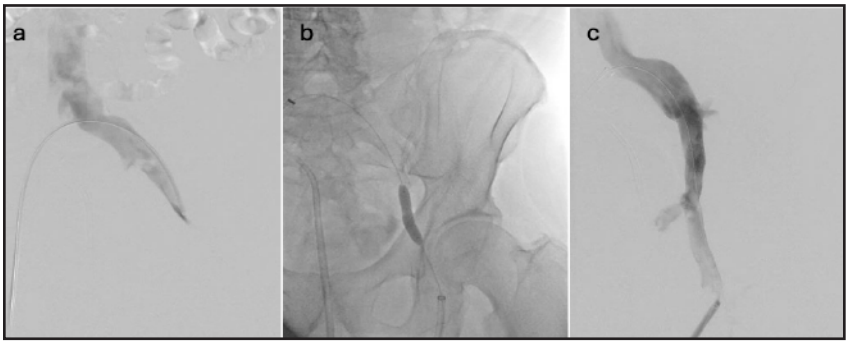
Introduction and Objective: Extra-anatomic endovascular venous bypass has been described for long segment central venous occlusions in dialysis access patients. There do not appear to be reports of such methods being employed for the treatment of symptomatic lower extremity venous occlusions. A unique etiology for external iliac vein occlusion is iatrogenic injury during robotic or laparoscopic inguinal hernia repair.

Methods: We present the case of a healthy male patient who came to the emergency room after his left external iliac vein was injured and ligated during a robotic inguinal hernia repair. His symptoms included moderate left lower extremity swelling without acute limb threat, for which he was initially treated with anticoagulation and compression. One month later, he was recommended to undergo endovascular intervention and recanalization to allow him to remain symptom free in the long-term.

Results: He underwent an iliocaval venogram, suction thrombectomy and extra-anatomic reconstruction of the left iliac venous system. After unsuccessful attempts at gaining wire access through the ligated section of vein (Figure 1a), an extra-anatomic channel was created through purposeful venous perforation above and below the occluded vein segment and wire was snared for through and through wire access (Figure 1b). Two overlapping venous stents were then deployed across this channel and subsequent venogram demonstrated substantial improvement in flow with resolution of collaterals (Figure 1c). Postoperative venous duplex study and CT venogram demonstrated patent stent and he was eventually transitioned off anticoagulation.

Conclusions: Extra-anatomic endovascular venous bypass of a lower extremity venous occlusion is not a frequently described procedure. Our experience has shown patency at one-year post-procedure with continued symptom relief, and therefore, a suitable alternative to open surgical repair.

Figure 1. (a) Initial venogram with occluded left iliac venous system, (b) through and through wire access with balloon dilation of extra-anatomic channel, (c) stented extra-anatomic channel with excellent flow through this segment.



3:00 – 3:45 pm	**Industry Sponsored Session**
3:00 pm	**Registration Re-Opens**
3:00 – 4:00 pm	**Coffee/Snacks – Visit Exhibitors**

4:00 – 6:00 pm **SCIENTIFIC SESSION III**
Moderators: S. Keisin Wang, Karan Garg & Mark Eid

4:00 – 4:12 pm	24	**Temporal Artery Biopsy And Its Impact On Glucocorticoid Management In Patients With Suspected Giant Cell Arteritis**
		Amelia Grace Fogle[1], Adriana Gutierrez Yllu[2], Ysabel Munoz[1], Vienna Wang[1], Rae S Rokosh[3], Olamide Alabi[3] *[1]Emory University School of Medicine, Atlanta, GA; [2]Emory University School of Public Health, Atlanta, GA; [3]Emory University Hospital, Atlanta, GA*

Introduction and Objectives: Temporal artery biopsy (TAB) is frequently requested for patients with clinical suspicion of Giant Cell Arteritis (GCA). We aim to characterize glucocorticoid management practices following TAB and adverse events in the setting of suspicion for GCA.

Methods: All TABs performed in our academic health system between 2016-2023 were reviewed. Sociodemographic data, presenting symptoms/exam findings, TAB procedural and pathology reports, dates of steroid use, and follow-up through 2 years were collected. Pathology results for 11 TAB were deemed "inconclusive" and categorized based on expert agreement from a rheumatologist and pathologist to 'treat as positive' or 'treat as negative'. Adverse events from steroid use were abstracted. Patient-specific and procedure-related variables were stratified by duration of steroid use and TAB result and compared.

Results: Among 200 subjects who underwent TAB (median age 72 [IQR:65-78], 75.5% female, 50.0% White), overall follow-up was 589.5 [IQR:107.5-717] days. TAB-positive rate was 13.0% (n=26), 53.9% of TAB-positive patients remained on steroids between 7mo-2 years, and 44.4% of TAB-positive patients transitioned from steroid to steroid-sparing GCA treatment. 84.5% of TAB-negative patients were maintained on steroids. The distribution of steroid utilization was: 28 (14.0%) never initiated on steroids, 105 (52.5%) used steroids for 0-3 months (7.6% TAB-positive), 15 (7.5%) for 4-6 months (20.0% TAB-positive), and 52 (26.0%) for 7mo-2 years (26.9% TAB-positive) (p=0.003). Diagnosis of a new steroid-related adverse event was stratified by TAB result (Table 1).

Conclusions: We recommend increased utilization of the weighted scoring system published in the 2022 American College of Rheumatology GCA guidelines as well as temporal artery ultrasound to reduce the treatment dilemmas presented by inconclusive/negative TAB results and to reduce adverse events from prolonged steroid use.

Table 1. Diagnosis of New Steroid-Related Adverse Events Stratified by Temporal Artery Biopsy Result.

	TOTAL, n=200	Negative (n=171)	Positive (n=18)	Inconclusive (n=11)
Diabetes mellitus	8 (4.00%)	7 (4.09%)	1 (5.56%)	0 (0.00%)
Time to new diagnosis of diabetes mellitus, days	58 (35-94.5)	52 (26-76)	595 (595-595)	-
Steroid-induced hyperglycemia during index hospital stay	13 (6.50%)	12 (7.02%)	1 (5.56%)	0 (0.00%)
New Hospitalization for steroid-induced hyperglycemia	15 (7.50%)	13 (7.60%)	1 (5.56%)	1 (9.09%)
Hypertension	4 (2.00%)	3 (1.75%)	1 (5.56%	0 (0.00%)
Time to new diagnosis of hypertension, days	46.5 (11-311)	78 (7-544)	15 (15-15)	-
Coronary Artery Disease or Cardiac Event	8 (4.00%	7 (4.09%)	0 (0.00%)	1 (9.09%)
Time to new Coronary Artery Disease or Cardiac Event Diagnosis, days	462 (394-489)	462 (394-612)	-	419.5 (350-489)
Glaucoma	2 (1.00%)	1 (0.58%)	0 (0.00%)	1 (9.09%)
Time to new glaucoma diagnosis, days	81 (62-100)	62 (62-62)	-	100 (100-100
Cataracts	3 (1.50%)	3 (1.75%)	0 (0.00%)	0 (0.00%)
Time to new cataracts diagnosis, days	265 (265-265	265 (265-265)	-	-
New Bone Fracture	11 (5.50%	10 (5.85%)	0 (0.00%)	1 (9.09%)
Time to new bone fracture, days	173.5 (111-325)	147 (111-325)	-	264 (264-264)

4:12 – 4:24 pm	25	**The Impact Of AAA Sac Thrombus Burden On Outcomes After EVAR**
		Cole C Pickney, James F Bena, Courtney Hanak, Ali Khalifeh, Ravi Ambani, Francis J Caputo, Lee Kirksey, Sean P Lyden, Jon G Quatromoni *Cleveland Clinic, Cleveland, OH*

Introduction and Objectives: Contradictory data exists regarding the impact of abdominal aortic aneurysm (AAA) sac thrombus burden (sac thrombus volume/total sac volume, STB), on stent graft-related complications after EVAR. This study evaluated the relationship between STB and AAA-related complications.

Methods: This was a retrospective analysis of elective EVAR from 2010-2020 at a quaternary center. Included devices were FDA approved and implanted on IFU in AAA>5.5cm in males, >5cm in females. Outcomes at 30d, 6mo, and 1yr were collected as well as all EVAR re-intervention at any time point. AAA sac volumes were measured in TeraRecon. Patients were stratified into quartiles by STB (Q1=lowest, Q4=highest). The primary endpoints were EVAR-related re-intervention and endoleak rate. Secondary endpoints were all-cause mortality and aneurysm growth.

Results: Two hundred and eighty-three patients were included. Baseline AAA diameter was significantly different across quartiles (p=0.017). Q4 had greater neck thrombus burden than Q1 and Q2 (p=0.008). Endoleak rate upon completion was significantly different across quartiles (Q1 55.7%, Q2 57.7%, Q3 39.4%, Q4 38.0%; p=0.026). 30d endoleak rate was lower in Q4 than Q1 (11.7% vs 41.3%, p=0.003). Overall mortality was similar between Q1, Q2, and Q3, but higher in Q4 (HR 1.94, p=0.009). Overall re-intervention rate was similar between Q1 and Q2, but lower in Q3 (HR 0.25, p=0.007) and Q4 (HR 0.36, p=0.045). Endoleak rate within year one was similar between Q1, Q2, and Q3 but lower in Q4 (HR 0.22, p<0.001). There was no significant difference in 1-year aneurysm growth across quartiles.

Conclusions: This data suggests that greater STB is associated with lower rate of perioperative, 30-day, and one-year endoleak. Increased STB is also associated with lower rates of EVAR re-intervention. This data may aid decision-making regarding durability and re-intervention rate in EVAR depending on pre-operative sac morphology.

4:24 – 4:36 pm	26	**Bridging The Gap: Vascular Surgery And Primary Care Partnership For Improving Resident Physician Competency In Peripheral Artery Disease Management**
		Natalie Hmeluk, Wato Nsa, Juell Homco, Peter Nelson, Blake Lesselroth, Kimberly Zamor, Kelly Kempe *The University of Oklahoma, Tulsa, OK*

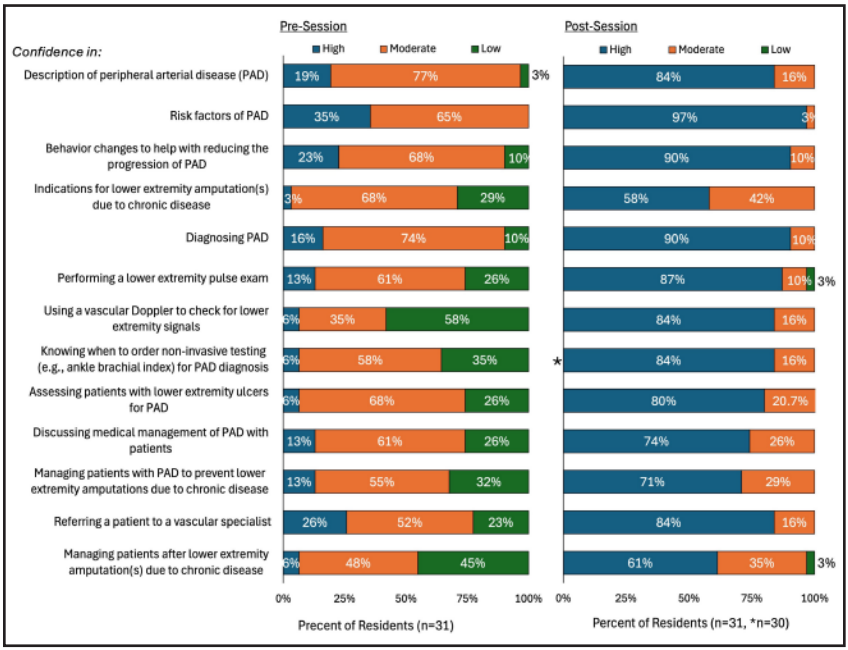
Introduction and Objective: Early diagnosis, establishment of best medical management, and timely specialty referral for patients with peripheral artery disease (PAD) remain ongoing challenges. In this study, we sought to identify gaps in Internal Medicine (IM) and Family Medicine (FM) residents' self-rated competency of PAD management and investigated whether an educational session led by vascular surgeons could promote recognition and confidence in patient care.

Methods: A single educational session, featuring a PowerPoint presentation, hands-on training (pulse and Doppler examination), and open discussion, was separately offered to IM and FM residents. A pre-session survey assessed self-rated knowledge, practices, attitudes, and medical training regarding PAD, followed by a truncated post-session survey. The responses were grouped as high vs. moderate/low. Descriptive statistics and McNemar Exact test were used for paired sample comparison.

Results: Thirty-one residents completed both surveys (65% IM, 35% FM, 58% male and 77% first- or second-year trainees). Pre-session data revealed gaps in knowledge, with few residents rating their understanding as "high." Post-session, there was a significant increase across all measured areas ($p<0.001$, **Fig. 1**). Notably, significant improvements were seen in the number of residents who felt highly confident in diagnosing PAD (from 16.1% to 90.3%), using a vascular Doppler (6.5% to 83.9%), ordering non-invasive testing (from 6.5% to 83.9%), performing a lower extremity pulse exam (from 12.9% to 87.1%), managing PAD for amputation prevention (from 12.9% to 71.0%), and referring to a vascular specialist (from 25.8% to 83.9%).

Conclusions: A significant impact was seen with a singular educational session. This collaborative model between vascular surgery educators and primary care residency programs demonstrates an adaptable framework that successfully addresses a gap in PAD management training.

Figure 1. Residents' Self-Rated Confidence Pre- and Post- Session.



4:36 – 4:48 pm	27	**Association Of Vascular Surgery Interest Groups With Applicant Volume And Match Outcomes: A Multi-year Analysis Of National Residency Match Program Data**
		Calvin Chao, Margaret Reilly, Lara Lopes, Deena El-Gabri, Mark Eskandari, Anand Brahmandam, Tadaki Tomita *Northwestern University, Chicago, IL*

Introduction and Objective: Vascular Surgery Interest Groups (VSIGs) have been established at numerous medical schools to promote early specialty exposure. However, their influence on applicant volume and match outcomes remains incompletely defined. This study evaluates the impact of VSIG presence in an applicant's medical school on national application volume to integrated vascular surgery residency and match performance.

Methods: U.S. allopathic medical schools with active VSIGs were identified via Society for Vascular Surgery registration. Aggregate, de-identified data were obtained from the National Resident Matching Program for 2020-2025 match cycles and compared to U.S. allopathic non-VSIG institutions. Data were normalized by number of institutions in each group and used for univariate analysis.

Results: 428 applicants were identified from VSIG institutions (n=88) versus 142 applicants from non-VSIG institutions (n=76). VSIG institutions demonstrated significantly higher normalized applicant volume per cycle (0.81 vs 0.31, $p<0.0001$) (**Figure 1**) and higher mean annual match rate (79.8% vs 64.9%, $p=0.006$) (**Figure 2**). Applicant volume per school increased at VSIG institutions over time (2020: 0.63; 2025: 0.97), while non-VSIG institutions showed a slight decline (2020: 0.36; 2025: 0.32). No significant differences were found between groups in research, work, or volunteer experiences, or abstract/presentation/publication count. Nationally, research experiences remained stable, work and volunteer experiences declined, and abstract/presentation/publication count increased across the study period.

Conclusions: The presence of a VSIG at a medical school is associated with increased integrated vascular surgery residency applicant volume and improved match outcomes. Early engagement through VSIGs may be an effective strategy to enhance recruitment into vascular surgery.

Figure 1: Normalized Applicant Volume.

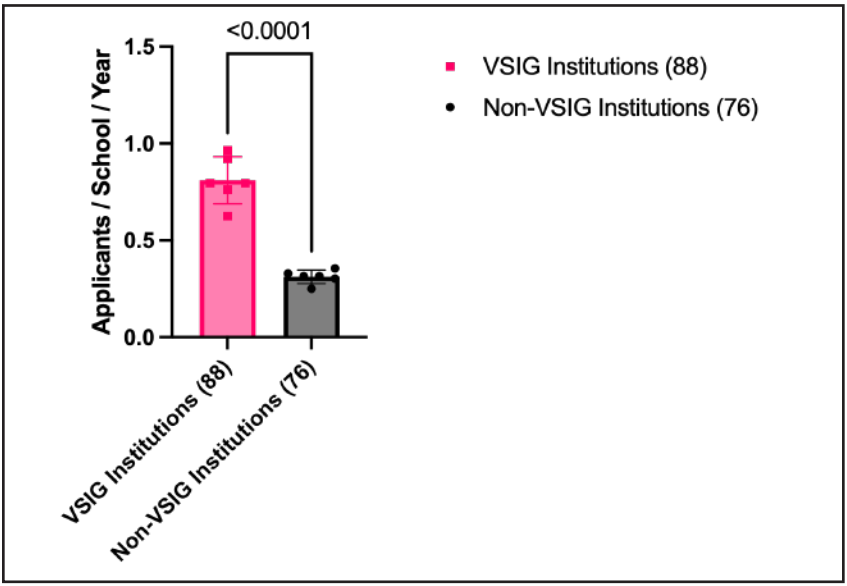
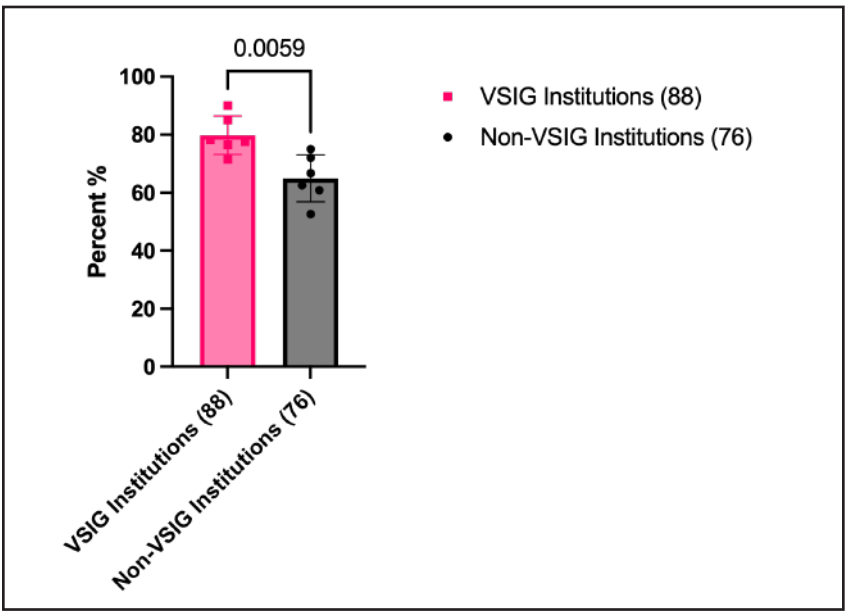


Figure 2: Mean Annual Match Rate.



4:48 – 4:56 pm	28 (RF)	**Who Gets Feedback? Predictors Of Receiving Narrative Feedback In Vascular Surgery Epas**
		Katie Glasgow[1], Ting Sun[1], Brigitte K Smith[2], M Libby Weaver[1] *[1]University of Utah, Salt Lake City, UT; [2]University of Wisconsin, Madison, WI*

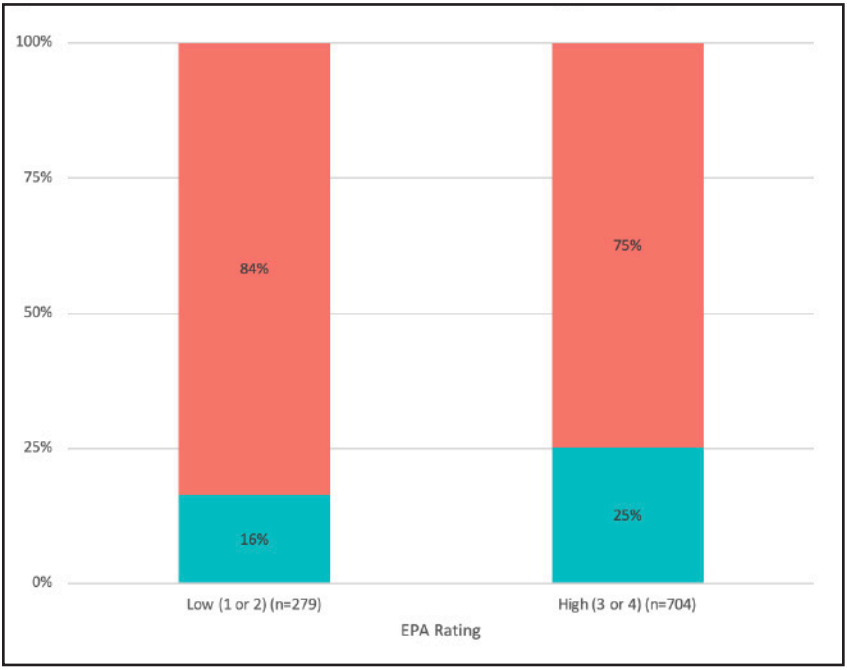
Introduction and Objective: Surgical residents and fellows require high-quality feedback to guide skill development. Entrustable professional activities (EPA) assessments allow for frequent feedback in all phases of care. However, feedback is optional and not always provided. We sought to understand predictors of receiving feedback in a national, multi-institutional study of EPA assessments.

Methods: EPA assessments were collected in a national Vascular Surgery EPA Pilot in 2024. EPAs were rated on a scale of limited participation, direct supervision, indirect supervision and practice ready. Assessments included entrustment score, postgraduate year (PGY), phase of care, and narrative feedback. Self-reported demographic information was collected. A mixed effects logistic regression was performed examining the effect of entrustment ratings, PGY, trainee and faculty gender and gender concordance, trainee underrepresented in medicine (URiM) identification, and phase of care on the probability of receiving narrative feedback, accounting for clustering through random effects.

Results: In total, 1,998 assessments were collected across 19 institutions (n=17 residencies, n=13 fellowships). Faculty submitted 983 assessments with 759 (77%) containing feedback. 58% of trainees were men, 54% were white, and 65% of faculty were men. Phase of care, post-graduate year, faculty gender, trainee gender, faculty-trainee gender concordance, and URiM-identification were not associated with likelihood of feedback. However, higher entrustment ratings were associated with lower odds of receiving feedback (OR 2.76 [95% CI: 1.25-6.10]) (Figure 1).

Conclusions: In this national, multi-institutional study of vascular surgery EPA assessments, demographic characteristics of trainees and faculty were not associated with likelihood of receiving or giving feedback. However, higher performing trainees are less likely to receive feedback. This may limit high-performing trainees' ability to reach their full potential, highlighting the need for ensuring quality feedback across competencies.

Figure 1: Distribution of Assessments with feedback in low versus high performing trainees.



4:56 – 5:04 pm	29 (RF)	**Rethinking Ketamine: No Opioid-Sparing Effect After Major Amputation**
		Demitra Chavez, Diana Otoya, Austin Nguyen, Andrew Mchale, Michael Kazior, Erik Baker, Kathryn Fong, Michael F Amendola, Kedar S. Lavingia *Virginia Commonwealth University, Richmond, VA*

Introduction and Objective: Major limb amputation is plagued by poorly controlled postoperative pain, leading to increased opioid use and impaired recovery. Although multimodal analgesia has demonstrated opioid-sparing benefits, the role of ketamine is unclear. This study evaluated whether postoperative ketamine infusions reduce opioid use or improve pain control following major amputation.

Methods: We conducted a single-center, retrospective review of patients undergoing major lower extremity amputation between 2022 and 2025. Patients were grouped by receipt of postoperative ketamine infusion. Case matching was performed for intraoperative lidocaine use. Primary outcomes included oral morphine equivalents (OME) and pain scores (0-10) through postoperative day (POD) 5. Statistical analyses included paired t-test, Wilcoxon signed-rank test, chi-squared testing, and linear regression.

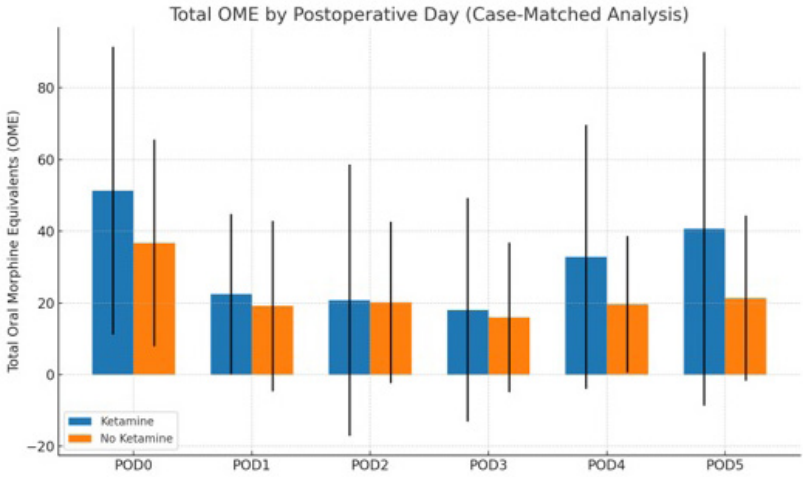
Results: Sixty patients were analyzed. Baseline comorbidities and length of stay were similar between groups. Mean pain scores from POD 0-5 did not differ (2.6 ± 2.6 vs. 2.9 ± 2.6, p=0.33). However, ketamine patients required significantly higher OME in the PACU (2.5 ± 8.0 vs. 10.1 ± 19.3, p=0.025) and on POD 5 (20.6 ± 23.0 vs. 40.1 ± 48.6, p=0.026) (Figure 1). Case-matched analysis (n = 29 pairs) demonstrated no significant differences in OME use, pain scores, or length of stay (Table 1). Notably, 10 of 29 patients (33.3%) in the ketamine group experienced side effects.

Conclusions: Ketamine did not improve pain scores after amputation and was associated with higher OME. These findings challenge ketamine's role as an opioid-sparing adjunct and highlight the need for investigation of alternative strategies for postoperative pain control.

Table 1: Case-Matched Analysis for Lidocaine Use (n = 29 pairs).

Variable	Ketamine (Mean)	SD	No Ketamine (Mean)	SD	P-Value
Length of Stay	17.10	14.43	19.62	24.78	0.88
Total OME POD0	51.29	40.12	36.72	28.85	0.19
Total OME POD1	22.43	22.35	19.09	23.73	0.62
Total OME POD2	20.78	37.86	20.15	22.53	0.28
Total OME POD3	18.02	31.19	15.97	20.88	0.70
Total OME POD4	32.79	36.82	19.60	19.09	0.25
Total OME POD5	40.66	49.31	21.31	23.03	0.24
Avg Pain POD0	2.71	3.22	2.28	3.12	0.48
Avg Pain POD1	3.29	2.69	2.60	2.50	0.34
Avg Pain POD2	2.61	2.30	2.52	2.58	0.58
Avg Pain POD3	2.63	3.00	2.66	2.21	0.90
Avg Pain POD4	2.77	2.25	2.67	2.35	0.82
Avg Pain POD5	2.86	2.40	3.09	2.92	0.86

Figure 1: Total oral morphine equivalents (OME) by postoperative day (POD) comparing ketamine and no ketamine groups (case-matched analysis). Error bars represent standard deviation.



5:04 – 5:12 pm	30 (RF)	**Percutaneous Bedside Decannulation Of Femoral-femoral VA ECMO In A High-Volume Center**
		Julia Fayanne Chen, Adel Barkat, Prashanth Iyer, Rachel Posey, Daniel Hopkins, Adam Betz *Oklahoma Heart Institute, Tulsa, OK*

Introduction and Objectives: Veno-arterial extracorporeal membrane oxygenation (VA-ECMO) decannulation has traditionally been performed in the operating room. Bedside decannulation circumvents potential complications secondary to induction of general anesthesia, decreases length of stay, and decreases overall resource consumption. We describe our experience with percutaneous bedside ECMO decannulation.

Methods: This is a retrospective review of femoral-femoral VA-ECMO decannulations performed at our institution between January 2021 and August 2025. Bedside decannulations were evaluated, in addition to all other closures performed in the operating room or hybrid lab. Primary outcomes evaluated were acute limb ischemia, bleeding requiring intervention, and pseudoaneurysm requiring intervention. Secondary outcomes were length of stay (LOS) from decannulation to discharge and 30-day mortality.

Results: Between January 2021 and August 2025, 162 patients underwent VA-ECMO cannulation and 122 (75.3%) survived to decannulation. 110 (49.4% male, mean age 59.4±15.9 years) had undergone arterial cannulation via the common femoral artery, of which 78 (70.9%) were decannulated percutaneously at the bedside. Indications for ECMO included eCPR (extracorporeal cardiopulmonary resuscitation, n=13), cardiogenic shock (n=40), peri-procedural support for pulmonary embolus thrombectomy (n=23), transcatheter mitral valve replacement (n=1) and transcatheter aortic valve replacement (n=1). Median length of cannulation was 3 days (IQR 2,4). Of these patients, percutaneous decannulation was performed using either the MANTA (n=65) or the Perclose Proglide (n=13) closure devices. Groin or lower extremity complication rate was 5.1% consisting of pseudoaneurysm requiring intervention (n=3) and acute limb ischemia (n=1). There was 1 closure device failure which did not require intervention. There was 1 patient who went into polymorphic ventricular tachycardia ten minutes after decannulation and could not be resuscitated. Median LOS following bedside decannulation was 8 days (IQR 4, 11). 30-day mortality was 10.8% amongst non-emergent patients and 92.3% amongst eCPR patients.

Conclusions: Bedside VA ECMO decannulation is safe and effective in experienced hands with multidisciplinary support.

5:12 – 5:24 pm	31	**Bioengineered Scaffold Seeded With Adipose-derived Stem Cells For Arterial Reconstruction In A Swine Model: A Step Toward On-demand Regenerative Vascular Grafts**
		Grzegorz Jodlowski[1], May Dvir[1], Patrick F Walker[2], John Chi[3], Michel Haddad[3], Zhipeng Liang[4], Eric Bennett[4], Jonathan Morrison[2], Samand Pashneh-Tala[4] *[1]Mayo Clinic, Rochester, MN; [2]Uniformed Services University, Bethesda, MD; [3]Synova Life, Pasadena, CA; [4]Frontier Bio, Hayward, CA*

Introduction and Objective: Options for arterial repair remain limited. Autologous vein is the gold standard but not always available, and synthetic grafts have poor long-term patency due to thrombosis and lack of endothelialization. Tissue-engineered vascular grafts (TEVGs) seeded with stem cells may offer a regenerative solution. We evaluated the feasibility of a polycaprolactone (PCL) scaffold seeded with autologous adipose-derived stem cells (ASCs) as a bedside-manufactured interposition graft in a swine model.

Methods: Electrospun PCL scaffolds were fabricated in advance. In a Yorkshire swine, cervical adipose tissue was harvested at surgery onset. ASCs were isolated and immediately seeded onto a 50 mm × 6 mm scaffold, which was interposed into the left carotid artery. Postoperative monitoring included clinical assessment and Doppler ultrasound for 14 days. At explant, grafts underwent histology and immunofluorescence for smooth muscle (α-SMA, calponin, myosin heavy chains) and endothelial (CD31) markers.

Results: Scaffold fabrication, ASC harvest and seeding, and carotid interposition were successfully completed. The graft remained patent for 14 days without thrombosis, hematoma, or infection (Fig. 1). Histology demonstrated substantial host cell infiltration and extracellular matrix remodeling (Fig. 2). Immunofluorescence revealed a continuous CD31-positive endothelial layer and organized smooth muscle cell populations, consistent with active endothelialization and neo-tissue formation.

Conclusions: An ASC-seeded PCL scaffold functioned as a patent vascular graft in a large-animal model, supporting endothelialization and smooth muscle integration within two weeks. These findings highlight the translational potential of stem cell-seeded scaffolds as next-generation, bedside-manufactured conduits for arterial reconstruction.

Figure 1: The graft remained patent for 14 days without thrombosis, hematoma, or infection.

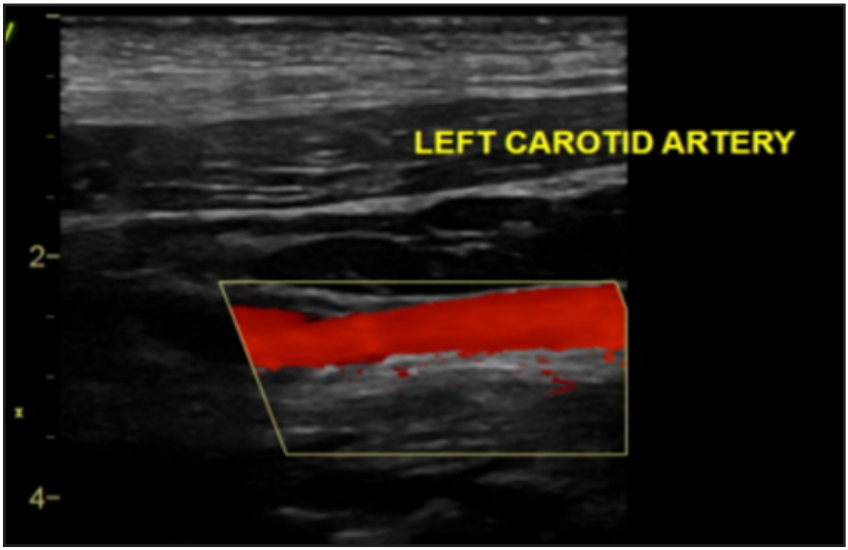
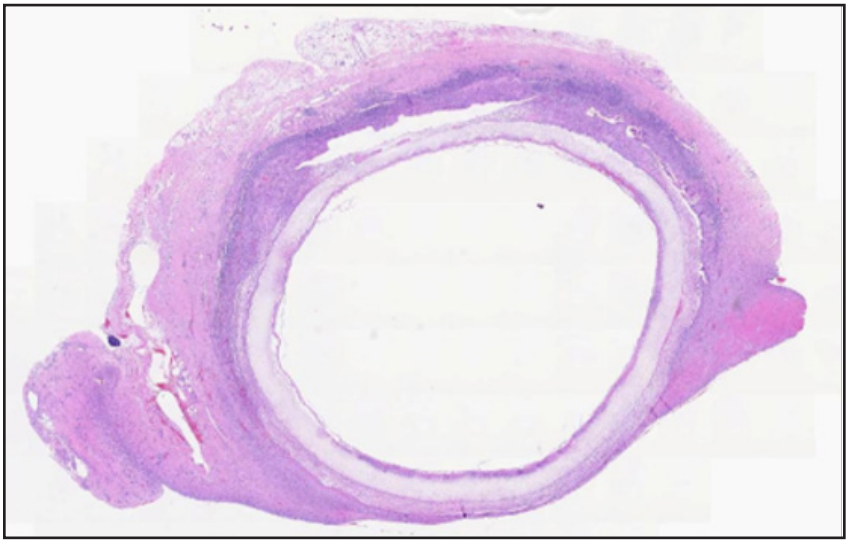


Figure 2: Histology demonstrated substantial host cell infiltration and extracellular matrix remodeling.



5:24 – 5:36 pm	32	**Regional Variations In Training Programs And Practice Location Among Vascular Qualifying Exam Examinees**
		Nikhil Pallem, Colleen McMullen, Daniel Davenport, Tana Repella *University of Kentucky, Lexington, KY*

Introduction and Objective: The predicted shortage of vascular surgeons will disproportionally affect certain regions. Correlation between number of training positions and vascular surgeons per capita in a state suggests future efforts to address workforce shortages should incorporate strategies to increase training opportunities in underserved areas. This study aims to compare regional variations in general surgery residency (GSR), vascular surgery fellowship (VSF), and location upon completion of training of Vascular Qualifying Exam examinees (VQEEs).

Methods: The GSR attended, VSF attended, and state of current residence for all VQEEs who completed a VSF from 2007-2024 was obtained from the American Board of Surgery. Regions were determined according to US Census Bureau.

Results: Of the 2149 VQEEs 433/2149 (20%) completed GSR and VSF at the same institution. Among VQEEs completing GSR in a region the % who completed VSF in that same region was: East North Central 44.40%, East South Central 45.30%, Middle Atlantic 51.00%, Mountain 15.60%, New England 39.20%, Pacific 50.60%, South Atlantic 45.40%, West North Central 47.30%, West South Central 44.70%. Among VQEEs completing GSR in the Mountain region the largest proportion of VQEEs then went on to complete VSF in the South Atlantic (20.30%). Among VQEEs in a region the % who stayed in the same region as their VSF upon completion of VSF was: East North Central 40.00%, East South Central 33.80%, Middle Atlantic 42.60%, Mountain 40.40%, New England 36.70%, Pacific 67.00%, South Atlantic 49.50%, West North Central 31.10%, West South Central 42.90%.

Conclusion: With the exception of the Mountain region the majority of VQEEs will stay in the same region for VSF as their GSR. Among VQEEs who completed fellowship in a region the majority will stay in the same region upon completion of VSF. This suggests strategies for vascular surgeon recruitment should focus on developing training programs in underserved areas.

5:36 – 5:48 pm	33	**Comparative Perioperative Outcomes Of Rescue FEVAR Vs Open Repair For Previous EVAR**
		Daniel Gage, Patrick Quinn, Matthew Corriere, Michael R Go, Xiaoyi Teng, Kristine Orion, Bryan Tillman, Xin K Peng, Babatunde Oriowo, Kyongjune B Lee *The Ohio State University, Columbus, OH*

Introduction and Objective: Redo aortic repair following previous endovascular aortic repair (EVAR) is technically challenging and associated with significant morbidity and mortality. Technological advances in fenestrated/branched endografts have brought forth new endovascular options as a rescue therapy after a failed EVAR. The purpose of this study is to compare the perioperative outcomes between these procedural approaches.

Methods: The Vascular Quality Initiative (VQI) database was queried for patients with a previous history of EVAR in the infrarenal aorta undergoing elective open aortic aneurysm repair or fenestrated endovascular aortic repair (FEVAR) with a physician-modified or custom graft from 2010 to 2024. Interventions for symptomatic aneurysms or aortic rupture were excluded. A univariate analysis was completed with chi square and Fisher's Exact T-test, and outcomes were compared using multivariable logistic regression.

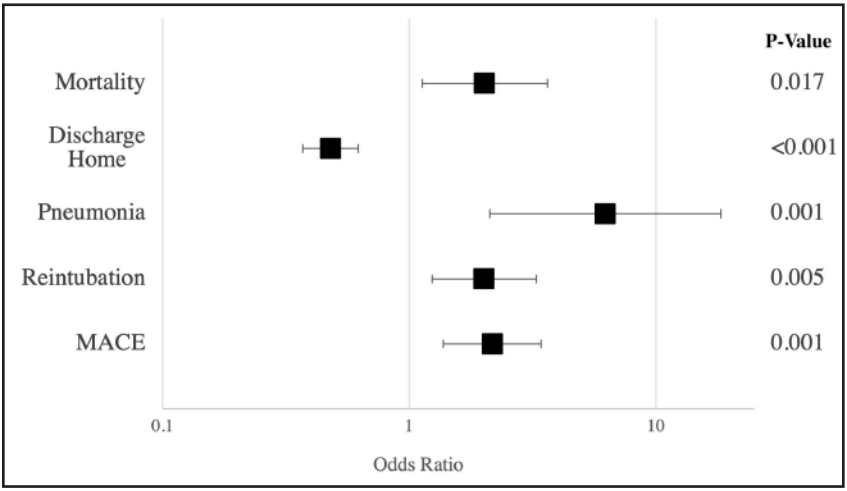
Results: 900 patients underwent open AAA repair, and 653 patients underwent FEVAR following previous EVAR (Table 1). Using multivariable logistic regression, patients undergoing open repair had higher 30-day mortality (OR 2.02, p=0.017), and major adverse cardiovascular event (MACE, OR 2.17, p=0.001). The open cohort had increased morbidity with postoperative pneumonia (OR 6.22, p=0.001), reintubation (OR 2.01, p=0.005), and were less likely to be discharged home (OR 0.48, p<0.001) (Figure 1).

Conclusions: Aneurysm repair following a failed EVAR presents a complex problem with high rate of mortality and morbidity. FEVAR represents a viable repair option with significantly decreased perioperative complications. In patients with appropriate anatomy, FEVAR should be considered as a first line therapy for patients undergoing revision AAA repair following previous EVAR.

Table 1. Comparison of FEVAR and Open Repair following previous EVAR.

Variable	FEVAR (n=653)	Open (n=900)	P-Value
Age	75.6 (74.9-76.2)	72.9 (72.4-73.5)	<0.001
Gender: n (%)	Male: 540 (83) Female: 113 (17)	Male: 765 (85) Female: 135 (15)	0.221
White Race: n (%)	544 (83)	796 (88)	0.004
CAD: n yes (%)	264 (40)	299 (33)	0.004
CHF: n yes (%)	152 (23)	102 (11)	<0.001
COPD: n yes (%)	295 (45)	262 (29)	<0.001
Diabetes: n yes (%)	136 (21)	195 (22)	0.690
Functioning Transplant: n yes (%)	2 (0.3)	2 (0.2)	1.000
Preoperative Dialysis: n yes (%)	19 (3)	9 (1)	0.005
HTN: n yes (%)	610 (94)	818 (91)	0.025
Current Smoking: n yes (%)	168 (26)	181 (20)	0.009
Aneurysm Diameter (mm)	66.3 (65.2-67.5)	73.3 (71.6-74.9)	<0.0001

Figure 1: Open AAA Repair vs FEVAR After Previous EVAR.



5:48 – 6:00 pm	34	**Long-term Outcomes After Medical And Surgical Management Of Blunt Traumatic Aortic Injury**
		Mohyee Ayouty[1], Joseph J DuBose[2], Donna Bahroloomi[1], Adam Surti[1], Robert Matthews[1], Donald Baril[1], Elizabeth Chou[1], Cassra Arbabi[1], NavYash Gupta[1], Ali Azizzadeh[1] *[1]Cedars-Sinai Medical Center, Los Angeles, CA; [2]University of Texas at Austin, Austin, TX*

Introduction and Objectives: Blunt traumatic aortic injury (BTAI) is a common cause of morbidity and mortality after blunt force. Management strategies include medical management (MM), and thoracic endovascular aortic repair (TEVAR). This study evaluated patterns of follow-up and outcomes using data from the international Aortic Trauma Foundation (ATF) registry.

Methods: The ATF prospective multicenter registry was queried for patients who had subsequent follow up at participating centers after management of BTAI. Patients were stratified by injury grade. Collected data included demographics, imaging, medical therapy, complications, and need for re-intervention.

Results: 228 (16.7%) patients had follow-up data: Grade I (n=45), II (n=31), III (n=125), and IV (n=27). MM was pursued in 86.7% of GI, 41.9% of GII, 7.2% of GIII, and 0% of GIV injuries while TEVAR was performed in 13.3% of GI, 58.1% of GII, 90.4% of GII, and 100% of GIV injuries. Anticoagulation was used in 15.7% and anti-platelet therapy in 46.4% (Table 1). Six (2.6%) patients required re-intervention, mostly in GIII: 2 for failure of MM, 2 for stent thrombosis, and 1 for subclavian steal. One patient with GII injury had reintervention for lesion progression. Morbidities (3%) included ischemia from left subclavian artery (LSA) coverage (n=5), embolic complication (n=1), and a graft infection (n=1). Notably, there were no strokes, re-interventions for endoleak, or stent graft-related complications (Table 2).

Conclusions: Both MM and TEVAR demonstrated favorable outcomes with low rates of treatment failure or re-intervention. TEVAR had no device-related complications. However, consistent follow-up remains a challenge in the trauma population.

Table 1.

	Grade I (n=45)	Grade II (n=31)	Grade III (n=125)	Grade IV (n= 27)	Total (n=228)
Descriptive					
Average age (SD)	41.2 (13.4)	47.3 (17.2)	40.0 (19.2)	44.1 (21.0)	41.7 (18.3)
Male/Female	32/13	24/7	94/31	24/3	174/54
Time since BTAI (months)	5.2	9.8	11.5	11.2	10.0
Time to follow up (months)	6.8	12.7	11.5	11.0	11.1
Initial Management					
Medical management	39 (86.7%)	13 (41.9%)	9 (7.2%)	0 (0.0%)	61 (26.8%)
Open repair	0 (0.0%)	0 (0.0%)	3 (2.4%)	0 (0.0%)	3 (1.3%)
Re-intervention after open repair	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Endovascular repair	6 (13.3%)	18 (58.1%)	113 (90.4%)	27 (100.0%)	164 (71.9%)
Endo conversion to open	0 (0.0%)	0 (0.0%)	7 (5.6%)	0 (0.0%)	7 (3.1%)
Endoleak post-op	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (7.4%)	2 (0.9%)
Re-intervention after TEVAR	0 (0.0%)	1 (3.2%)	0 (0.0%)	1 (3.7%)	2 (0.9%)
Imaging obtained					
Total	**32 (71.1%)**	**26(83.9%)**	**104(83.2%)**	**21 (77.8%)**	**183(80.3%)**
CXR	1 (2.2%)	1 (3.2%)	6 (4.8%)	0 (0.0%)	8 (3.5%)
CTA	31 (68.9%)	25 (80.6%)	91 (72.8%)	21 (77.8%)	168 (73.7%)
MRI/MRA	0 (0.0%)	0 (0.0%)	6 (4.8%)	0 (0.0%)	6 (2.6%)
Arteriography	0 (0.0%)	0 (0.0%)	2 (1.6%)	0 (0.0%)	2 (0.9%)
Echocardiogram	0 (0.0%)	1 (3.2%)	3 (2.4%)	0 (0.0%)	4 (1.8%)
Other	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Anticoagulation/antiplatelet					
Total anticoagulation	**8 (17.8%)**	**6 (19.4%)**	**18 (14.4%)**	**4 (14.8%)**	**36 (15.8%)**
LMWH	0 (0.0%)	2 (6.5%)	5 (4.0%)	1 (3.7%)	8 (3.5%)
Warfarin	2 (4.4%)	3 (9.7%)	2 (1.6%)	1 (3.7%)	8 (3.5%)
Total antiplatelet	16 (35.6%)	16 (51.6%)	56 (44.8%)	18 (66.7%)	106 (46.5%)
ASA	13 (28.9%)	16 (51.6%)	55 (44.0%)	18 (66.7%)	102 (44.7%)
Plavix	0 (0.0%)	0 (0.0%)	4 (3.2%)	1 (3.7%)	5 (2.2%)

Table 2.

	Grade I (n=45)	Grade II (n=31)	Grade III (n=125)	Grade IV (n= 27)	Total (n=228)
Re-intervention					
Total	**0 (0.0%)**	**1 (3.2%)**	**5 (4.0%)**	**0 (0.0%)**	**6 (2.6%)**
Failed non-op	0 (0.0%)	0 (0.0%)	2 (1.6%)	0 (0.0%)	2 (0.9%)
Failed open index	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Failed endo index	0 (0.0%)	0 (0.0%)	2 (1.6%)	0 (0.0%)	2 (0.9%)
Re-intervention indicated	0 (0.0%)	1 (3.2%)	1 (0.8%)	0 (0.0%)	2 (0.9%)
Endoleak	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Device compression	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Stent graft fracture	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Stent graft migration	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Flow limiting stenosis or narrowing	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Thrombosis	0 (0.0%)	0 (0.0%)	2 (1.6%)	0 (0.0%)	2 (0.9%)
Infection	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Subclavian steal from coverage of LSA	0 (0.0%)	0 (0.0%)	1 (0.8%)	0 (0.0%)	1 (0.4%)
Morbidities					
Total	**1 (2.2%)**	**1 (3.2%)**	**4 (3.2%)**	**1 (3.7%)**	**7 (3.1%)**
Stroke	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Ischemia from LSA coverage	1 (2.2%)	0 (0.0%)	3 (2.4%)	1 (3.7%)	5 (2.2%)
Extremity ischemia from access	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Bowel/embolus distal to BTAI	0 (0.0%)	1 (3.2%)	0 (0.0%)	0 (0.0%)	1 (0.4%)
Major infectious complication	0 (0.0%)	0 (0.0%)	1 (0.8%)	0 (0.0%)	1 (0.4%)

6:00 pm **VESS Member Business Meeting**

6:15 pm **Industry Sponsored Symposia**

SATURDAY, FEBRUARY 7, 2026

6:00 – 7:00 am	**Continental Breakfast in the Exhibit Hall**
6:00 – 9:30 am	**Registration**

7:00 – 8:08 am	**SCIENTIFIC SESSION IV** Moderators: Bjoern Suckow, Young Kim & Marissa Jarosinski

7:00 – 7:12 am	35	**Lp-182 As A Novel Therapeutic Drug For Abdominal Aortic Aneurysms**
		Brennan Callow, Xiaobing He, Nicholas Juriga, Kevin Heist, Youngsoon Jang, Dominique Pierre-Louis, Brian Ross, Frank Davis *University of Michigan, Ann Arbor, MI*

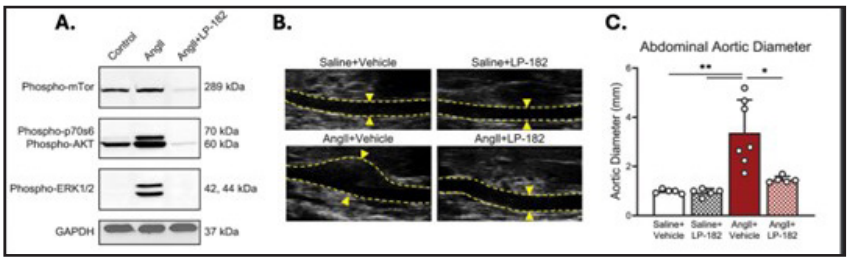
Introduction and Objective: Abdominal aortic aneurysms (AAAs) are a life-threatening disease for which there is a lack of effective pharmacologic therapy preventing aortic rupture. During AAA formation, pathological vascular remodeling is driven by vascular smooth muscle phenotypic transition and macrophage infiltration. VSMC switching and macrophage plasticity are regulated by the mitogen-activated protein kinase (MAPK) pathway and the mammalian target of rapamycin (mTOR), resulting in aortic wall destruction. Recently, LP-182 was identified as a potent and selective, orally bioavailable, multi-functional kinase inhibitor that can specifically target both the MAPK and mTOR pathways. Our goal was to investigate the therapeutic efficacy of LP-182, a dual pathway inhibitor, on AAA expansion.

Methods: Single-cell sequencing (scRNAseq) was conducted on human AAAs and control tissue samples. For our murine model, we used apolipoprotein E knockout mice and infused them with either Ang II to induce AAAs (1 μg/kg/min) or saline. After pump implantation, LP-182 was administered orally daily (400 mg/kg). AAA maximum diameters were quantified by ultrasound. Gene and protein expression were analyzed via qPCR, Western blotting, immunohistochemistry, and ELISA.

Results: scRNAseq revealed that the MAPK and mTOR pathways are significantly upregulated in human AAA VSMCs and macrophages compared to nonaneurysmal controls. In vitro treatment with LP-182 (20 μM) preserves the expression of VSMC contractile markers and also prevents macrophage proinflammatory polarization. In vivo administration of LP-182 to APOE-deficient mice subjected to the AngII-induced murine AAA model resulted in a reduction in AAA development and inhibition of both the mTOR and MAPK pathways.

Conclusions: LP-182 limits macrophage inflammation, prevents VSMC phenotypic transition, and limits AAA progression in a preclinical model, supporting its potential as a targeted therapeutic for AAA.

Figure 1. LP-182 Prevents MAPK and mTOR Activation and Decreases AAA Development. A. MOVAS cells were treated with AngII (25 ng/mL) or AngII+L-182 (20uM) for 8 hrs. Western blot was conducted for phospho-mTor, total mTor, phospho-p70pS, total p70pS, phospho-AKT, total AKT, phospho-ERK1/2, and total ERK1/2. Representative westerns are shown for treatment conditions and proteins of interest. **B.** Representative ultrasound images of the abdominal aorta at day 28 in wild-type mice that received either saline or AngII infusion with or without LP-182 treatment. **C.** Maximal abdominal aortic diameter and aneurysm incidence as determined by ultrasound measured by two observers in *apoE* mice infused with either saline or AngII with or without LP-182 administration (n=5-7 per group).



7:12 – 7:20 am	36	**Top-down Vs. Bottom-up Approach In Open Thoracoabdominal Aortic Reconstruction**
		David P Stonko[1], Robert Aru[2], Li T Tan[1], Qingwen Kawaji[1], Kimberly A Gerling[1], Ying Wei Lum[1], Caitlin W Hicks[1], James H Black, III[1] *[1]Johns Hopkins, Baltimore, MD; [2]Jefferson Health, Philadelphia, PA*

Introduction and Objectives: In open thoracoabdominal aortic reconstruction (OTAR) with distal aortic perfusion, reconstruction may be conducted top-down (TD) or bottom-up (BU). A BU approach may be useful in patients with challenging iliac arteries, where the distal anastomoses are prioritized first. We compared perioperative outcomes and complication risks in OTAR with TD vs. BU approaches.

Methods: Patients who underwent OTAR for thoracoabdominal aortic aneurysm or chronic dissection from 2015-2025 were retrospectively identified at a tertiary-care hospital. Exclusion criteria were age < 16 years and hybrid aortic repair. In-hospital mortality (primary outcome) was compared for TD vs. BU patients. Secondary outcomes were AKI, SCI and hospital LOS.

Results: Forty-four patients underwent OTAR (72.7% male, median age 54 years), where 33 (75%) underwent a TD and 11 (25%) underwent a BU approach. Preoperative demographic and comorbidities were not statistically different between groups, except hypertension was less common in TD (46% vs. 82%, P=0.036). Extent of repair (Type 2 [54.5% vs. 27.3%], Type 3 [21.2% vs. 18.2%], or Type 4/completion [24.2% vs. 54.6%], P=0.13), use of prophylactic CSF drain (93.2% vs. 81.8%, P=0.084), transfusions (pRBC 8.3 vs. 7.7 units, P=0.83) and 9,166 vs. 6,677 mL cell saver, P=0.42) were similar between groups. There was no difference in in-hospital mortality (TD 3.0% vs. BU 9.1%, 0.40). Postoperative complications were notable for AKI (63.6% vs. 54.5%, P=0.59), need for new hemodialysis (12.1% vs. 9.1%, P=0.78), transient SCI (21.2% vs. 0%, P=0.10), and permanent paraplegia (6.1% vs. 9.1%, P=0.73). Hospital LOS was similar between groups (15.8 vs. 16.9 days, P=0.90).

Conclusions: Operative parameters and postoperative outcomes were similar in OTAR with either TD vs. BU techniques. The BU approach may be useful in hostile iliac anatomy, and the sequence of the aortic reconstruction should be individualized to patient anatomy and surgeon experience.

7:24 – 7:36 am	37	**Volume Adjusted Calcium Analysis Of Aortoiliac Atherosclerosis As A Predictor Of Mortality**
		Rujul Kumar[1], Joel Kruger[1], Mario Matabele[1], Franziska Röder[2], Doran Mix[1], Michael Stoner[1], Karina Newhall[1] *[1]University Of Rochester School of Medicine and Dentistry, Rochester, NY; [2]University of Groningen Medical Center, Groningen, Netherlands*

Introduction and Objective: Pre-operative cross-sectional imaging guides surgical planning in vascular surgery. Despite the relationship between atherosclerotic burden and surgical success, no studies have adjusted atherosclerotic burden according to lumen volume. Given variability in vessel diameter and significance of aortoiliac disease, we developed a volume-adjusted calcium score (VACS) and evaluated its association with patient outcomes.

Methods: This single-institution retrospective study included 100 patients over nine years who underwent peripheral vascular intervention. Using TeraRecon, calcium and patent lumen volumes were quantified along a contiguous aorto-iliac segment totaling 10 cm generating a VACS. An interclass correlation coefficient (ICC) assessed inter-rater reliability. Patients were stratified into tertiles. Primary outcomes were death at one year and amputation-free survival. Secondary outcomes were re-interventions and number of arteries treated.

Results: The mean patent lumen volume was 9.3 cm^3 ± 4.3 cm^3. ICC was 0.64 with 89% agreement. Intervention type (endovascular, open, hybrid) did not differ between tertiles (p=0.54). Patients with higher VACS were more likely older, have diabetes or hypertension. VACS was not significantly associated with post-operative complications, re-interventions, or amputation-free survival. However, higher VACS was significantly associated with increased 1-year mortality (p=0.004), confirmed with Kaplan-Meier analysis (p=0.0064).

Conclusions: Higher VACS is linked with greater 1-year mortality following intervention, supporting its utility as a pre-operative risk stratification tool. Future studies should compare atherosclerotic burden across arterial beds to clarify its relationship with survival.

Table 1. Baseline Characteristics by Total VACS Groups.

Characteristic	High VACS (N=33[1])	Medium VACS (N=33[1])	Low VACS (N=33[2])	P-Value[2]
Age at Admission	69 ± 9	69 ± 11	59 ± 11	<0.001
Birth Sex				0.2
Male	13 (39%)	20 (61%)	19 (56%)	
Female	20 (61%)	13 (39%)	15 (44%)	
Race				0.005
White	30 (91%)	30 (91%)	27 (79%)	
Black or African American	3 (9.1%)	0 (0%)	7 (21%)	
Unknown / Other	0 (0%)	3 (9.1%)	0 (0%)	
Hispanic or Latino	0 (0%)	1 (3.0%)	0 (0%)	0.7
BMI Average	26.2 ± 5.7	28.8 ± 6.6	27.4 ± 5.8	0.2
Ambulation				0.063
Ambulatory	22 (67%)	28 (85%)	31 (91%)	
Ambulatory with Assistance	10 (30%)	4 (12%)	3 (8.8%)	
Wheelchair	1 (3.0%)	1 (3.0%)	0 (0%)	
Medical history				
Diabetes	17 (52%)	7 (21%)	11 (32%)	0.033
CVD	4 (12%)	2 (6.1%)	5 (15%)	0.6
CAD	14 (42%)	7 (21%)	9 (26%)	0.15
CHF	9 (27%)	6 (18%)	2 (5.9%)	0.065
Dysrhythmia	6 (18%)	6 (18%)	2 (5.9%)	0.3
COPD	14 (42%)	13 (39%)	6 (18%)	0.062
Hypertension	32 (97%)	28 (85%)	21 (62%)	<0.001
Smoking Status				0.3
None	4 (12%)	5 (15%)	2 (5.9%)	
Prior	16 (48%)	15 (45%)	11 (32%)	
Current	13 (39%)	13 (39%)	21 (62%)	

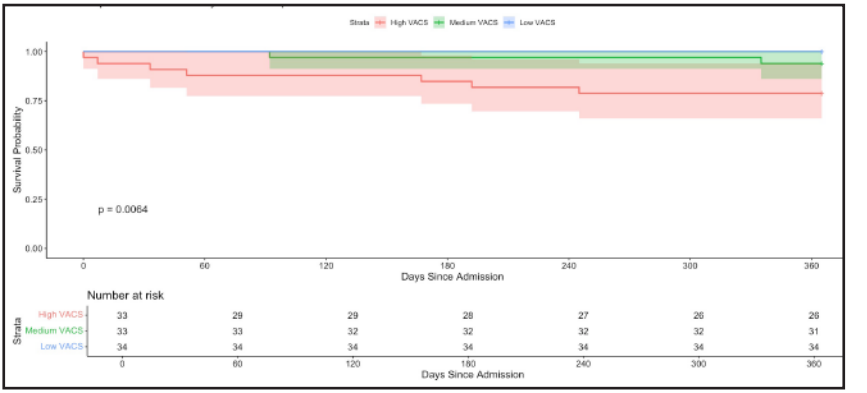
[1]Mean ± SD; n (%)
[2]Kruskal-Wallis rank sum test; Pearson's Chi-squared test; Fisher's exact test

Table 2. Outcomes and Characteristics by Total VACS Groups.

Characteristic	Low VACS (N=34[1])	Medium VACS (N=33[1])	High VACS (N=33[1])	P-Value[2]
Average VACS	0.07 ± 0.05	0.22 ± 0.04	0.42 ± 0.09	<0.001
Pre-op presence of an Aortoiliac Occlusion	13 (38%)	8 (24%)	7 (21%)	0.3
Number of Arteries Treated During Surgery	1.71 ± 0.72	1.70 ± 0.77	2.09 ± 0.84	0.077
Most Proximal Amputation within a Year				0.7
None	29 (85%)	31 (94%)	27 (82%)	
Single Toe Amputation	2 (5.9%)	1 (3.0%)	1 (3.0%)	
BKA	2 (5.9%)	1 (3.0%)	1 (3.0%)	
AKA	1 (2.9%)	0 (0%)	3 (9.1%)	
B/L Toe Amputation	0 (0%)	0 (0%)	1 (3.0%)	
Number of Other Vascular Interventions within a Year	0.53 ± 1.13	0.39 ± 1.03	0.48 ± 0.83	0.5
Death within a Year Post Intervention				0.004
N	34 (100%)	31 (94%)	26 (79%)	
Y	0 (0%)	2 (6.1%)	7 (21%)	

[1]Mean± SD; n (%)
[2]Kruskal-Wallis rank sum test; Pearson's Chi-squared test; Fisher's exact test

Figure 1. 1 Year Kaplan-Meier Survival by VACS Group.



7:36 – 7:48 am	38	**Novel Device For Safe Endovascular Aortic Endograft Explantation**
		Richard Longfei LI, Mohamed Zayed, John W. Ohman *WashU Medicine, Saint Louis, MO*

Introduction and Objectives: -5% of abdominal aortic endografts require explantation due to infection, migration, or endoleaks, yet no FDA-approved devices exist. Current techniques using modified syringes risk aortic trauma and lack reliable suprarenal barb disengagement. We developed EVAx, a novel device for safe endograft removal during open conversion.

Methods: EVAx prototypes were designed using Solidworks and 3D printed. The device features a ribbed handle, diameter-reducing clamp, and constraining arms with beveled tips (Figure 1).

Results: Testing demonstrated successful endograft collapse across all diameters tested. The device reduced endograft diameter, disengaged suprarenal barbs, and maintained structural integrity under mechanical stress.

Conclusions: EVAx addresses current endograft explantation limitations with improved safety and efficiency for open aortic procedures. Further ergonomic refinement and large animal trials will be conducted to support further development and device validation.

Figure 1. Oblique projection of the EVAx device's three component configuration: ribbed handle (A), circumferential clamp (B), and radially positioned constraining arms with beveled tips (C) for suprarenal barb engagement. The mechanism simultaneously collapses endograft circumferentially while advancing cranially to disengage suprarenal barbs (Figures 2 and 3).

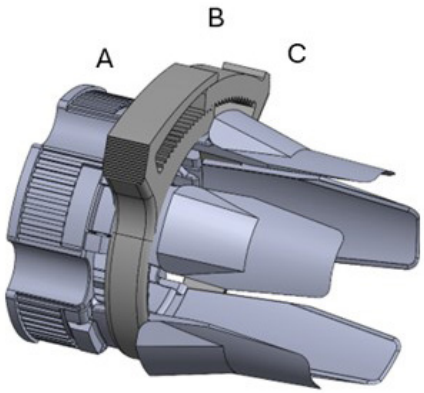
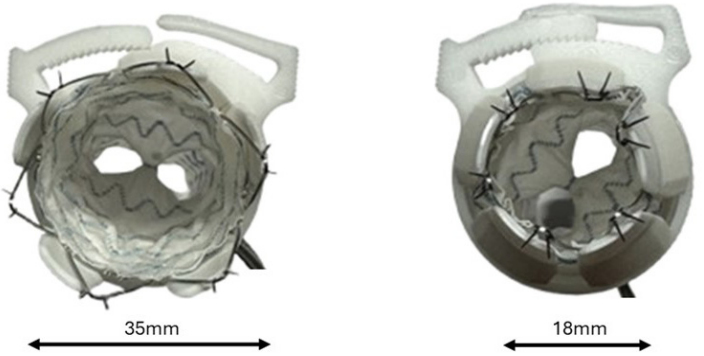


Figure 2. Side projection of the EVAx device use on a 35mm Medtronic Endurant II™ before and after engaging the constraining clamp, with the tapered tip slid underneath the fixation barbs.

Figure 3. Front view of the EVAx device constraining a 35mm Medtronic Endurant II™. Estimated diameter reduction is ~50%.



7:48 – 7:56 am	39 (RF)	**A Novel Total Transfemoral Approach For W.l. Gore Tambe Device That Minimizes Precannulated Wires**
		Mark Eid[1], Jenaya Goldwag[1], Sukgu Han[2], Bjoern Suckow[1] *[1]Dartmouth Hitchcock Medical Center, Lebanon, NH; [2]USC Keck School of Medicine, Los Angeles, CA*

Off-the-shelf thoraco-abdominal aortic devices have changed the treatment paradigm for patients with complex thoraco-abdominal aortic aneurysms. The TAMBE device has expanded options for complex endovascular repair, but standard approaches often require both femoral and upper extremity access. Recently, totally transfemoral TAMBE techniques have been described, each with their own pearls and pitfalls. In this video, we present a novel, alternative transfemoral technique that enhances stability and facilitates branch vessel cannulation using a single pre-cannulated wire strategy. To do this, two 0.018" wires are buddied through the central wire lumen. One V18 wire is situated in the aorta as the working wire. A second 0.018" wire (Terumo Glidewire M) is buddied through the central wire lumen, curved back and threaded through the SMA portal as an internal through-and through wire. All other TAMBE portal guide-tubes are removed. The graft is advanced over both wires, fully deployed, and a steerable sheath is advanced over the pre-cannulated SMA wire and anchored above the graft for stability during cannulation. The procedure was completed successfully and the patient discharged on dual anti-platelet therapy. This technique was found to be ergonomically easier with less radiation exposure than standard approaches, and with theoretically lower stroke risk due to no arch manipulation.

7:56 – 8:04 am	40 (RF)	**Initial Experience With A Frozen Elephant Trunk (FET) Device For A Two-stage Repair Of Extensive Aortic Aneurysms And Dissections**
		Jessica Lee Efird, Dina Obed, Robert Matthews, Adam Surti, Donna Bahroloomi, Elizabeth Chou, Donald Baril, Tyler Gunn, Dominick Megna, Pedro Catarino, Ali Azizzadeh *Cedars Sinai Medical Center, Los Angeles, CA*

Introduction and Objective: Extensive aortic aneurysm and dissection (EAAD) management remains a challenge. We present experience using frozen elephant trunk (FET) device followed by Thoracic Endovascular Aortic Repair (TEVAR) for a two-stage repair.

Methods: Prospective registry data identified patients with EAAD who underwent FET/Thoraflex followed by TEVAR. Primary outcomes were intraoperative and 30-day mortality. Secondary outcomes were stroke, renal failure, and spinal ischemia. For dissection patients undergoing TEVAR, descending thoracic aorta diameter (DTAD), false lumen diameter (FLD), and dissection extent were recorded in both cohorts.

Results: From 2022 to 2025, 64 patients underwent FET for type A dissection (n=47), type B dissection (n=6), and aneurysm (n=11). For FET, ntraoperative and 30-day mortality was 0, reoperation (n=1), stroke (n=9), spinal ischemia (n=1), renal failure (n=2) (Table 1). Eighteen underwent TEVAR for residual dissection with aneurysmal degeneration (n=16), and aneurysm alone (n=2). The 30-day mortality, stroke, renal failure and paraplegia rate was 0 (Table 1). In dissection patients post TEVAR 82% (n=13) had DTAD >5, 75% (n=12) had a FLD >2cm, and 94% (n=15) had dissections to aortoiliac bifurcation. For patients without TEVAR, all (n=9) had a DTAD of <5cm, 66% (n=6) had a FLD <2cm, and 56% (n=5) had dissections above bifurcation (Table 2).

Conclusions: Our single- institution experience demonstrates safe and effective results for two-stage repair of EAAD. DTAD >5cm, FLD>2cm, and longer dissection underwent TEVAR. Ongoing investigation is needed to determine durability of this paradigm.

Table 1. Pre operative, operative and post operative data of patients after FET with Thoraflex and TEVAR.

Preoperative Characteristics	FET with Thoraflex (n=64)	TEVAR extension after FET (n=18)
Age (years), med (IQR)	64 (53, 71)	64 (53, 71)
Body Mass index (kg/m2), med (IQR)	26.0 (23.1, 29.6)	25.6 (23.9, 27.1)
Female Gender, n (%)	19 (30%)	5 (28%)
Atrial fibrillation, n (%)	4 (6%)	2 (12%)
Chronic kidney disease, n (%)	8 (12.5%)	1 (6%)
Diabetes Mellitus, n (%)	7 (10.9%)	2 (12%)
Heart Failure, n (%)	2 (3.1%)	0 (0%)
Cerebrovascular disease, n (%)	8 (13%)	2 (12%)
Previous Cardiac Surgery, n (%)	30 (46%)	
Indication	**n=64**	**n=18**
Elective, n (%)	50 (78%)	18 (100%)
Urgent, n (%)	9 (14%)	0 (0%)
Emergent, n (%)	5 (8%)	0 (0%)
Type A dissection, n (%)	47 (73%)	
Type B dissection, n (%)	6 (9%)	
Aneurysm, n (%)	11 (17%)	
Indication for TEVAR extension N=18		
Residual Dissection/ Aneurysmal degeneration, n (%)		16 (77%)
Aneurysm alone, n (%)		2 (11%)
Post operative outcomes	**n=64**	**n=18**
Re-open for bleeding, n (%)	1 (1.6%)	
Stroke, n (%)	9 (9.3%)	0 (0%)
Renal failure, n (%)	2 (3.1%)	0 (0%)
Spinal Infarct, n (%)	1 (1.5%)	0 (0%)
Recurrent laryngeal nerve injury, n (%)	2 (3.1%)	0 (0%)
Length of stay (days), med (IQR)	11 (8, 18.5)	1 day 12 (67%), <1 week 5 (29%), >1 week 1 (6%)
Operative mortality, n (%)	0 (0%)	0 (0%)
30-day mortality, n (%)	0 (0%)	0 (0%)
Overall mortality, n (%)	2 (2.1%)	1 (6.3%)

Table 2. Imaging characteristics of dissection patients post FET/Thoraflex.

Thoraflex	FET / Thoraflex alone	Second-stage TEVAR
DTAD	**n=9**	**n=16**
<4cm	4 (44%)	1 (6%)
4-4.9cm	5 (56%)	2 (13%)
5-5.9cm	0 (0%)	7 (44%)
<6cm	0 (0%)	6 (38%)
False lumen width	**n=9**	**n=16**
<1cm	2 (22%)	
1-1.9cm	4 (44%)	4 (25%)
2-2.9cm	3 (33%)	5 (31%)
3-3.9cm	0 (0%)	5 (31%)
>4cm	0 (0%)	2 (13%)
Extent of dissection	**n=9**	**n=16**
Zone 5	3 (33%)	0 (0%)
Zone 8	2 (22%)	1 (6%)
Zone 9+	4 (44%)	15 (94%)

8:04 – 8:12 am	41 (RF)	**Feasibility Of Early Detection Of Non-compressible Torso Hemorrhage Utilizing Contrast-enhanced Ultrasound: Development Of A Swine Model**
		Yun Beom Lee, Michael Olson, Micaela Cuneo, Christian Goei, Pranav Singh, Jessica Saul-Mcbeth, Jason Rall, Kenneth Bogenberger, Marlin Causey, Theodore Hart *Brooke Army Medical Center, Fort Sam Houston, TX*

Introduction and Objective: Non-compressible torso hemorrhage (NCTH) remains a leading cause of preventable death in both civilian and military trauma. In environments without cross-sectional imaging modalities, the Focused Assessment with Sonography for Trauma (FAST) is used to detect hemoperitoneum, but it is limited in the evaluation of the retroperitoneum, highly user dependent, and unreliable in localizing the source of bleeding. Contrast-enhanced ultrasound (CEUS) has been reported to have a high sensitivity and specificity in assessing solid organ pathologies, but no studies have explored its use as a diagnostic tool to detect and localize NCTH.

Methods: A reproducible model of NCTH was induced in swine (70-90 kg) via laparoscopic injury to a solid organ or an endovascular injury to an aortic branch vessel. Invasive blood pressure monitoring including an intra-aortic multi-sensor pressure catheter and intravascular ultrasound was utilized to localize the relevant branch vessel and quantify pressure differentials across the injury site. Standard FAST exam and CEUS were performed pre and post injury in an unblinded fashion. Outcome measures include sensitivity, time to hemorrhage detection, volume of hemoperitoneum, and inter-rater reliability.

Results: CEUS detected active contrast extravasation from solid organ and vessel injuries in all cases. Contrast enhancement of solid organ parenchyma improved free fluid detection in lower volume hemoperitoneum. The time to detection was not significantly different between injury models or use of standard FAST versus CEUS. The learning curve for the detection of NCTH was lower for CEUS over FAST alone based on inter-rater agreement scores.

Conclusions: This pilot study demonstrated the feasibility of CEUS for the detection of NCTH as an alternative or adjunct to FAST in multiple relevant injury patterns. The swine model establishes a controlled and reproducible platform for the study of multiple portable technologies that may aid in hemorrhage localization in austere environments.

8:08 – 9:00 am **AWARD SESSION**
Moderators: Ravi Rajani & Michael Soult

UPDATE FROM 2025 AWARD WINNERS

Travel Award:
Adam Tanious, MD

Resident Research Award:
Tiffany Bellomo, MD

BSCI Early Career Investigator Award:
Melinda Schaller, MD

2026 AWARD WINNERS ANNOUNCEMENT

Travel Award
Resident Research Award
Early Career Faculty Award

9:00 – 9:15 am **Introduction of the President**
Todd Berland, MD

9:15 – 10:00 am **PRESIDENTIAL ADDRESS**
Ravi Rajani, MD

10:30 – 12:30 pm **SPECIAL SESSION: Advocacy/CMS 2026 Update**
Moderators: Nathan Aranson & Natalie Sridharan

10:30 am	SS1	**How State Economics And Hospital Status Create A Two-tiered Vascular Reimbursement Phenomenon**
		Alyster Alisla Alcudia[1], Glade Adams[1], Aryan Gupta[1], Kristina Lowndes[1], Priya Joshi[1], William Moser[2], Subodha Kumar[3], Sharvil U Sheth[4], Suyog Mokashi[2] *[1]Lewis Katz School of Medicine, Philadelphia, PA; [2]Temple University Hospital, Philadelphia, PA; [3]Fox School of Business at Temple University, Philadelphia, PA; [4]St. Luke's University Health Network, Bethlehem, PA*

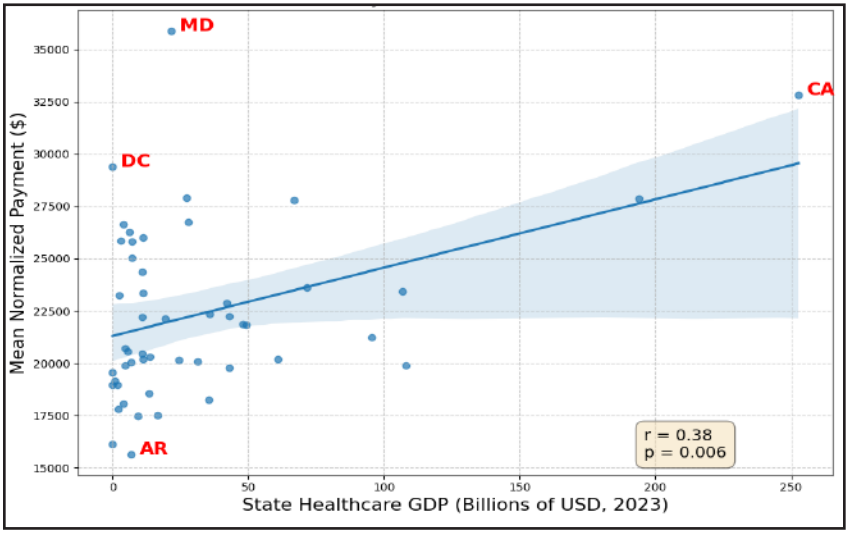
Introduction and Objective: Medicare reimbursement for vascular procedures shapes both patient access and program survival. Whether payment variation across hospitals reflects irrationalities, billing strategies, or deeper economic forces remains uncertain.

Methods: We analyzed 2022 Centers for Medicare & Medicaid Services (CMS) inpatient data for MS-DRGs 252-254 ("Other Vascular Procedures," defined as peripheral arterial repairs, embolectomy/thrombectomy, vascular shunt procedures, and related reconstructions not involving the aorta or great vessels). Average Medicare payment per discharge was calculated per hospital. State and city variations were assessed using Kruskal-Wallis testing. Hospitals were categorized as university or non-university and compared via Welch's t-test. Spearman correlation tested the association between submitted charges and Medicare payments. State average payments were linked to 2023 Bureau of Economic Analysis (BEA) healthcare GDP data and assessed with Pearson correlation.

Results: Significant reimbursement disparities were found across states ($p < 1e-55$) and cities ($p < 1e-9$), with mean payments ranging from $15,652 in Arkansas to $35,873 in Maryland. University hospitals were paid significantly more than non-university hospitals ($27,770 vs. $22,787, a 21.9% difference; $p < 1e-6$). Charges showed weak correlation with Medicare reimbursement ($\rho = 0.42$), while total and Medicare payments were strongly correlated ($\rho = 0.90$). Crucially, state mean payments were significantly correlated with state healthcare GDP ($p = 0.006$).

Conclusions: Medicare reimbursement for vascular procedures is complex, varying more than two-fold across states, higher at university hospitals. These disparities are not explained by hospital billing practices alone but reflect structural payment policies, regional factors and state-level economic factors. This pattern reveals a two-tiered vascular reimbursement system. In turn, provided we identify causes and correctly adopt appropriate remedies, contrasts in reimbursement between hospitals will contract.

Figure 1. State Mean Payment vs. State Healthcare GDP.



10:38 am	SS2	**Acute Limb Ischemia: Medicare And Medicaid Reimbursement Gaps Threaten Sustainability Of Care**
		Mouhammad Halabi1, Michael Lee[1], Loay Kabbani[1], Hassan Chamseddine[2], Donald D. Chang[1], Timothy Nypaver[1], Mitchell Weaver[1], Yasaman Kavousi[1], Ilan Rubinfeld[1], Alexander Shepard[1] *[1]Henry Ford Hospital, Detroit, MI; [2]University Hospitals Cleveland - Case Western Reserve University, Cleveland, OH*

Introduction and Objective: Acute limb ischemia (ALI) is a vascular emergency demanding urgent revascularization and substantial hospital resources. This study assessed hospitalization costs and profitability by insurance status and treatment modality.

Methods: A retrospective review of patients admitted with ALI at a quaternary medical center (2016-2024) was performed. Patients were identified using ICD-10 and CPT codes. Exclusion criteria were outpatient encounters, primary amputations, and non-operative management. Hospitalization cost was defined as professional plus technical charges. Profit was reimbursement minus cost. Analyses were stratified by insurance status and treatment modality.

Results: We identified 656 ALI patients, of whom 59% were Medicare, 27% commercial, and 14% Medicaid. Median hospitalization costs were similar between payer groups: Medicare $50,894 [33,496 - 90,923], Medicaid $49,417 [33,775 - 83,379], and Commercial $56,603 [35,823 - 96,067] (p=0.19). Similarly, hospitalization costs were comparable between endovascular revascularization (EVR) and open revascularization (OR): $48,949 [31,858 - 79,456] for EVR vs $46,131 [30,846 -87,816] for OR (p=0.103) and did not differ across payer types within either subgroup (EVR p=0.49 vs OR p=0.78). Profitability varied significantly by payer: Medicaid and Medicare admissions had a median loss of -$3,176 [-10,035 to 3,859], and -$12,673 [-28,732 to 1,425] respectively, while Commercial admissions had a profit of $30,622 [7,602 - 50,208], (p<0.001). These differences persisted in both the EVR (p<0.001) and OR (p<0.001) subgroups. At our institution, ALI admissions generated a median hospital loss of -$5,112 [-20,116 to 6,523] per patient.

Conclusions: ALI care is costly, with profitability determined by payer status rather than treatment type. Only commercial insurance yields positive margins, while Medicare/Medicaid under-reimbursement drives institutional losses. Without DRG adjustments, the sustainability of emergent ALI care remains at risk.

10:46 am	SS3	**Medicaid Expansion Is Associated With Reduced Hospital Costs For Patients Presenting With Chronic Limb-threatening Ischemia**
		Oluwasegun A Akinyemi, Kaelyn Gordon, Kakra Hughes *Howard University College of Medicine, Washington DC*

Introduction and Objective: Chronic limb-threatening ischemia (CLTI) often necessitates urgent revascularization or amputation. The impact of Medicaid expansion on hospital charges for these high-acuity procedures remains uncertain. The objective of the present study is to evaluate the association between the Affordable Care Act's Medicaid expansion and hospital charges among patients admitted with CLTI who underwent revascularization (open or endovascular) or amputation.

Methods: Using a difference-in-differences design, we compared adults admitted with CLTI in Maryland (Medicaid expansion state) and Florida (non-expansion state) between 2007 and 2021. Only admissions with lower-extremity revascularization or amputation were included. The primary outcome was total hospital charges. We estimated a linear regression model with robust standard errors including a three-way interaction term (Medicaid expansion × ACA period × procedure type) and covariates (race/ethnicity, payer, age, discharge quarter, neighborhood income quartile, obesity, and smoking). Average marginal effects were derived from model contrasts to obtain difference-in-differences estimates stratified by procedure.

Results: A total of 13,785 patients were included (7,225 [52.4%] pre-ACA and 6,560 [47.6%] post-ACA). Medicaid expansion was associated with significantly lower adjusted hospital charges across procedures. For amputations, expansion corresponded to a −$91,817 change (95% CI, −$122,611 to −$61,023; p<0.001). For endovascular revascularization, the corresponding change was −$73,361 (95% CI, −$86,902 to −$59,821; p<0.001), and for open revascularization −$53,420 (95% CI, −$97,211 to −$9,629; p=0.017). Joint tests confirmed significant difference-in-differences effects within each procedure group.

Conclusions: In this two-state natural experiment, Medicaid expansion was associated with substantially lower hospital charges for patients undergoing CLTI procedures, with the largest reductions observed for amputations. These findings suggest that expanded insurance coverage reduces the financial burden of high-acuity limb procedures and may reflect improved access and care pathways.

10:54 am		INVITED SPEAKERS
		Introduction to Advocacy Olamide Alabi, MD **Feedback from the Inaugural SVS Advocacy and Leadership Conference** Katherine McMackin, MD **Understanding the Medicare Fee Schedule and the Normal Legislative Process** Natalie Sridharan, MD **Proposed CMS Changed to the MPFS for 2026 - What to Expect** Mounir Haurani, MD **Beyond Payment Reform: Wellness, Training, Prior Auth & Other Policy Priorities** Nathan Aranson, MD
		PANEL DISCUSSION

1:00 – 3:00 pm **CASE REPORT SESSION**
Moderator: Katherine Hekman

1:00 pm	C7	**Salvage Of Exposed Autogenous Leg Bypass Using Biodegradable Temporizing Matrix (BTM)**
		Morgan Colling[1], Thomas Reifsnyder[2] *[1]Johns Hopkins University School of Medicine, Baltimore, MD; [2]Johns Hopkins Bayview Medical Center, Baltimore, MD*

Introduction and Objective: Biodegradable temporizing matrix (BTM) is a fully synthetic dermal substitute that supports neodermis formation and facilitates delayed skin grafting. It has shown promise in burn patients, but its application in vascular surgery has not been previously reported. This case describes its use to salvage an exposed autogenous bypass.

Methods: A 60-year-old woman with end-stage renal disease and prior pancreas transplant developed a complex anterior knee wound after treatment of septic arthritis, which occurred following a popliteal-to-anterior tibial bypass performed for dry gangrene of all five toes of her left foot. Treatment of the knee wound eventually required a medial head of the gastrocnemius rotational flap, but that was complicated by necrosis and dehiscence of the medial leg incision, exposing a long segment of the previously healed patent bypass (Figure 1).

Results: BTM was successfully utilized as temporary coverage over the bypass, enabling subsequent autologous skin grafting (Figure 2).

Conclusion: BTM has unique characteristics that make it a valuable adjunct when treating complex wounds and should be part of the vascular surgeon's armamentarium.

Figure 1. Exposed segment of bypass (arrow) in the medial leg wound.

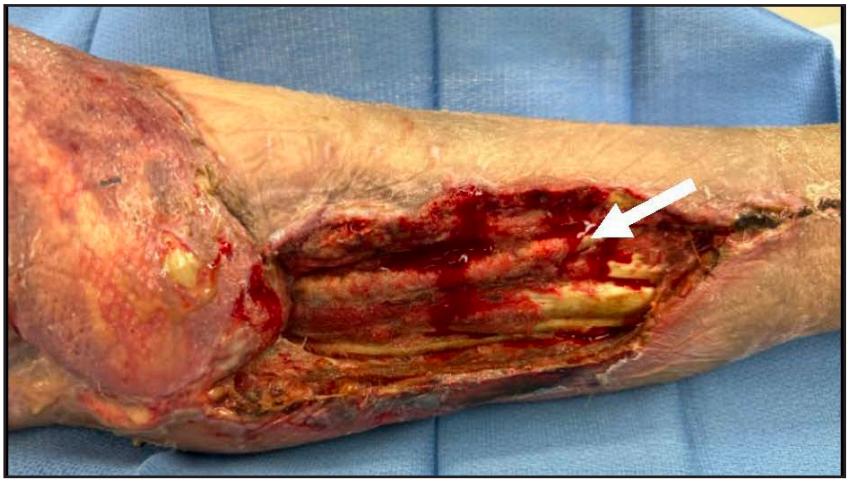
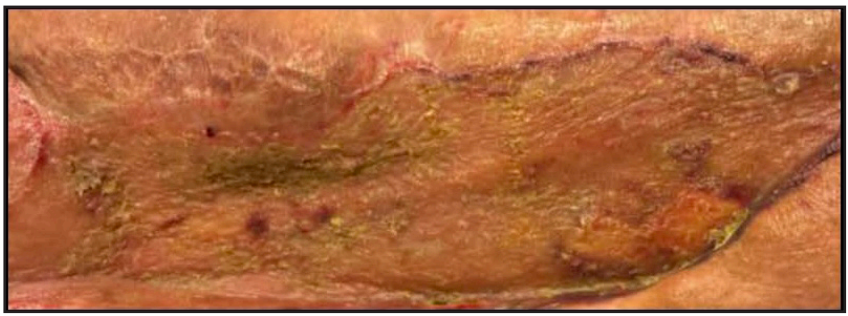


Figure 2. Healed medial leg wound following biodegradable temporizing matrix application and subsequent split-thickness skin grafting at 3-month follow-up.



1:08 pm	C8	**Left Renal And Ovarian Vein Transposition For Posterior Nutcracker Syndrome**
		Cole Pickney[1], Sam Laczynski[2], John Taaffe[1], David Laczynski[1] *[1]Cleveland Clinic, Cleveland, OH; [2]Florida State University College of Medicine, Tallahassee, FL*

Introduction and Objective: Nutcracker phenomenon occurs from compression of the left renal vein (LRV) between the aorta and superior mesenteric artery. Nutcracker Syndrome represents symptom manifestation from this anatomic compression. Less commonly, posterior nutcracker phenomenon (PNP) and its corresponding syndrome, PNCS, occur from LRV compression between the aorta and vertebrae. In one study evaluating CT scans of 6,225 patients, 0.84% had PNP from retro-aortic LRV. Owing to its rarity, literature describing PNCS is limited, with many cases managed conservatively. We present a unique case treated surgically.

Methods: This is a single case report from a quaternary referral center.

Results: A woman in her 20s presented with 1.5-years of low abdomen cramping and back pain associated with nausea, anorexia, and microscopic hematuria. CT abdomen/pelvis demonstrated retro-aortic LRV with compression causing dilated left ovarian vein (LOV) and pelvic varicosities. A venogram demonstrated severe LOV reflux into large pelvic collaterals with minimal flow across the compressed LRV (Figure 1). Intravascular ultrasound demonstrated >90% LRV stenosis. The patient then underwent open LRV transposition with adjunctive LOV transposition to the IVC (Figures 2, 3). At two-month follow-up she had improved appetite, intentional weight gain, resolution of nausea, back and pelvic pain. She had returned to work. The surveillance duplex demonstrated widely patent LRV.

Conclusions: This is a unique report of concomitant LRV and LOV transposition for a case of PNCS.

Figure 1. Left renal venogram demonstrating reflux into left ovarian vein and ascending lumbar vein.

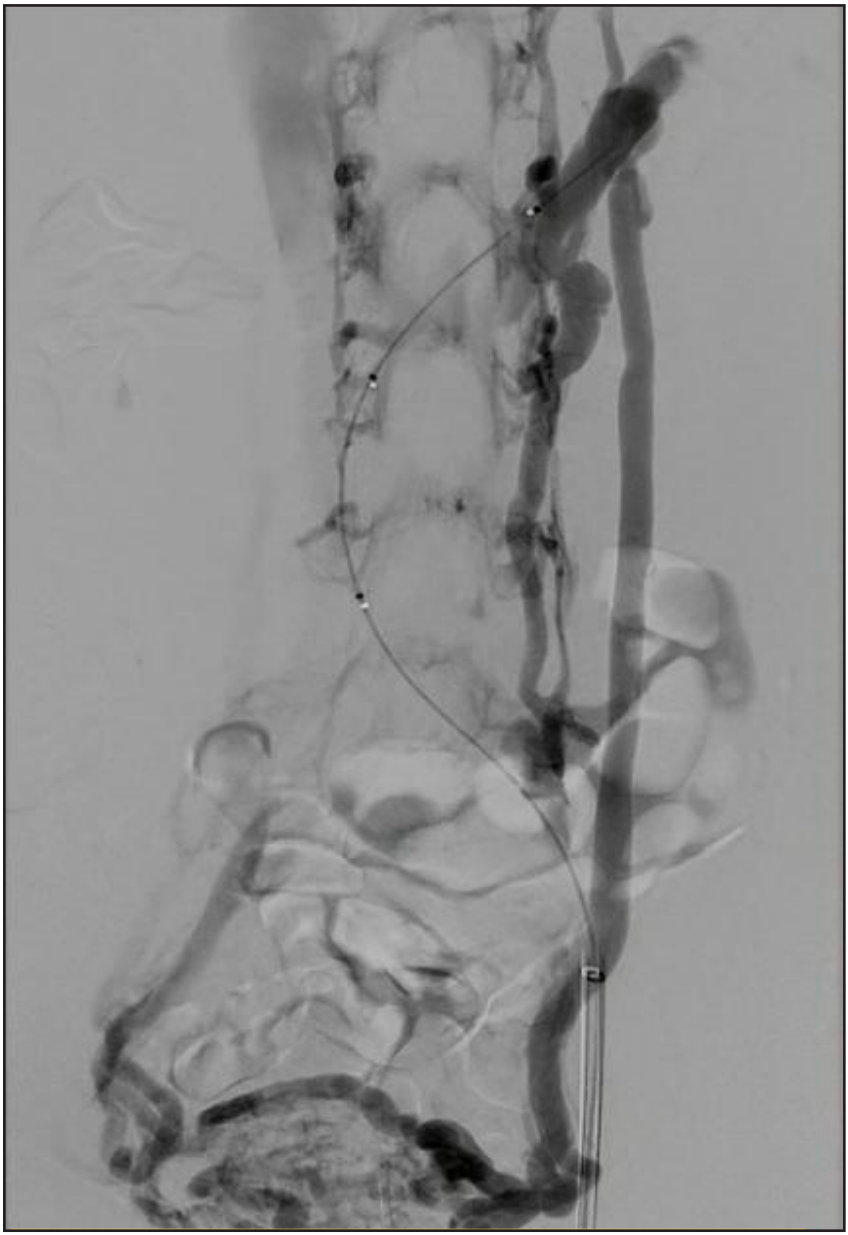


Figure 2. Intraoperative photo of retro-aortic left renal vein.
Ao = aorta; LRV = left renal vein.

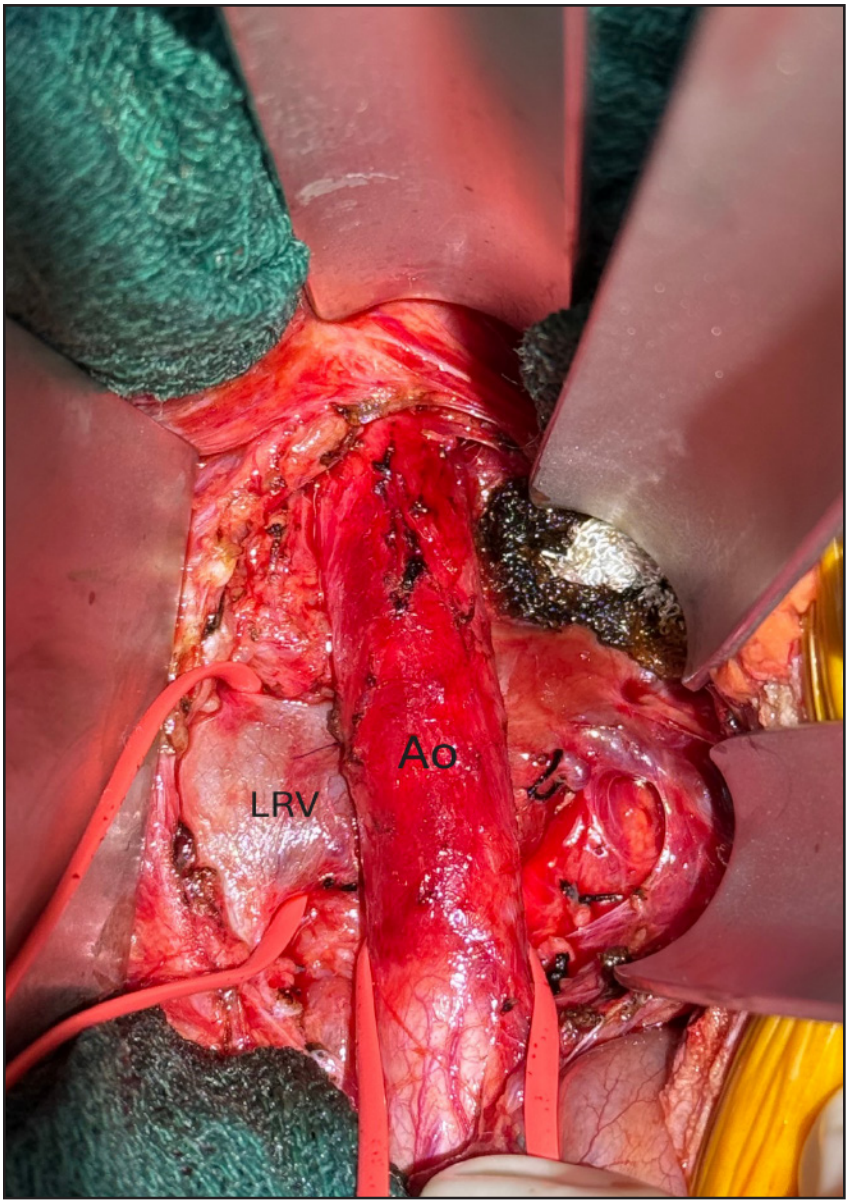
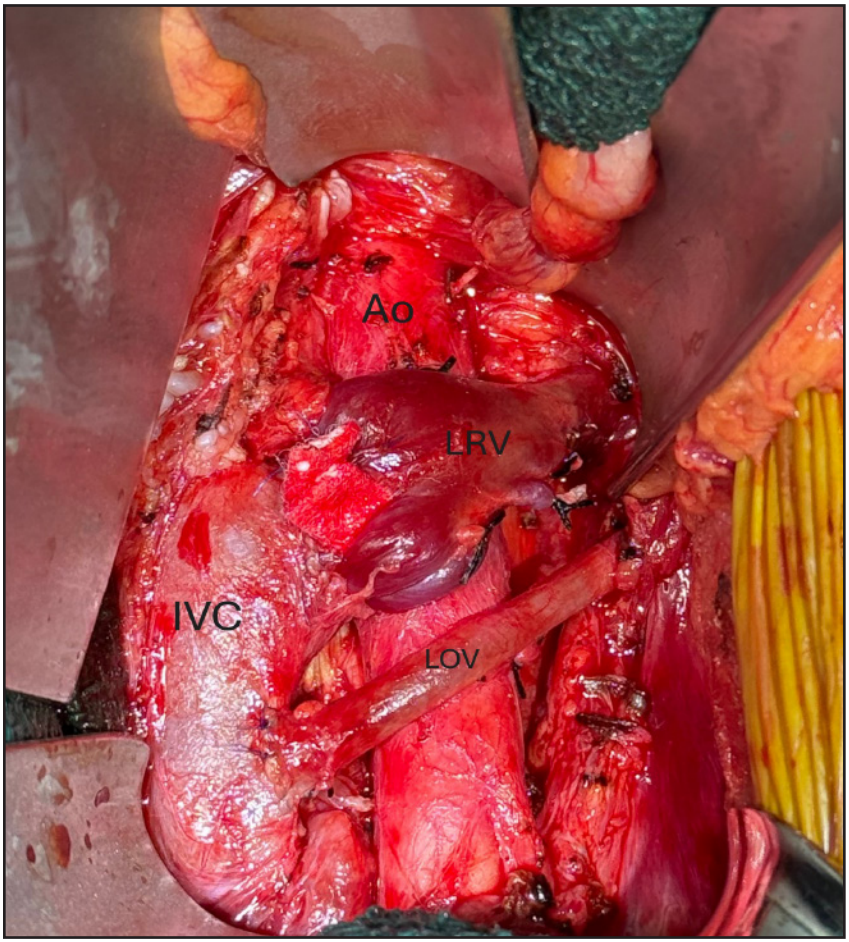


Figure 3. Left renal vein transposed anterior to aorta. Left ovarian vein transposed onto inferior vena cava. IVC = inferior vena cava. LOV = left ovarian vein.



1:16 pm	CR9	**Repurposing The Thoracic Branch Endoprosthesis Side Branch For Endovascular Repair Of Aneurysmal And Stenotic Aortic Pathology**
		Arash Fereydooni, Arielle Lee, Camille Rogine, Shaunak Adkar, Kenneth Tran *Stanford, Stanford, CA*

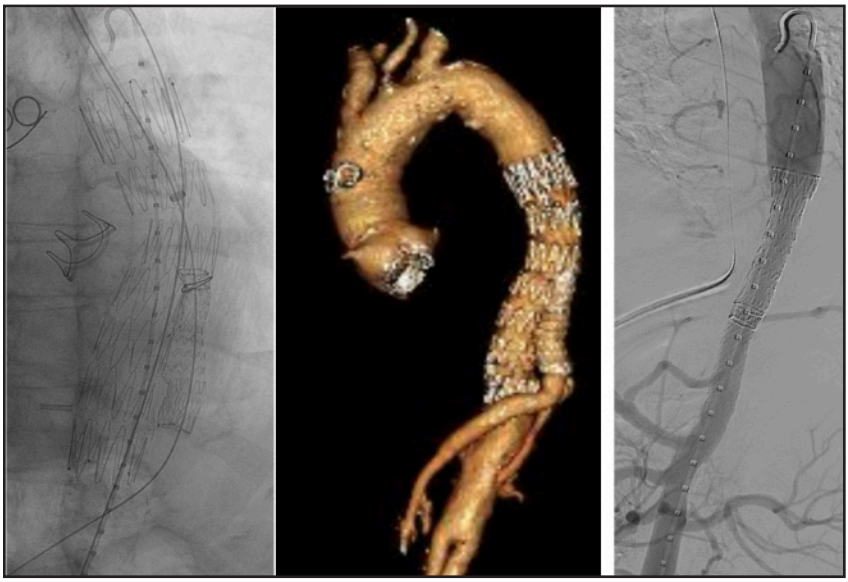
Introduction and Objective: We report a case series of three patients treated with endovascular strategies utilizing the Thoracic Branch Endoprosthesis side branch (TBE-SB) component.

Methods: The TBE-SB was used as an antegrade bridging stent in one patient with a para-anastomotic thoracoabdominal aortic aneurysm, and in two patients with thoracic aortic stenosis as a tapered stent-graft in combination with a distal balloon-expandable covered stent (BECS) to conform to anatomy and prevent retrograde dissection.

Results: Case 1: An 80-year-old male with prior open thoracoabdominal aneurysm repair and visceral bypass presented with a 7.6 cm para-anastomotic thoracic aneurysm eroding into vertebral bodies. Open redo repair was prohibitive. A physician-modified endograft with a single ante-grade branch portal was constructed. The 20mm TBE-SB was then deployed in antegrade fashion as a bridging stent into a dilated visceral Dacron graft measuring 14-16mm in diameter. The patient had patent visceral branches and excluded aneurysm on 6 month follow up **(Figure 1). Case 2:** A 52-year-old female with severe systemic hypertension and aortic coarctation underwent endovascular repair using a proximally placed 20mm TBE-SB component from femoral approach with a distal BECS (**Figure 1**). The repair equalized radial-femoral pressure gradients, improved ABIs, and relieved claudication. At follow-up, she achieved blood pressure control on a single agent. **Case 3:** A 74-year-old female a high-grade Zone 4-5 aortic stenosis underwent endovascular repair with a 20mm TBE-SB deployed as a tapered stent-graft bridging the BCES across the severe narrowing into healthy proximal aorta from femoral approach. The repair also resulted in normalized ABIs and resolved claudication.

Conclusions: This series demonstrates that the TBE-SB can be used off-label to successfully treat complex aortic pathology.

Figure 1.



1:24 pm	C10	**Trans-iliac Vein Embolization Of A Previously Excluded Left Internal Iliac Artery Aneurysm With A Type II Endoleak**
		Sabrina Sevilla[1], Sarah Kang[1], Damon S Pierce[2], Carlos E Pineda[2] *[1]Virginia Mason Franciscan Health, Seattle, WA; [2]Virginia Mason Franciscan Health, Seattle, WA*

Introduction and Objective: The reported incidence of type II endoleaks (T2E) following endovascular repair of iliac artery aneurysms is 15-20% even with pre-stent coil embolization of outflow vessels. If there is associated aneurysmal growth, re-intervention is indicated. Alternatives to accessing the aneurysmal sac have been reported; however, trans iliac vein embolization is not well described.

We present a 76-year-old man with a history of right common iliac artery (CIA) and left internal iliac artery (IIA) aneurysms who underwent staged coil embolization of the anterior and posterior branches of the left IIA followed by endovascular repair of the aneurysms with preservation of the right IIA with an iliac branch endoprosthesis and coverage of the left IIA origin with stent graft extension into the external iliac artery. Surveillance imaging at 2 years revealed a persistent T2E and growth of the excluded left IIA aneurysm.

Methods: Percutaneous access of the ipsilateral common femoral vein was obtained. Intravascular ultrasound was used to help establish the area of maximal contact between the aneurysm sac and the iliac vein. An 8.5F steerable sheath was used to engage the sac, which was punctured with the back of a V-18 wire. Coil embolization was then successfully performed. Completion imaging confirmed no further filling of the sac.

Results: The patient was seen in follow-up 1 month later and was doing well without development of new symptoms. CTA demonstrated a stable size of the left IIA without evidence of endoleak.

Conclusions: With appropriate anatomy, resources, and expertise, a transvenous, intravascular ultrasound-guided approach provides a safe and useful technique for treatment of type II endoleaks of previously treated IIA aneurysms.

1:32 pm	C11	**Endovascular Repair Of Extent V Thoracoabdominal Aortic Aneurysm With No Access Option, An Innovative Technique**
		Dongjin Suh, Priyam K Vyas, Animesh Rathore *Eastern Virginia Medical School at Old Dominion University, Norfolk, VA*

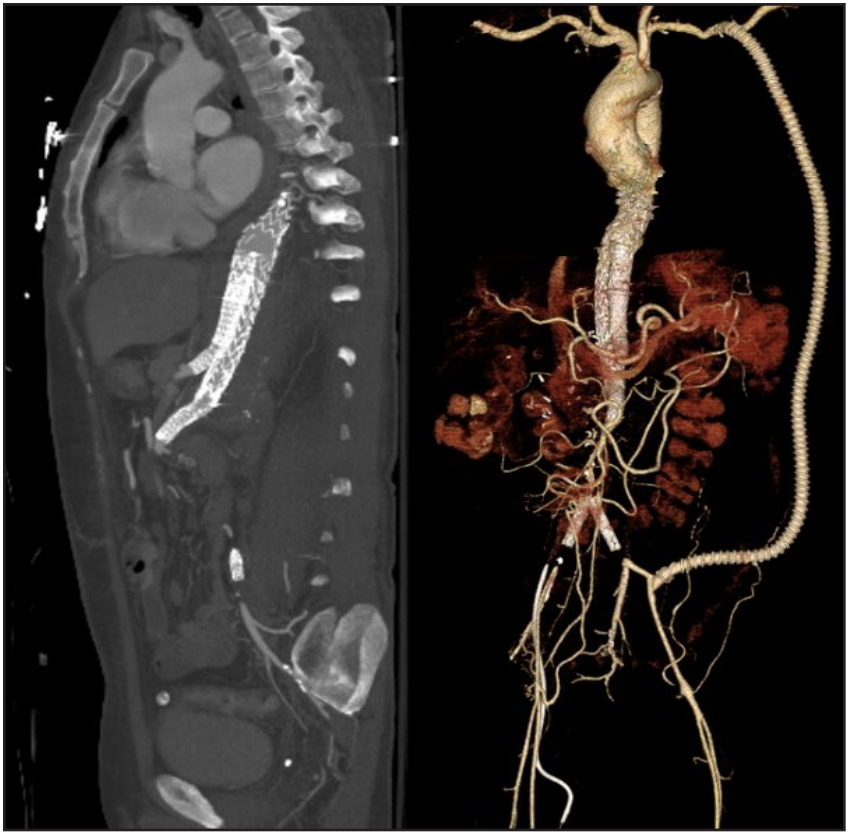
Introduction and Objective: To describe a novel hybrid strategy using antegrade endovascular aortic graft deployment with visceral stenting in a high-risk patient presenting with a symptomatic, impending rupture of an extent V TAAA and complex occlusive disease.

Methods: A 50-year-old male with CHF, CKD4, COPD, and recent CVA presented with right flank pain and a rapidly enlarging extent V TAAA (4.2 × 4.8 cm to 6.0 × 5.0 cm within three months). Anatomy was further complicated by chronic infrarenal aortic occlusion with lifestyle-limiting claudication, critical right renal artery stenosis, and >70% stenosis with thrombus involving both the celiac and superior mesenteric arteries (SMA). Open repair was deemed prohibitive.A Medtronic Endurant II EVAR graft was modified on the back table: active fixation hooks removed, soaked in rifampin, and repackaged in reverse orientation. The graft was delivered via a surgically exposed left axillary artery and deployed with proximal landing in the thoracic aorta. Distally, one limb was directed into the SMA and extended with a Gore iliac limb graft, while the contralateral limb was directed into the celiac artery and extended with a Gore VBX stent graft, sparing the splenic artery. The proximal seal was reinforced with endoanchors. A type III endoleak at the SMA junction was resolved by relining with a Medtronic Endurant iliac limb graft. A left axillary-to-external iliac bypass maintained lower extremity perfusion, and right renal artery to hepatic artery transposition preserved renal function.

Results: Technical success was achieved with preservation of visceral perfusion. Completion angiography showed no residual endoleak.

Conclusions: Hybrid antegrade thoracoabdominal endografting with visceral stenting and extra-anatomic bypass offers a feasible, life-saving alternative for patients with prohibitive comorbidities and hostile anatomy.

Figure 1.



1:40 pm	C12	**Endovascular Management Of A Complicated Type B Aortic Dissection In A Pediatric Patient**
		Tara Zielke[1], Andres Fajardo[1], Joel S Corvera[2], Raghunandan L Motaganahalli[1] *[1]Indiana University, Indianapolis, IN; [2]Indiana University, Indianapolis, IN*

Introduction and Objective: Pediatric acute aortic dissection is an extremely rare pathology, and this case study highlights a successful endovascular repair technique.

Methods: A 14-year-old male with no past medical history presented with an acute type B aortic dissection from zone 3 to zone 10 with an occluded right common iliac artery. There were multiple fenestrations associated with compression of the true lumen and malperfusion of the right lower extremity and viscera. A wire was advanced through the true lumen from the right radial access to the left femoral artery access. Three 21 mm x 10 cm thoracic endografts were placed from zone 2 to 2 cm above the celiac artery origin. Despite the expansion of the stent in Zone 3, the patient had no flow in his right lower extremity, so dissection stents were placed from the distal thoracic aorta to the aortic bifurcation. This established brisk filling into the SMA, celiac, and renal arteries. 8 mm x 59 mm balloon expandable covered stents were placed into the common iliac arteries up to the iliac bifurcation. A distal flap beyond the common iliac artery extending into the right external iliac artery was addressed with placement of a 8 x 100 mm self-expandable stent. A four-compartment fasciotomy of the right lower extremity was then performed.

Results: Completion intravascular sonographic evaluation and postoperative CT imaging demonstrated true lumen remodeling and preservation of flow into both lower extremities.

Conclusions: This case demonstrates an endovascular repair of an extremely rare pediatric acute type B aortic dissection with malperfusion of the right lower extremity and viscera.

1:48 pm		Worse Case Presentations from Invited Faculty
		Bernadette Aulivola, MD *Loyola University* **Niten Singh, MD** *University of Washington* **Matthew Corriere** *The Ohio State University*

3:00 pm	**Registration Re-Opens**
3:00 – 4:00 pm	**Coffee/Snacks – Last Chance to Visit Exhibitors**

4:00 – 6:00 pm **SCIENTIFIC SESSION V**
Moderators: Dawn Coleman & Todd Berland

4:00 – 4:12 pm	42	**30 Year Experience With The Management Of Upper Extremity Iatrogenic Pseudoaneurysm: Nonoperative Therapy For < 2cm**
		Patrick Stone *Vanderbilt, Nashville, TN*

Introduction and Objective: The management of Upper Extremity Pseudoaneurysm (UEPSA) is not clearly defined. We evaluated our 30-year experience and management of this pathology.

Methods: ICD9/10 codes identified 105 met our strict criteria: The size of the aneurysm was recorded based on the flow channel of the measured aneurysm.

Results: 105 patients with UEPSA (39 brachial, 54 radial, 6 axillary, 7 ulnar). The mean time between iatrogenic event and vascular surgery evaluation - 22 days. 12 patients had only a patent neck at time of evaluation and were excluded from treatment analysis. 58 (62.4%) underwent surgical repair, 27 (29.0%) received conservative management, and 8 (8.6%) underwent thrombin injection. 7 (12.1%) of surgical patients developed surgical complications. Separated into sizes, there were a total of 21 patients managed conservatively and 16 patients managed surgically with UEPSAs less than 2cm; in contrast for those with greater than 2cm UEPSAs, 6 patients were managed conservatively, 42 were managed surgically, and 8 with thrombin injection. By year, there was an obvious trend towards conservative management over the past decade in <2cm UEPSAs. Prior to the end of 2010, there were 27 iatrogenic UEPSAs noted with only 3 (11.1%) managed conservatively, while after 2010 there were 66 iatrogenic pseudoaneurysms with 24 (36.4%) managed conservatively. Of the UEPSAs managed conservatively, only 3 (11.1%) failed conservative management and were recommended to pursue surgical correction. UEPSAs <2cm managed conservatively that thrombosed successfully with a mean time to thrombosis of 8.4 days by duplex ultrasound.

Conclusions: Our three-decade cohort demonstrates that patients with a <2cm diameter size of UEPSA can be successfully managed via observation with no adverse events during observation. Intervention for small pseudoaneurysm should be reserved for those patients that either fail observation and spontaneous thrombosis or enlarge during follow up.

4:12 – 4:20 pm	43 (RF)	**Information Preferences Of Vascular Surgery Patients**
		Joshua Garrett, Caleb McCabe, Tracy Si, Henry Styron, Jatin Dhamrait, David Gosser, Bhanuteja Pujari, David Ebertz, Michael Williams, Catherine Wittgen, Matthew R Smeds *Saint Louis University School of Medicine, Saint Louis, MO*

Introduction and Objective: Effective communication is critical in vascular surgery. While after visit summaries (AVS) improve provider-patient communication and electronic portals are increasingly used, optimal methods of information delivery remain unclear. We sought to understand vascular surgery patients' preferences on receiving information and determine associated factors.

Methods: Patients seen over a two-month period were surveyed about perceived usefulness of information included in the AVS, preferred information delivery, and comparisons between information received in vascular surgery vs. primary care. Demographics were obtained including healthcare literacy (BRIEF health literacy tool) and logistic regression analysis was performed to assess associations between demographics, literacy, and preferences.

Results: Over this period, 238/395 (60.2%) were approached with 125 (53%) completing the survey. The mean age was 62 years with 57% male gender and 34% having low/marginal health literacy. Most patients rated treatment instructions (90%), follow-up details (92%), and test results (88%) "very helpful". In-person communication was the most important delivery method (45%) followed by online (25%) or printed material (18%). Most patients (86%) desired additional material to review at home, with paper summaries valued more than online summaries. Compared with primary care, 32% of patients preferred more in-person delivery in vascular surgery clinics. Multivariable analysis showed female patients and those with children were more likely to prefer in-person over hard copy information ($p<0.05$), while lower health literacy and increased age were associated with greater reliance on paper formats ($p<0.05$). Preferences for in-person vs. hard copy communication did not vary by race, income, marital status, or health literacy.

Conclusions: Vascular surgery patients value detailed information delivered in person but also desire supplementary written materials. Paper summaries remain important for lower health literacy patients, women, and older patients, while younger patients favor electronic delivery. Tailoring communication strategies may improve understanding, satisfaction, and adherence to complex vascular treatment plans.

4:20 – 4:32 pm	44	**Endovascular Management Of Aortic Coarctation Using Innovative Stent Technology**
		Peter Foster, Ivory Crittendon, III, Samuel Money *Ochsner, New Orleans, LA*

Introduction and Objective: Aortic coarctation (AC) in adolescents and adults is currently treated with balloon angioplasty and stenting. However, up to 10% of patients treated with off-label commercial endografts experience serious complications. The Cheatham-Platinum (CP) stent graft is a balloon expandable covered platinum skeleton endograft that is delivered on a balloon-in-a-balloon catheter, a technology with specific indication for aortic coarctation. This design reduces risks of asymmetric stent expansion, migration, or "watermelon seeding," ensuring a secure fit.

Methods: This is a single-center retrospective review of 10 consecutive patients (five female) treated for AC. Patient cohort consisted of older adolescents and adults (x= 28 +/- 5.6, 13-62 years). Primary indications for intervention were hypertension (7 patients), pseudoaneurysm (1), aortic insufficiency (1), and claudication (1). Rapid ventricular pacing was used for all deployments.

Results: Mean lengths of treated lesions were 5.4 +/- 1.8 mm with mean aortic diameters of 7.6 +/- 1.2 mm located 26.1 +/- 4.0 mm from coarctation to the left subclavian artery. Technical success was reported in all 10 patients, which was judged on mean improvement of pre gradient mean arterial pressure of 33.6 +/- 9.1 mmHg to < 5 mmHg in all cases. Among patients with hypertension, six out of seven required a reduced number of antihypertensive medications. No adverse events were reported. The median length of stay was 1.0 day. Mean follow up was 25.3 +/- 7.55 months with no recurrences. The list price of this device is less than half of standard thoracic endografts.

Conclusions: This series demonstrates that balloon expandable covered stent graft using balloon-in-a-balloon technology was a safe, effective, and economical option for treatment of AC in these 10 patients with recurrent or de novo diagnosed coarctation. Expanded indications of this device are likely feasible.

4:326 – 4:44 pm	45	**Suprarenal Vs. Infrarenal Fixation In Endovascular Repair Of Abdominal Aortic Aneurysm: A Systematic Review And Meta-analysis**
		ali reza sattari[1], shahab aldin Sattari[2], Robert Dabek[1], mueen megdadi[1], Omar Karim[1], Vladimir Coca-Soliz[1], Michael Zatina[1], Margaret W Arnold[3] *[1]Ascension St. Agnes, Baltimore, MD; [2]University of Missouri-Kansas City, Kansas City, MO; [3]MedStar Health Baltimore, Baltimore, MD*

Introduction and Objective: Endovascular aneurysm repair(EVAR) is the standard treatment for abdominal aortic aneurysm (AAA). However, the proximity of stent fixation relative to the renal arteries is still debated, mainly in terms of postoperative kidney outcomes. To compare suprarenal vs. infrarenal fixation in EVAR for AAA.

Methods: MEDLINE, PubMed, and Embase were searched from inception to 10/5/2023. Primary outcomes included postoperative estimated glomerular filtration rate (eGFR)(ml/min/1.73m2)and>20% eGFR drop relative to the baseline value. Secondary outcomes included postoperative acute kidney injury (AKI), hemodialysis, renal ischemia or infarction, renal artery stenosis or occlusion, type1 and2endoleak, operative bleeding (ml), duration of operation (minute), hospital length of stay (day),and overall mortality.

Results: Twenty-seven non-randomized studies yielding52,400 patients were included, from which 15245 (29%) underwent suprarenal fixation, and the remaining 37,146 (71%) received infrarenal fixation. Two groups were similar in age (72.8 vs. 73.2, p=0.56), male sex (79.9% vs. 80.7%, p=0.06), contrast exposure (143.8 vs. 138.8 ml, p=0.39),and aneurysm diameter (59.3 vs. 57.7 mm, p=0.161). Two groups were similar in baseline eGFR (mean difference [MD]= 1.56 [-1.71, 4.83], p=0.35) and1-year eGFR (MD=-1.13 [-4.94, 2.69], p=0.56). Furthermore, two groups were similar in the odds ratio (OR) of >20% eGFR drop at 1-year (OR=1.27 [0.81, 1.99], p=0.31) and 3-year (OR=1.40 [0.67, 2.94], p=0.37); however, suprarenal fixation was associated with higher OR of >20% eGFR drop at 5-year post-EVAR (OR=1.75 [1.14, 2.66], p=0.01). In addition, suprarenal group was associated with higher renal ischemia/infraction (OR= 2.80 [1.35, 5.82], p=0.006), renal artery stenosis/occlusion (OR= 2.74 [1.23, 6.07], p=0.01), and hospital LOS (MD=0.58 [0.11,1.04], p=0.01). Other outcomes were similar between the groups.

Conclusions: Suprarenal fixation is associated with higher odds of post-EVAR renal complications and 5-year drop in eGFR. Given that infrarenal fixation may be associated with a safer kidney profile, surgeons can proceed with infrarenal fixation if it is deemed feasible. A multicenter randomized controlled trial with long follow-up is required to corroborate these findings.

4:44 – 4:52 pm	46 (RF)	**Calf And Femoral-popliteal Deep Venous Thrombus Is Associated With The Highest Risk Of Venous Ulceration**
		Anne Pugmire[1], Lorena P De Marco Garcia[2], Julie B Hales[1], Benjamin S. Brooke[1] *[1]University of Utah, Salt Lake City, UT; [2]Northwell Health, Valley Stream, NY*

Introduction and Objective: Deep vein thrombosis (DVT) affects ~1 in 1,000 people in the US annually. A common complication of DVT is post-thrombotic syndrome, which increases the risk of developing venous leg ulcers (VLUs) that impair quality of life. This study was designed to evaluate the degree to which anatomic location of lower-extremity DVTs is associated with subsequent risk of developing a VLU.

Methods: We conducted a case-control study among patients ≥18 years at a single academic institution diagnosed with a VLU in at least one leg between January 2014-September 2024 and had a history of lower extremity DVT. Limbs of cases without a VLU in the contralateral leg served as controls. The association between DVT location and VLU occurrence was analyzed using logistic regression models while controlling for DVT treatment and patient comorbidities.

Results: We identified 80 patients diagnosed with VLU in a lower limb (cases) and 49 with no history of ulcer in the contralateral limb (controls). As compared to controls, limbs with a VLU had a higher proportion of DVTs diagnosed in the femoral-popliteal and calf vein segments (46%-case vs 35%-control) as well as combination of both iliofemoral and distal segments (31%-case vs. 16%-control; $P<0.05$). This finding was confirmed in risk-adjusted models showing that limbs with calf vein DVTs were 3.4 times (95% CI:1.2-9.2;$P<0.05$) more likely to develop a VLU than controls, whereas the combination of calf vein and iliofemoral DVTs carried a 4.7-fold increased risk (95% CI:1.3-17.2;$P=0.02$) of VLU. In comparison, isolated iliofemoral DVTs were not associated with increased risk of VLU.

Conclusions: Calf and femoral-popliteal DVTs are associated with a higher risk of developing VLU than more proximal iliofemoral DVTs. These findings suggest a potential need for earlier and more aggressive intervention of DVTs in the distal segments to reduce the incidence of VLUs.

4:52 – 5:00 pm	47 (RF)	**Impact Of Pre-hemodialysis Nephrology Care And Comorbidity Burden On Type Of Vascular Access At Dialysis Initiation**
		Crystal Diaz[1], Nancy C Edwards[1], Matthew P Goldman[1], Ross P Davis[1], Mariana Murea[1], Jeanette Stafford[2], Timothy Craven[2], Gabriela A Velazquez[1] *[1]Atrium Health Wake Forest Baptist, Winston Salem, NC; [2]Wake Forest University School of Medicine, Winston Salem, NC*

Introduction and Objective: End-stage renal disease is prevalent in the US with variable pre-hemodialysis (HD) nephrology (preHDn) care. We aimed to determine whether duration of preHDn care and comorbidity burden influenced vascular access type at HD initiation; hypothesizing that longer preHDn care and lower comorbidity burden would be associated with higher rates of arteriovenous (AV) access (fistula or graft, AVF/AVG) rather than catheter (CVC).

Methods: We conducted a single-institution, retrospective review from 2015-2019 of 1,978 patients initiating HD. The outcome was type of access at HD initiation. Primary covariates were preHDn care (none, <6 months, 6-12 months, >12 months) and comorbidity burden (low, moderate, high). Logistic regression models evaluated these factors and their interaction, with and without adjustment for age, sex, race, insurance, and distressed community quintiles.

Results: Of 1,978 patients [mean age 64.3 (SD 14.2), 43% female, 56% non-Hispanic White], 1,634 (83%) initiated HD with CVC and 344 (17%) with AVF/AVG. Compared to no care, <6 months of preHDn was associated with greater odds of AV access creation [OR 3.9 (95% CI 2.4-6.6), p<0.0001], and 6-12 months conferred additional benefit [OR 1.8 (1.1-2.7), p=0.0096]. No significant difference was seen between 6-12 months and >12 months. Patients with moderate comorbidity burden had lower odds of AVF/AVG creation versus low burden [OR 0.7 (0.5-0.9), p=0.0128]. The interaction term was non-significant, and findings were consistent in adjusted models.

Conclusions: PreHDn care and lower comorbidity burden are associated with increased odds of AV access at HD initiation. The benefit of preHDn plateaus after 12 months. Importantly, comorbidity burden did not diminish the positive association between nephrology care and AV access, supporting universal referral irrespective of comorbidities. These findings underscore the critical role of timely nephrology care in optimizing dialysis readiness and reducing reliance on catheters.

5:00 – 5:08 pm	48 (RF)	**Mid-term Outcomes Of Asymptomatic And Symptomatic Isolated Mesenteric Artery Dissections**
		Alejandro Pizano, Nakia Sarad, Varuna Sundaram, Andy Lee, Rajeev Dayal *NewYork Presbyterian Queens, Flushing, NY*

Introduction and Objective: Isolated dissections of the superior mesenteric and celiac arteries are rare vascular conditions that are increasingly detected due to advances in imaging. Presentations vary from incidental findings to mesenteric ischemia, and optimal management remains debated, ranging from conservative medical therapy to open surgical repair. This study reviews the experience of a single institution, focusing on patient characteristics, management, and mid-term outcomes.

Methods: A retrospective review of patients diagnosed with isolated dissections of the superior mesenteric artery (SMA), celiac artery, or their branches between January-2017 and August-2025. Clinical and imaging characteristics were recorded. Patients were stratified by presentation (asymptomatic vs symptomatic), and treatment strategies (medical vs surgical) were compared. Primary outcomes included survival, symptom resolution, and treatment failure requiring reintervention. Secondary outcomes included hospital and intensive care unit length of stay, readmission, and radiographic remodeling.

Results: Thirty-two patients were identified, mean age **61±12 years**; most were male (88%), of Asian descent (56%), and symptomatic (72%), with SMA involvement in 69%. Observation was initial management in 20% and medical therapy in 53%, while 33% underwent operative intervention, all symptomatic presenting with rupture, ischemia, or aneurysmal progression. Survival exceeded 85% in both groups (asymptomatic 89% vs. symptomatic 87%), with longer follow-up in asymptomatic patients (1679 vs. 1371 days). Symptom resolution occurred in 2 asymptomatic and 17 symptomatic patients; 4 symptomatic patients required reintervention. Length of stay was similar (6.2 vs 8.5 days), but symptomatic patients required more ICU care (p=.004). Favorable remodeling was observed in 57% of non-operative patients.

Conclusions: Both asymptomatic and symptomatic SMA/celiac dissections demonstrate favorable mid-term survival with high rates of symptom resolution. Asymptomatic cases can be safely managed medically, whereas symptomatic patients more often require surgery, particularly with rupture, ischemia, or higher Zerbib classifications. A tailored, medical-first strategy remains safe and effective for most patients.

5:08 – 5:20 pm	49	**Tibial Artery Stenting In The VQI Database**
		Nicholas Wells[1], Martin D Slade[2], Yuan Huang[3], Jonathan Cardella[4], Britt Tonnessen[4], Raul J Guzman[4], Cassius Iyad Ochoa Chaar[4] *[1]Yale School of Medicine, New Haven, CT; [2]Yale School of Medicine, Yale School of Public Health, New Haven, CT; [3]Yale School of Public Health, New Haven, CT; [4]Yale School of Medicine, Department of Vascular Surgery and Endovascular Therapy, New Haven, CT*

Introduction and Objective: The development of dedicated tibial artery stents has been challenging despite reports of successful use of coronary stents in the infrapopliteal circulation. This study compares the outcomes of tibial stenting and plain balloon angioplasty (POBA) prior to FDA approval of a tibial scaffold.

Methods: The Vascular Quality Initiative (VQI) Peripheral Vascular Intervention module was reviewed for patients treated for tibial peripheral arterial disease (PAD) between 2008-2024. Trends in tibial interventions were derived, and patient characteristics undergoing stenting or POBA were compared. Propensity score matching was performed to evaluate outcomes, and Kaplan-Meier (KM) estimates of Major Adverse Limb Event-free (MALE-free) survival were compared.

Results: Among 312,929 patients undergoing 455,297 procedures, 92,152 (29.4%) underwent tibial revascularization. Use of stenting declined (11.7%→1.7%), while special balloons increased (2.7%→12.0%). (Figure) Before matching, patients undergoing stenting were more likely to be older, male, African American, and had higher smoking rates but were less likely to have diabetes and renal disease compared to patients undergoing POBA. They also more frequently underwent elective treatment of shorter lesions involving the tibioperoneal trunk with more fluoroscopy time. (Table) After matching, patients undergoing stenting had higher perioperative complications but achieved higher technical success compared to POBA. After a mean follow up of 1.1-year there were no difference in cumulative outcomes or MALE-free survival based on KM analysis.

Conclusion: Tibial stenting yields higher technical success than POBA but with no improvement in long-term outcomes. Dedicated, durable tibial stents are needed in the endovascular armamentarium.

Figure I. Trends in Tibial Revascularization.

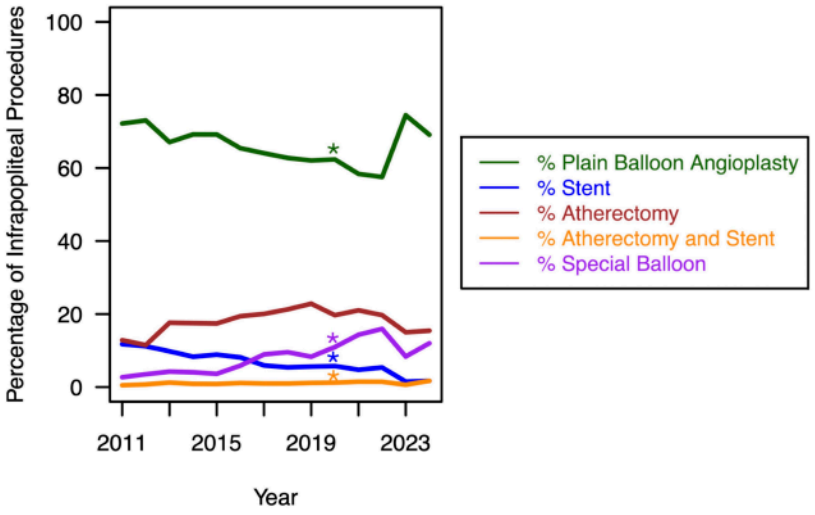


Table I. Characteristics and outcomes of patients undergoing stenting and balloon angioplasty for infrapopliteal peripheral artery disease in the VQI.

Pre-Match (n=37,516)	Stent (N=2,889)	Balloon Angioplasty (N=34,627)	P-Value
DEMOGRAPHICS			
Age	71.8 (11.8)	70.3 (12.0)	**<0.001***
Male Gender	1,998 (69.2%)	22,457 (64.9%)	**<0.001***
Race			**<0.001***
Black	2,110 (73.1%)	23,166 (66.9%)	
White	569 (19.7%)	8,196 (23.7%)	
Other	209 (7.2%)	3,249 (9.4%)	
Hispanic	253 (8.8%)	3,355 (9.7%)	0.103
COMORBIDITIES			
Renal Status			**<0.001***
Normal	1,526 (53.1%)	17,301 (50.2%)	
Chronic Kidney Disease	944 (32.8%)	11,005 (31.9%)	
End Stage Renal Disease	406 (14.1%)	6,166 (17.9%)	

Pre-Match (n=37,516)	Stent (N=2,889)	Balloon Angioplasty (N=34,627)	P-Value
Smoking			**0.012***
Never	1,097 (38.0%)	14,090 (40.7%)	
Former	1,202 (41.7%)	13,970 (40.4%)	
Current	586 (20.3%)	6,518 (18.9%)	
Diabetes	1,958 (67.8%)	24,954 (72.1%)	**<0.001***
Coronary Artery Disease	999 (34.6%)	11,827 (34.2%)	0.659
Congestive Heart Failure	816 (28.3%)	10,405 (30.1 %)	**0.040***
Chronic Obstructive Pulmonary Disease	613 (21.2%)	6,920 (20.0%)	0.113
Hypertension	2,630 (91.3%)	31,440 (91.2%)	0.838
Coronary Revascularization	1,119 (41.5%)	11,693 (35.9%)	**<0.001***
PRE-OPERATIVE MEDICATIONS			
ASA	1,985 (68.7%)	22,878 (66.1%)	**0.004***
P2Y12 Inhibitor	1,291 (44.7%)	12,820 (37.0%)	**<0.001***
Statin	2,070 (71.7%)	24,399 (70.5%)	0.184
Anticoagulant	722 (25.0%)	8,689 (25.1%)	0.904
PROCEDURAL CHARACTERISTICS			
Indication			**<0.001***
Claudication	543 (18.8%)	5,320 (15.4%)	
Rest Pain	425 (14.7%)	4,286 (12.4%)	
Tissue Loss	1,921 (66.5%)	25,021 (72.3%)	
Urgent/Emergent	569 (19.7%)	7,707 (22.3%)	**<0.001***
Number of Arteries Treated			**<0.001***
1	821 (28.4%)	9,915 (28.6%)	
2	1,075 (37.2%)	14,062 (40.6%)	
3	678 (23.5%)	7,722 (22.3%)	
4	314 (10.9%)	2,926 (8.5%)	
Treated Length - Mean CM (SD)	8.9 (9.8)	12.6 (12.3)	**<0.001***
Fluoroscopy Time - Mean Minutes (SD)	27.2 (19.8)	21.5 (16.0)	**<0.001***

Pre-Match (n=37,516)	Stent (N=2,889)	Balloon Angioplasty (N=34,627)	P-Value
Isolated Tibial Intervention	1,291 (44.7%)	16,074 (46.4%)	0.073
Artery Treated			
Anterior Tibial	597 (20.7%)	8,735 (25.2%)	**<0.001***
Tibioperoneal Trunk	385 (13.3%)	2,395 (6.9%)	**<0.001***
Posterior Tibial	435 (15.1%)	6,692 (19.3%)	**<0.001***
Peroneal	407 (14.1%)	4,429 (12.8%)	**0.046***
Dorsalis Pedis	43 (1.5%)	1,007 (2.9%)	**<0.001***
Plantar	28 (1.0%)	401 (1.2%)	0.359
Multilevel Including Tibial	1,598 (55.3%)	18,553 (53.6%)	0.073
Artery Treated			
Anterior Tibial	644 (22.3%)	8,113 (23.4%)	0.165
Tibioperoneal Trunk	756 (26.2%)	5,573 (16.1%)	**<0.001***
Posterior Tibial	406 (14.1%)	5,498 (15.9%)	**<0.010***
Peroneal	421 (14.6%)	5,457 (15.8%)	0.092
Dorsalis Pedis	35 (1.2%)	472 (1.4%)	0.498
Plantar	10 (0.3%)	137 (0.4%)	0.682
Concomitant Treatment Level			
Aortoiliac	62 (2.1%)	1,013 (2.9%)	**0.016***
Femoropopliteal	1,578 (54.6%)	18,318 (52.9%)	0.075

PERIOPERATIVE OUTCOMES - After Matching with No Differences in Baseline Characteristics			
Pre-Match (n=11,556)	**Stent (N=2,889)**	**Balloon Angioplasty (N =8,667)**	**P-Value**
Technical Success	2,649 (92.9%)	7,780 (90.5%)	**<0.001***
Target Artery Dissection	176 (9.6%)	171 (2.6%)	**<0.001***
Embolism	24 (1.3%)	52 (0.8%)	**0.040***
Thrombosis	28 (1.5%)	32 (0.5%)	**<0.001***
Morbidity	132 (7.1%)	315 (4.7%)	**<0.001***
Mortality	113 (3.9%)	347 (4.0%)	0.829
LONG-TERM OUTCOMES			
Follow-Up Time - Mean Years (SD)	1.12 (0.89, 1.47)	1.10 (0.86, 1.50)	0.224
Major Amputation	226 (13%)	649 (12%)	0.655
Reintervention	82 (5.4%)	249 (5.7%)	0.686
MALE	280 (18%)	841 (19%)	0.565
Mortality	780 (32%)	2,226 (31%)	0.113

5:20 – 5:32 pm	50	**Early Outcomes Of Open Aortic Enhanced Recovery After Surgery Program**
		Joseph R Chitwood, C. Adam Banks, Zdenek Novak, Courtney Busby, Jarrad W Rowse, Danielle C Sutzko, Benjamin J Pearce, Adam W Beck, Emily L Spangler *University of Alabama Birmingham Medical Center, Birmingham, ALL*

Introduction and Objective: Enhanced recovery after surgery (ERAS) protocols are well established in many surgical specialties and are particularly well-suited to aortic surgery due to variability in perioperative management. The open aortic ERAS program launched November 1, 2024. We aim to demonstrate success in early postoperative outcomes.

Methods: Pre-ERAS cohort consists of 171 open aortic cases, 92 met inclusion criteria. The ERAS cohort includes patients enrolled in the Open Aortic ERP (n=27 to date, n=23 excluded). Primary exposure: ERP vs no ERP. Primary outcomes: total and postoperative length of stay (LOS). Secondary outcomes: postoperative IVF volume, time to postoperative lactate correction, nasogastric tube days, Foley catheter days, postoperative day (POD) of first physical therapy, POD of first ambulation, complications, and readmission.

Results: Demographic and operative characteristics are not statistically different between groups: including age, race, sex, pre-op anesthetic technique, indication, and proximal clamp placement. Table 1 includes postoperative outcomes of ERP and pre-ERP patients. Significantly lower use of postoperative IVF, earlier POD of first physical therapy and POD of first ambulation, decreased Foley catheter duration is observed in the ERP (Figure 1). Between Pre-ERP and ERP group there is no significant difference in postoperative LOS, total LOS, complications, RTOR, mortality, readmission or reintervention.

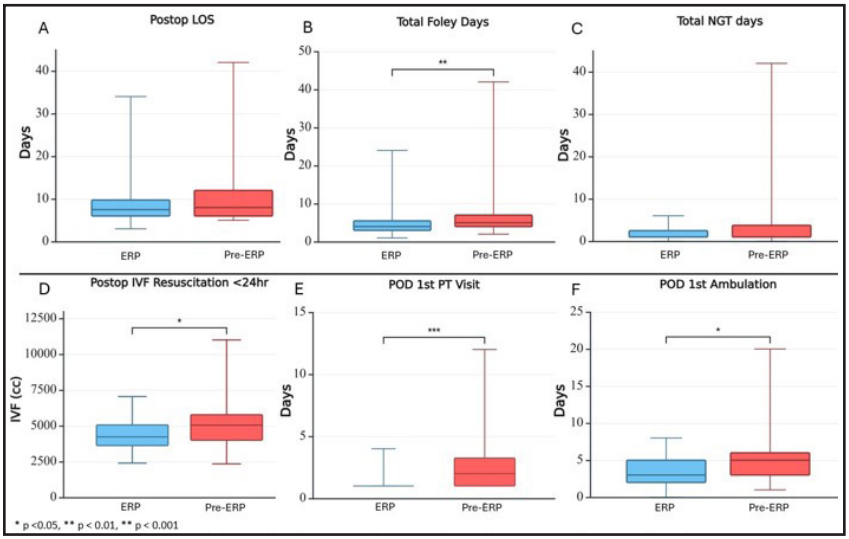
Conclusions: This study demonstrates early success in implementation of an open aortic ERP and provides a framework for application in complex vascular surgery. Early outcomes highlight success of lower postoperative IVF resuscitation, earlier mobilization, and shorter catheter and tube durations without increases in morbidity, kidney injury, or mortality.

Table I. Postoperative outcomes for patients enrolled in the open aortic enhanced recovery program and the historic pre-ERP cohort.

	ERP		
	No (n=92)	**Yes (n=27)**	**P-Value**
Postoperative Outcomes, median (QI, Q3)			
Postop LOS (days)	8 (7, 12)	7.5 (6, 10.5)	0.3[1]
Total LOS (days)	9 (7, 14)	9.5 (6, 15.25)	0.77[1]
LOS in ICU (days)	4 (3, 6)	4 (2.75, 6.25)	0.98[1]
Postop IVF <24hr (cc)	5100 (4125, 6000)	4340 (3493, 5100)	**0.04**[1]
Lactic Correction Time (hrs)	0 (0, 7)	0 (0, 10)	0.72[1]
POD of PT visit (days)	2 (1, 3)	1 (1, 1)	**<0.01**[1]
POD of 1st ambulation (days)	4 (3, 6)	3 (2, 5)	**0.012**[1]
Total Foley (days)	5 (5, 7)	4 (3, 5.25)	**<0.01**[1]
Postoperative Outcomes, n%			
In-Hospital Complications	35 (38.0%)	13 (48.1%)	0.35[2]
RTOR	10 (10.9%)	2 (7.4%)	0.6[2]
Cardiac Complication	10 (10.9%)	8 (29.6%)	**0.016**[2]
In-Hospital Mortality	1 (1.1%)	1 (3.7%)	0.4[2]
30d Mortality	0 (0.0%)	0 (0.0%)	1[2]
30d Readmit	10 (10.9%)	1 (3.7%)	0.25[2]
30d Reintervention	15 (16.3%)	3 (13.0%)	0.7[2]

Statistical test applied: [1]Chi-square. [2]Man-U Whitney (Wilcoxon Rank-Sum).

Figure I. A, Postoperative length of stay (LOS). **B**, Total Foley catheter days. **C**, Total nasogastric tube days. **D**, Postoperative intravenous fluid resuscitation within 24 hours. **E**, Postoperative day (POD) of first physical therapy (PT) visit. **F**, Postoperative day of first ambulation.



5:32 – 5:40 pm	51 (RF)	**Impact Of Socioeconomic Vulnerability On Outcomes Following Repair Of Chronic Mesenteric Ischemia**
		Mackenzie K Madison, Aniffa Kouton, Geneva Frank, Hanaa Aridi, Rohan Basu, Andres Fajardo, Greg Westin, Raghu Motaganahalli *Indiana University School of Medicine, Indianapolis, IN*

Introduction and Objective: Poverty is associated with greater atherosclerotic disease burden, including mesenteric disease. The association between poverty and outcomes following repair for chronic mesenteric ischemia is less clear.

Methods: A retrospective review of patients who underwent repair for chronic mesenteric ischemia across affiliate hospitals from January 2020 through June 2024 was performed. Patients who underwent open or endovascular repair were included and stratified by neighborhood socioeconomic status using the Area Deprivation Index (ADI). Statewide indices were used to categorize patients into low (1-3), medium (4-6), and high (7-10) deprivation neighborhoods. Statistical analysis was performed in Stata. Categorical variables were compared using chi square and Fisher's exact analysis. Quantitative variables were compared using ANOVA.

Results: A total of 117 patients underwent repair during this time (open: n=71, endovascular: n=46 ; p = 0.983). There were no significant differences in baseline demographics or comorbidities between groups. Patients from high deprivation neighborhoods were more likely to experience post-operative complications (odds ratio [OR]: 7.9 ; 95% confidence interval [CI]: 1.9-33.0, p = 0.005) and succumb to in-hospital mortality (OR: 9.7 ; 95% CI: 2.3-40.7, p = 0.002). Patients from high deprivation neighborhoods additionally had higher rates of 30-day readmission (OR: 9.3 ; 95% CI: 1.08-79.8, p = 0.042), lower primary patency (Hazard Ratio [HR]: 27.5 ; 95% CI: 2.39-317.4, p = 0.008) and require reintervention (HR: 9.43 ; 95% CI: 1.06-83.9, p = 0.044) on follow up (Table 1).

Conclusions: This study shows that socioeconomic disadvantage is linked to poorer outcomes following surgical repair of chronic mesenteric ischemia. Results such as these suggest that ADI may be useful for identifying high-risk patients and developing care pathways to improve surgical outcomes.

Table 1. In-hospital, 30 day and long term outcomes.

	Low Deprivation	Medium Deprivation		High Deprivation	
In-Hospital		OR (95% CI)	P-Value	OR (95% CI)	P-Value
Complications	Reference	3.94 (0.93-16.7)	0.063	7.9 (1.9-33.0)	**0.005**
Mortality	Reference	0.91 (0.05-16.7)	0.951	12.7 (1.10-145.2)	**0.040**
Complications and/ or Mortality	Reference	4.02 (0.95-17.0)	0.059	9.7 (2.30-40.7)	**0.002**
Thirty-Day		OR (95% CI)	P-Value	OR (95% CI)	P-Value
Readmission	Reference	2.28 (0.24-21.4)	0.471	9.30 (1.08-79.8)	**0.042**
Mortality (including in-hospital)	Reference	0.95 (0.05-16.8)	0.970	15.8 (1.40-178.4)	**0.026**
Follow Up		HR (95% CI)	P-Value	OR (95% CI)	P-Value
Reintervention	Reference	1.98 (0.23-17.3)	0.537	9.43 (1.06-83.9)	**0.044**
No Symptom Resolution	Reference	1.70 (0.33-8.62)	0.520	4.1 (0.75-22.1)	0.104
Non-Patent Repair	Reference	4.9 (0.39-60.9)	0.218	27.5 (2.39-317.4)	**0.008**

5:40 – 5:48 pm	52 (RF)	**Factors Associated With Same-day Cancellations In Dialysis Access Surgery**
		Shaunak Adkar, Andrea Fisher, Ashley Griffin, Michael Sgroi, David S. Kauvar *Stanford University, Stanford, CA*

Introduction and Objective: Dialysis access surgery constitutes the majority of outpatient vascular procedures nationwide, particularly at publicly-funded, resource-limited hospitals caring for underserved populations. Same-day surgical cancellations delay care and result in inefficient resource utilization. We sought to identify patient-level predictors of same-day surgical cancellation in patients scheduled for dialysis access surgery at a large county hospital.

Methods: Using medical record data obtained at Santa Clara Valley Medical Center, we conducted a retrospective review of patients scheduled for creation of arteriovenous (AV) fistula or graft placement between 2015-2021. The primary outcome was same-day cancellation. Wilcoxon rank sum test was used for continuous variables and Pearsons X2 test for categorical variables. Logistic regression was used to identify independent predictors of cancellation.

Results: We identified 273 patients undergoing 473 dialysis access procedures, of which 58 patients (21%) canceled on the day of surgery. This cohort had higher prevalence of current smokers (19% vs. 7%, $p < 0.05$) and patients with a history of cerebrovascular accident (CVA) (22% vs. 12%, $p < 0.05$). Patients with same-day cancellations were more likely to ultimately need AV graft placement (14% vs. 4%, $p < 0.05$). In adjusted analysis, current smoking (OR 3.45; CI: 1.26-3.98; $p < 0.05$), history of CVA (OR: 2.79; CI: 1.21-6.29; $p < 0.05$), and AV graft placement (OR: 4.52; CI: 1.49-13.60; $p <0.05$) remained independent predictors of same-day cancellation.

Conclusions: We have identified some demographic and procedural characteristics associated with same-day surgical cancellation in patients in need of dialysis access. Patients with a history of CVA, current smokers, and those in need of AV grafts may benefit from focused social support and pre-operative counseling. These variables may also be surrogates for SDOH, inviting further study to improve timely placement of dialysis access and efficient use of health system and community resources.

5:48 – 5:56 pm	53 (RF)	**Hypercoagulability In Acute Limb Ischemia: A Rising Diagnosis With Increased Amputation Risk**
		Sahar Alimohamadi, Katherine Reitz, Elizabeth Andraska, Edith Tzeng, Natalie Sridharan, Marissa Jarosinski *UPMC, Pittsburgh, PA*

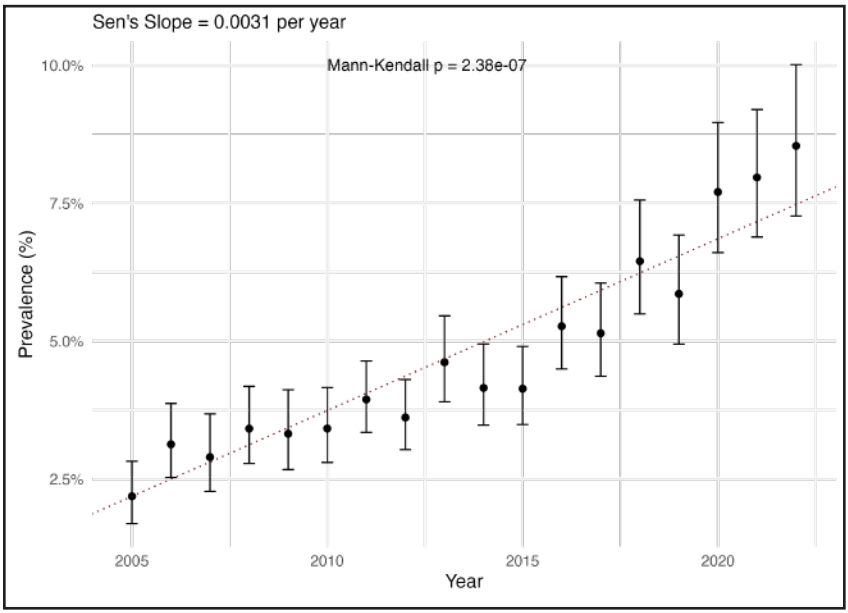
Introduction and Objective: Hypercoagulability worsens peripheral artery disease outcomes, but little is known about its impact on presentation and outcomes of acute limb ischemia (ALI).

Methods: We identified survey-weighted emergent admissions with primary diagnosis of lower extremity ALI in the National Inpatient Sample (NIS) data (2005-2022). The primary outcome was the prevalence of hypercoagulability, defined by ICD-9/10 codes for inherited or acquired thrombophilia. Secondary outcomes included in-hospital amputation and mortality rates. Mann-Kendall testing examined trends. Multivariable logistic regression identified predictive covariates in those with anatomic data (ICD10 only). Linear combinations of regression coefficients were estimated for comparisons of interest.

Results: Of 246,317 ALI hospitalizations included (mean age 68±16, 49% female, 69% White race), 11,191 (4.5 %) hospitalizations were hypercoagulable. Prevalence of hypercoagulability among ALI hospitalizations increased from 2.2% in 2005 to 8.5% in 2022 ($p<.05$; Figure). While non-hypercoagulable cases had decreasing rates of amputation over the study period (4.2% to 0.9%; $p<.05$), amputation rates in hypercoagulable cases remained stable (6.1% to 3.9%, $p=1$). Hypercoagulable cases had more amputations (12% vs 6%, $p <.05$) but lower mortality (4% vs 6%, $p <.05$). The strongest predictors of amputation were hypercoagulable diagnosis (aOR 2.1, 95% CI [1.7, 2.7]) and tibial intervention (aOR 2.1, 95% CI [1.8, 2.5]). Hospitalizations with both hypercoagulability and tibial intervention had 4.5-times odds (95% CI [3.40, 5.95]) of amputation compared to the rest of the cohort.

Conclusions: Hypercoagulable diagnosis is increasing in prevalence among ALI patients. The worst outcomes are seen in cases with both hypercoagulability and tibial interventions. Amputation rates remain stagnant in hypercoagulable cases, while decreasing in non-hypercoagulable cases. Further investigation is warranted into these mechanisms to mitigate the risk in this population.

Figure I. Prevalance of Hypercoagulable State in Patients with ALI (2005-2022).



7:00 – 10:00 pm	**Presidents Reception & Dinner** **50th Anniversary Celebration**

VESS BYLAWS

ARTICLE I – NAME

The name of this organization shall be the "Vascular and Endovascular Surgery Society" (hereinafter the "Society"). *Formerly Peripheral Vascular Surgery Society, Established in 1976.*

ARTICLE II – MISSION & OBJECTIVES

The Mission of the Society shall be to improve the quality and safety of vascular & endovascular surgical procedures and general vascular care through education, scholarship, advocacy and leadership.

The Objectives of the Society shall be:

1. To provide a diverse and inclusive forum for the early career vascular surgeon.
2. To promote basic, translational, clinical health services research pertaining to vascular and endovascular surgery.
3. To educate vascular surgeons on effective procedures, therapies and approaches to care.

The Society shall carry on activities:

- As a corporation exempt from Federal income tax under Section 501 (C) (3), of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law), or;
- As a corporation, contributions to which are deductible under Section 170; Furthermore, no part of the net income of the Society or its property or assets shall at any time inure to the benefit of any individual member, or of any private individual, or be used to promote the candidacy of any person seeking political office.

ARTICLE III – MEMBERSHIP

There shall be six types of membership:

a) Active
b) Inactive
c) Honorary
d) Candidate
e) Associate
f) Medical Student

a) **Active Membership** of this Society shall be limited to physicians of good professional standing who have completed an ACGME-approved vascular surgical residency or fellowship, or equivalent foreign advanced training, who have a sustained major interest and active practice in vascular and endovascular surgery and who are certified or eligible for certification by the Vascular Surgery Board of the American Board of Surgery or its equivalent. Active Members shall be required to pay annual dues. Active members have voting privileges, can serve on committees, sponsor new member applications as well as submit and sponsor papers for presentation at the annual meeting. Active Members who have been in practice for greater than 15 years may complete their term of elected office but are ineligible for any new position. This same group of Active Members may sponsor but may not present papers at Society meetings nor may they apply for or receive any grant funding.

b) **Inactive Membership** shall be granted to Members upon receipt of written request. Inactive members will no longer receive a subscription to the Journal. Inactive members are not required to pay annual dues, nor are they allowed to sponsor new member applications or papers submitted to the annual meeting. Inactive members may reactivate their membership by requesting in writing and paying all back dues or three times the current year's dues.

c) **Honorary Membership** shall be granted to individuals at the discretion of the Executive Council. Honorary Members pay no dues and are not eligible for election as Society officers.

d) **Candidate Membership** shall be granted to participants who are in good professional standing in an ACGME accredited general surgery, or vascular training programs recognized by the Society. Candidate Members must provide the name of their program and program director on their application. Candidate Members may serve on Committees but shall have no voting rights. Candidate Members may present papers at the annual meeting if sponsored by

an Active Member. Candidate Members may be promoted to Active Membership upon completion of their vascular surgery training and upon receipt by the society office, of a copy of their vascular surgery training certificate or a letter of endorsement from an Active VESS member Sponsor. At that time, the newly promoted Active Member will be bound by the requirements of active membership in the society.

e) **Associate Membership** shall be limited to non-vascular trained physicians and surgeons with either an MD or DO degree, scientists active in vascular research, physician extenders in vascular specialties (RN's, PA's, NP's) and/or vascular technologists. These members shall pay half dues, have no voting rights, and may not be elected as officers of the society. They may, however, submit abstracts and papers to meetings for presentation.

f) **Medical Student Membership** shall be open to those enrolled in an accredited allopathic or osteopathic medical school.

ARTICLE IV – ELECTION OF MEMBERS

The process of election of active members to the Society shall be as follows:

a) Membership enrollment in the Society shall be completed via electronic application through the website.

b) Completed applications shall be submitted 3 months prior to any scheduled business meeting, at which time the candidate shall be considered for election. A recommendation from an active society member is required to complete the application.

c) The names of the applicants recommended for membership by the Executive Committee shall be submitted to the members at the business meeting.

d) Election to membership shall be by secret ballot, by a three-fourths (3/4) affirmative vote of the membership present.

e) An applicant who fails to be elected at one meeting may be reconsidered at the next two business meetings of the Society.

ARTICLE V – DUES AND FEES

a) Dues and fees shall be levied by the Executive Committee and approved by the membership at the annual meeting.

b) Any member whose dues remain unpaid for a period of three years shall be dropped from membership, provided that notification of such lapse is given at least three months prior to its effective date. The member may be reinstated on approval of the Executive Committee following payment of the dues in arrears.

ARTICLE VI – RESIGNATIONS, EXPULSIONS

a) Resignations of members otherwise in good standing shall be accepted by a majority vote of the Executive Committee.

b) Charges of unprofessional or unethical conduct against any member of the Society, if proffered in writing and submitted to the Executive Committee, must be acted upon within one year. The Executive Committee's concurrence or disallowance of the charges shall be presented to the membership at the annual meeting. A three-fourths (3/4) affirmative vote of the members present shall be required for expulsion.

ARTICLE VII – OFFICERS: ELECTIONS AND DUTIES

a) The officers of this Society shall consist of a president, president-elect, secretary, treasurer, and recorder; all to be elected as provided in these bylaws.

b) The president shall preside at Executive Committee meetings and the Annual Meeting. Successors to vacated offices of the Society shall be appointed by the president until the position is filled at the next annual meeting.

c) The president and president-elect of the Society shall be elected for terms of one year each. The secretary, treasurer &recorder, shall be elected for three-year terms; and councilors at large shall be elected for 2-year terms.

d) The president-elect, in the absence or incapacity of the president, shall perform the duties of the president's office.

e) In the absence of both the president and president-elect, the chair shall be assumed by a president pro tempore, elected by such members of the Executive Committee as are present.

f) The secretary shall keep minutes at the meetings of the Society and the Executive Committee, update the Executive Committee on membership database and new applicant files and conduct correspondence of the Society. The Secretary will issue an annual written report at the Annual Meeting.

g) The Treasurer shall receive all monies and funds belonging to the Society, pay all bills, render bills for dues and assessments, and report to the membership at the annual meeting. The treasurer will prepare an annual report for audit.

h) The Recorder shall receive all papers presented before the Society. The recorder shall be responsible for assuring prompt editorial review of manuscripts in concert with other Society members.

i) The Councilors-at-large shall be elected for two-year terms, with election of two councilors occurring annually so as to provide overlapping terms.

ARTICLE VIII – EXECUTIVE COUNCIL

a) There shall be an Executive Committee consisting of the president, president- elect, secretary, treasurer, recorder, councilors-at-large, and the two most recent past presidents.

b) Committee Chairs shall be non-voting members of the EC and are invited to attend the Executive Committee Meetings and Conference Calls at the direction of the President.

c) The Executive Committee shall be the governing body of the Society and shall have full power to manage and act on all affairs of the Society.

d) Executive Committee meetings shall be held at the call of the president of the Society.

e) A majority of the members of the Executive Committee shall constitute a quorum for the transaction of business.

f) All members of the executive committee will be required to complete a conflict of interest declaration prior to their appointment. This declaration must be approved by a majority of the remaining executive committee members. If the executive committee requests, the member must divest themselves of a designated conflict of interest prior to assumption of the appointment. A conflict of interest is defined as any direct financial reimbursement to an individual or their spouse. It does not include non-specified research contributions to an institution.

ARTICLE IX – COMMITTEES AND REPRESENTATIVES

Standing committees of the Society shall consist of a nominating committee, a spring program committee, a winter program committee, a grants & scholarship committee, a fundraising committee, a bylaws committee, a membership development committee, a diversity, equity & inclusion committee, a vascular resident education committee, a student education committee and a communications committee.

The **Nominating Committee** shall consist of the current president in office, the president-elect and the three most recent past presidents. Its functions shall be to make up a slate of officers for the Society, and to nominate representatives to affiliated societies to be presented to the Executive Committee at the annual meeting. The proposed slate shall then be presented for vote during the Annual Member Business Meeting.

Representatives shall be appointed by the nominating committee in concert with the Executive Committee to serve on the American College of Surgeons Board of Governors, American College of Surgeons Advisory Council for Surgical Specialties, Vascular Surgery Board of the American Board of Surgery and the Society for Vascular Surgery (SVS) Executive Committee. Each representative shall serve a three-year term unless otherwise noted by the Executive Committee. From time to time, as other organizations may seek representation from the Society, additional representatives shall be appointed in a similar manner outlined above.

The **Spring Program Committee** shall work in concert with the SVS Program Committee to select papers and make up the program for upcoming meetings. The Spring Program Chair shall be named by the Executive Committee and serve a term of two years. The Committee will consist of 6 additional society members serving a term of two years each, with three members alternating years in such a manner as to allow for overlap.

The **Winter Program Committee** shall solicit papers and other presentations from members and other individuals and make up the programs for upcoming meetings. The Winter Program Chair shall be named by the Executive Committee and serve a term of one year. The Executive Committee will also name a Vice Chair for the Winter Program Committee for continuity. The Vice Chair will advance to the Chair. Winter Program Committee members will be asked to serve as ad hoc reviews for manuscripts presented at the Winter Meeting and submitted to Annals of Vascular Surgery for publication.

The **Grants & Scholarships Committee** shall review all applications submitted for any of the Society's educational grants. Applications will be scored and ranked, and winners will be chosen and submitted to the Executive Committee and announced at the Annual Winter Meeting.

The function of the **Fundraising Committee** shall be to research and implement comprehensive fundraising campaigns to support the Society.

The function of the **Bylaws Committee** is to review the By-Laws from time to time as directed by the Council and when appropriate, make recommendations regarding amendments. The committee will also be charged with developing policies and procedures for the Society.
The function of the Membership Development Committee is to review all applications and present their nominations for membership to the Executive Committee for review and ratification at the Annual Business Meeting. The Committee shall also assist the Secretary with membership development and expansion campaigns.

The function of the **Diversity, Equity & Inclusion Committee** is to identify and promote ways to address issues of diversity, equity, and inclusion in vascular surgery, and encourage women and minorities to actively participate in the society and its committees.

The Communications Committee shall consist of two sub-committees:

1) **Website sub-committee** that is responsible for all web-based and electronic communication, maintenance of the Society website and social media accounts.
2) **Newsletter sub-committee** is responsible for population of content for the membership newsletters.

The function of the **Vascular Resident Education Committee** is to organize and execute the Fellows Program and the Technology Forum at the VESS Annual Meeting and other initiatives focused on the education and recruitment of Vascular Surgery trainees.

The function of the **Student Education Committee** is to organize and execute the Student Mentor Program during the VESS Annual Meeting and other initiatives focused on the education and recruitment of medical students.

ARTICLE X – MEETINGS

a) The Society shall hold an annual meeting, customarily in winter, and held at a time and place selected by the Executive Committee.

b) The business meeting of the Society shall be conducted during the annual meeting.

c) All active members are encouraged to attend the annual meeting one year out of every three years. There is no attendance requirement for any other member category.

d) Special meetings may be called at any time by the president, or a simple majority of the Executive Committee.

ARTICLE XI – QUORUM

The members present at any official meeting of the society shall constitute a quorum necessary to change the constitution and bylaws of the Society, to make assessments, to authorize appropriations or expenditures of money other than those required in the routine business of the Society, to elect officers and members, and to expel members.

ARTICLE XII – ALTERATIONS, REPEAL

Bylaws may be altered or repealed at the annual meeting by a two-thirds (2/3) affirmative vote of the members present.

ARTICLE XIII – PROCEDURE

Proceedings of the Society shall be conducted under Robert's Rules of Order.

Amended – August, 2012
Amended – February, 2013
Amended – January, 2014
Amended – February, 2016
Amended – February 2018
Amended – February 2019
Amended – June 2020
Amended – January 2021
Amended – January 2022
Amended – February 2023

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MEMBER UPDATE FORM

Please help the VESS keep your membership information current. We require an email address from all members for communication purposes, as well as your preferred mailing address.

Please return to the VESS Registration Desk or email to **vess@administrare.com.**

MEMBER INFORMATION (required for all members)

Name

Institution City State

Email Address

MAILING INFORMATION

Preferred Mailing Address: ☐ Work ☐ Home

Please provide preferred mailing address below:

Mailing Address

Mailing Address *(continued)*

City State Postal Code Country

Daytime Telephone

Thank you!