

UNIVERSITY OF PENNSYLVANIA - PERELMAN SCHOOL OF MEDICINE
Curriculum Vitae

Date: 03/16/2026

Asad Ali Usman, MD, MPH

Address: Hospital of the University of Pennsylvania
Department of Anesthesiology and Critical Care
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Philadelphia, PA 19106 USA

If you are not a U.S. citizen or holder of a permanent visa, please indicate the type of visa you have:
none (U.S. citizen)

Education:

2006	BS	University of Michigan (Mathematics)
2012	MD	Xavier University (Doctorate of Medicine)
2012	MPH	Northwestern University (Biostatistics)

Postgraduate Training and Fellowship Appointments:

2012-2015	Resident in Surgery, University of Illinois
2015-2018	Resident in Anesthesiology, Boston University
2018-2019	Fellow in Critical Care Anesthesiology, University of Pennsylvania
2019-2020	Fellow in Cardiovascular Anesthesiology, University of Pennsylvania
2020-2023	NIH T32 Post Doctoral Fellow, University of Pennsylvania

Military Service:
[none]

Faculty Appointments:

2023-present	Assistant Professor of Clinical Anesthesiology and Critical Care, University of Pennsylvania School of Medicine
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Hospital and/or Administrative Appointments:

2014-2018	Surgical Intensivist/Nocturnist Department of Surgery (Moonlighting), Weiss Memorial Hospital, University of Illinois, Chicago
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Other Appointments:
[none]

Specialty Certification:

2012	Educational Commission for Foreign Medical Graduates (ECFMG)
2020	National Board of Echocardiography - Transesophageal

	Echocardiography
2020	National Board of Echocardiography - Critical Care Ultrasound
2021	American Board of Anesthesiology
2021	American Board of Anesthesiology - Critical Care
2025	American Board of Anesthesiology - Cardiac

Licensure:

2014	Illinois
2020	New Jersey
2022	Pennsylvania
2023	Delaware
2024	Michigan

Awards, Honors and Membership in Honorary Societies:

2006	Summa Cum Laude, University of Michigan
2006	Burton Academic Merit Medical Scholarship, Northwestern
2017	Trauma Resident of the Year, Boston University
2018	Intensive Care Resident of the Year, Boston University
2019	Surgical/Anesthesia Fellow of the Year, University of Pennsylvania
2021	Early Career Investigator Award, Society of Cardiovascular Anesthesiologists
2024	Trauma Surgery Non-Core Faculty Teaching Award

Memberships in Professional and Scientific Societies and Other Professional Activities:International:

2018-Present	International Anesthesia Research Society
2022-Present	International Society of Heart and Lung Transplantation
2023-Present	Spectrum Medical (Chairperson Data Safety and Monitoring Board)

National:

2010-Present	Extracorporeal Life Support Organization (Committee Support Member, Technology and Devices 2010-present)
2015-Present	American Society of Anesthesiologists
2018-Present	Society of Cardiovascular Anesthesiologists
2018-Present	Society of Critical Care Anesthesiologists
2024-Present	Johnson and Johnson MedTech (National Content Expert Mechanical Circulatory Support)

2025-Present Livanova (Clinical Advisor on Mechanical Circulatory Support)

Local:

2018-Present Pennsylvania Society of Anesthesiologists

Editorial Positions:

2011	Reviewer, Circulation Imaging
2020-Present	Reviewer, Journal of Cardiovascular and Thoracic Anesthesia
2021-Present	Reviewer, American Society for Artificial Internal Organs (ASAIO)
2022	Reviewer, Circulation, Cardiovascular Interventions
2024-Present	Reviewer: Journal of Thoracic and Cardiovascular Surgery Open

Academic and Institutional Committees:

2023-Present	Committee Member - Society of Cardiovascular Anesthesiologists - Subsection Mechanical Circulatory Support
2025-Present	Committee Member - Society of Cardiovascular Anesthesiologists - Subsection Cardiac Critical Care

Major Academic and Clinical Teaching Responsibilities:

2012	"Cardiac Transplant Imaging and Cost Effectiveness" Thesis Presentation Grand Rounds, School of Public Health, Northwestern University, Chicago
2015-2018	MS3 education during core Surgery/Anesthesiology clerkship, University of Pennsylvania
2016-2018	Senior Resident Board Review; Merit nomination by Faculty for CA1 Basic Exam teaching, University of Pennsylvania
2017	"Pregnancy Testing in the Perioperative Setting" Morbidity and Mortality Conference, Department of Anesthesiology, Boston University, Boston Medical Center
2018	"The State of Surface Ultrasound education for Anesthesiology Residents" Grand Rounds, Department of Anesthesiology, Boston University, Boston Medical Center
2018	ICU delirium, ICU Grand Rounds, University of Pennsylvania
2018	Pericardial Tamponade, Echocardiography Grand Rounds, University of Pennsylvania
2018	Undiagnosed ROSC, Morbidity and Mortality Video Review, University of Pennsylvania
2019	Infection management in LVAD - Post-operative management, CTICU Conference Presentation, University of Pennsylvania
2019	Cannulation strategies for VV and VA ECMO, CTICU Conference Presentation, University of Pennsylvania
2019	SICU QI Video Review Presentation, Acute abdominal compartment syndrome, University of Pennsylvania
2019	Tricuspid valvular Pathology Review of Matthews Echocardiography, University of Pennsylvania

2020-2023	Informal bedside and intraoperative teaching and didactics to Department learners as NIH T32 Post Doctoral Fellow, University of Pennsylvania
2020-Present	Rescue TEE: Critical Care Fellow Lecture Series, University of Pennsylvania
2020	Combined CV/CT: Aortic Dissection management and surgical decision making, University of Pennsylvania
2021	Cardiovascular Surgery Fellow Echo education, University of Pennsylvania
2022	Intensive Care Unit APP TTE Education, University of Pennsylvania
2022	RIPZ - ReTEECA and RVAD ARDS Trial, University of Pennsylvania
2022-Present	MCS I - ECMO - Cannulation, Types, Indications, Contraindications, University of Pennsylvania
2022-Present	MCS II - Left and Right VADs, University of Pennsylvania
2022-Present	MCS III - IABP and Impella, University of Pennsylvania
2023	The Use of RescueTEE and the development of perioperative echocardiography, Department of Anesthesiology Grand Rounds, University of Pennsylvania Philadelphia PA
2023	HUP Cedar Critical Care Faculty Meeting - Mobile ECMO at Penn, University of Pennsylvania
2023	ECMO/Lung Rescue - Trauma, Critical Care, and Emergency Surgery Education Series - University of Pennsylvania
2023	Resuscitative TEE - UPHS Clinical Emergencies Committee meeting, University of Pennsylvania Health System
2023	The expanding role of transesophageal echocardiography in Anesthesiology and Critical Care, CPORT, University of Pennsylvania
2025	Monthly Lecture for Cardiology, Cardiac Surgery Advanced Nurse Practitioners April 3, 2025, University of Pennsylvania
2025	Right Ventricular Assist Devices: Where are we at now, PARC: Penn Acute Resuscitation Consortium, University of Pennsylvania
2025	Trauma and ECMO indications: ESS and Trauma Education Series. Jan 2025, University of Pennsylvania
2025	PSOM Anesthesiology Lightning Research Talks
2026	REVIVE - Mastering the Art and Science of Resuscitation Penn

Lectures by Invitation (Last 5 years):

Nov, 2021	"Indications for Mobile ECMO" Nazerath Hospital Department of Medicine Grand Rounds, Philadelphia, PA
Nov, 2021	"RV Failure and monitoring in ARDS and Cardiogenic Shock" New Frontiers in Cardiac Surgery Conference. George Washington Medical Center, Medstar, Washington, DC
Nov, 2021	"Management of Acute RV failure in ARDS: Challenges" Robert

- Wood Johnson Medical Center. Department of Anesthesiology and Critical Care Grand Rounds, New Brunswick, Canada
- Dec, 2021 "Clinical Governance and Risk management for ECMO Transport" Extracorporeal Life Support Transport Conference and Workshop on Development of a Mobile ECMO Program, ELSO, Brooke Army Medical Center, San Antonio, TX
- Dec, 2021 "Transport of ECMO patients with Communicable Disease, Extracorporeal Life Support Transport Conference and Workshop on Development of a Mobile ECMO Program, ELSO" Brooke Army Medical Center, San Antonio, TX
- Dec, 2021 "ECMO for ARDS and Acute RV Failure" Medical Grand Rounds, Pennsylvania Hospital, Philadelphia, PA
- Jan, 2022 "A Primer on Right Ventricular Failure: Causes, Consequences, and Contemporary Treatment" Medscape Medical Education storyboard, virtual
- Jan, 2022 "VV ECMO and Advanced MCS Support for ARDS" Boston University Anesthesiology Grand Rounds, Boston, MA
- Mar, 2022 "Mechanical Support options for COVID ARDS and RV Failure: Challenges and Controversies" Beaumont Hospital, Department of Anesthesiology and Critical Grand Rounds, Detroit, MI
- Mar, 2022 "Mechanical Circulatory Support options for Acute Respiratory Distress Syndrome" Boston Medical Center. Boston University Department of Anesthesiology and Critical Care, Boston, MA
- Mar, 2022 "Development of VV ECMO and mobile ECMO program" Beaumont Health Oakland University Anesthesiology Grand Rounds, Oakland, MI
- Apr, 2022 "ECMO in COVID ARDS" Critical Care Speaker exchange, Virtual, University of Colorado & Vanderbilt University, Boulder, CO
- May, 2022 "The Use of VV ECMO in trauma" Atlanticare Trauma Symposium, Atlantic City, NJ
- May, 2022 "The future of research in the critical care anesthesiology world" Critical Care Speaker exchange, Virtual, University of California San Francisco, San Francisco, CA
- Jun, 2022 "Advanced mechanical circulatory support for lung failure and cardiogenic shock" Mercy Fitzgerald Hospital Medical Grand Rounds, Philadelphia, PA
- Aug, 2022 "Updates in ECMO care" Inspira Cardiology Grand Rounds, Philadelphia, PA
- Sep, 2022 "ECMO and the utilization of RV mechanical circulatory support" Lancaster Trauma Grand Rounds, Lancaster, PA
- Sep, 2022 "RV mechanical circulatory support" Mid Atlantic Cardiac Anesthesiology Conference, Philadelphia PA
- Jan, 2023 "Prevention of Right Ventricular Failure in VV ECMO Patients", Society of Critical Care Medicine Annual Meeting, San Francisco, CA
- Feb, 2023 "The use of RV mechanical circulatory support in VAD surgery"

Apr, 2023 Trinity Health Care Critical Care Grand Rounds, Philadelphia, PA
 "ECMO Bootcamp Basics" South Jersey Virtua Medical Cardiology
 Grands Rounds. Camden, NJ

May, 2023 "Problem-based learn for mechanical circulatory support VA and
 VV ECMO" Society of Cardiovascular Anesthesiologists, Portland,
 OR

May, 2023 "Mobile ECMO: Recent Success" MontCo Emergency Medicine
 Grand Rounds. Montgomery County. Philadelphia, PA

May, 2023 "Hybrid ECMO configurations (including oxy-RVAD): When to use
 them and what to consider", Society of Cardiovascular
 Anesthesiology Annual Meeting. Portland, OR

Sep, 2023 "Right Ventricular Assist Devices and Mobile ECMO",
 Pennsylvania State Perfusion Society Meeting. Philadelphia, PA

Sep, 2023 "Mobile ECMO", Trinity Health Mid-Atlantic Critical Care Grand
 Rounds. Philadelphia, PA

Nov, 2023 "Lung and Shock Rescue", Moses Taylor Scranton Hospital Medical
 Grand Rounds. Scranton, PA

Dec, 2023 "Penn Lung Rescue/ECMO/Shock: How we do it." Cape May
 Emergency Medicine Grand Rounds. Cape May, NJ

Feb, 2024 "Right Ventricular Mechanical Circulatory Support", Mercy
 Fitzgerald Hospital Trinity Health. Critical Care Grand Rounds.
 Philadelphia, PA

Apr, 2024 "Updates on Mechanical Circulatory Support", Crozer Medical
 Center Emergency Medicine Grand Grounds. Philadelphia, PA

Apr, 2024 "AATS-SCA ECMO Workshop" Society of Cardiac
 Anesthesiologists and American Academy of Thoracic Surgeons
 Annual Meeting. Toronto, Canada

Apr, 2024 "Challenging Topics in ECMO", American Academy of Thoracic
 Surgeons Annual Meeting. Toronto, Canada

Sep, 2024 "Best Practices: Managing ARDS in Cardiac Surgery", Society of
 Thoracic Surgeons Perioperative Conference. Philadelphia, PA

Sep, 2024 "Plenary: The Failing heart" Moderator. Society of Thoracic
 Surgeons Perioperative Meeting. Philadelphia, PA

Sep, 2024 "ECMO pharmacological Challenges" Society of Thoracic Surgeons
 Perioperative Meeting. Philadelphia, PA

Sep, 2024 "Mobile ECMO in ARDS" Nanitoke Hospital Internal Medicine
 Grand Rounds. Tidal Health Nanitoke, DE

Sep, 2024 "VA ECMO Management Pearls: LV Venting Strategies",
 Extracorporeal Life Support Organization Annual Meeting, Detroit,
 MI

Oct, 2024 "Mobile ECMO for ARDS", Bayhealth Internal Medicine Grand
 Rounds. Sussex, DE

Oct, 2024 "Best Practices: Managing ARDS in Cardiac Surgery Patients",
 Society of Thoracic Surgeons, Perioperative Critical Care Meeting,
 Philadelphia, PA

Oct, 2024 "ECMO Pharmacological Challenges", Society of Thoracic

Oct, 2024 Surgeons, Perioperative Critical Care Meeting, Philadelphia, PA
 "ECMO and where we are now." Guthrie Robert Packer Hospital
 Surgery Grand Rounds. Guthrie, PA
 Nov, 2024 "TopMedTalk: ECMO and Mechanical Circulatory Support."
 American Society of Anesthesiology Meeting 2024. Philadelphia,
 PA
 Nov, 2024 "ECMO in eCPR", Emergency Medicine Medical Education
 Conference. Doylestown Hospital. Doylestown, PA
 Feb, 2025 "Building Blocks - Shock Team & Early Identification", Johnson
 and Johnson MedTech Users Meeting. Boston, MA
 Apr, 2025 "Mobile ECMO: Indications", Shore Memorial Hospital Grand
 Rounds. Somers Point, NJ
 Jun, 2025 "ECMO: Indications and Complex management", Tower Health
 Anesthesiology Grand Rounds. Reading, PA
 Jul, 2025 "Ultralong distance ECMO transport and management", Guys and St
 Thomas Harefeild Hospital. London, United Kingdom
 Aug, 2025 "VA ECMO and shock program management", SUNY Bronx
 Medicine Grand Rounds. New York, NY
 Sep, 2025 "Microaxial Flow devices for Critical Care Intensivists", New
 Orleans, Louisiana
 Sep, 2025 "VP versus VV ECMO in Lung Failure" Extracorporeal Membrane
 Life Support ELSO National Meeting. Washington, DC
 Sep, 2025 "Plenary Session - VA ECMO Simulation" Extracorporeal
 Membrane Life Support ELSO National Meeting. Washington, DC
 Sep, 2025 "Right Ventricular Assist Devices: Surgical and Percutaneous
 Review" Pennsylvania State Perfusion Society. Philadelphia, PA
 Sep, 2025 "Case Review of RV MCS" Pennsylvania State Perfusion Society.
 Philadelphia, PA
 Oct, 2025 "Empowering Critical Care Microaxial MCS", Louisville, KY
 Oct, 2025 "ECMO and the current paradigm", Tower Health Department of
 Cardiology Grand Rounds. Reading, PA
 Nov, 2025 "Mobile ECMO for Penn Medicine", Penn Princeton, Princeton New
 Jersey.
 Dec, 2025 "ECMO for the Emergency Doctor", Bay Health Emergency
 Medicine Grand Rounds, Bayhealth Delaware
 Dec, 2025 "ECMO for the ICU" Nazareth Hospital Grand Rounds. Philadelphia
 PA
 Feb, 2026 "ECMO and the role of the Anesthesiologist", Henry Ford
 Department of Anesthesiology and Critical Care Grand Rounds.
 Detroit, MI
 Mar, 2026 "Right Ventricular Assist Device Review and Chair" Society of
 Critical Care Medicine National Congress. Chicago, IL
 Apr, 2026 "VA ECMO in the Cardiac Catheterization lab", Society of
 Cardiovascular Anesthesiology. Nashville, TN
 Apr, 2026 "Mechanical Circulatory Support: Everything You Ever Wanted to
 Know About ECMO, Durable and Non-Durable Ventricular Assist

Apr, 2026 Devices". Society of Cardiovascular Anesthesiology, Nashville TN
 "Hands of ECMO Workshop", Society of Cardiovascular
 Anesthesiology. Nashville TN

Organizing Roles in Scientific Meetings:

Jan, 2023 Co-Chair. Penn ECMO and MCS Symposium
 Philadelphia
 Jun, 2024 Data Safety and Monitoring Board
 Executive Chairperson
 Spectrum Medical
 Via Di Mezzo, 23
 41037 Mirandola (MO) - Italy

Bibliography:

Research Publications, peer reviewed (print or other media):

1. Usman AA, Cunningham C, Jackson T. : Application of the Mathematical Model of Tumor-Immune Interactions for IL-2 Adoptive Immunotherapy to Studies on Patients with Metastatic Melanoma or Renal Cell Cancer. Rose Hulman Institute of Technology Journal of Mathematics 6(2): 2-9, November 2005.
2. Neiderbichler AD, Westfall MV, Su GL, Donnerberg J, Usman AA, Vogt PM, Ipaktchi KR, Arbabi S, Wang SC, Hemmila MR.: Cardiomyocyte Function After Burn Injury and Lipopolysaccharide Exposure: Single Cell Contraction Analysis and Cytokine Secretion Profile. Shock 25(2): 176-183, February 2006.
3. Tang GL, Tehrani HY, Usman AA, Katariya K, Otero C, Perez E, Eskandari MK. : Reduced Mortality, Paraplegia, and Stroke With Stent Graft Repair Of Blunt Aortic Transections: A Modern Meta-Analysis. Journal of Vascular Surgery 47(3): 671-675, March 2008.
4. Usman AA, Eskandari MK. : Asymptomatic Carotid Disease: A Review of Carotid Stenting Versus Carotid Endarterectomy. Italian Journal of Vascular and Endovascular Surgery 15(3): 167-170, September 2008.
5. Usman AA, Tang GL, Eskandari MK. : Metaanalysis of Procedural Stroke and Death Among Octogenarians: Carotid Stenting Versus Carotid Endarterectomy. Journal of the American College of Surgeons 208(6): 1124-1131, June 2009.
6. Brown KE, Usman AA, Kibbe MR, Morasch MD, Matsumura JS, Pearce WH, Amaranto DJ, Eskandari MK.: Carotid Stenting Using Tapered and Non-Tapered Stents: Associated Neurologic Complications and Restenosis Rates. Annals of Vascular Surgery 23(4): 439-445, July 2009.
7. Eskandari MK, Usman AA, Garcia-Toca M, Matsumura JS, Kibbe MR, Morasch MD, Rodriguez HE, Pearce WH. : Eight-Year Institutional Review Of Carotid Artery Stenting. Journal of Vascular Surgery 51(5): 1145-1151, May 2010.

8. Usman AA, Resnick SA, Benzuly KH, Beohar N, Eskandari MK. : Late Stent Fractures After Endoluminal Treatment of Ostial Supraaortic Trunk Arterial Occlusive Lesions. Journal of Vascular and Interventional Radiology 21(9): 1364-1369, September 2010.
9. Kalisz KR, Davarpanah AH, Usman AA, Collins JD, Carroll TJ, Carr JC. : Detection of Renal Dysfunction by Point-of-Care Creatinine Testing in Patients Undergoing Peripheral MR Angiography. American Journal of Roentgenology 197(2): 430-435, August 2011.
10. Usman AA., Taimen K., Wasielewski M., McDonald JM., Shah S., Collins JD., Carr JC. : Cardiac magnetic resonance T2 mapping for monitoring acute cardiac transplant rejection. Circulation Cardiovascular Imaging 5(6): 782-90, November 2012 Notes: doi: 10.1161/CIRCIMAGING.111.971101. Epub 2012 Oct 15.
11. Schonberger M, Usman AA, Kino A, Popescu A, Galiza M, Collins JD, Carr JC, Carroll T.: Time-Resolved MR Venography of the Pulmonary Veins Pre-Catheter-Based Ablation for Atrial Fibrillation. Journal of Magnetic Resonance Imaging 37(1): 127-37, January 2013.
12. Markl M, Rustogi R, Galizia M, Goyal A, Collins J, Usman A, Jung B, Foell D, Carr J. : Myocardial T2-mapping and velocity mapping: Changes in regional left ventricular structure and function after heart transplantation. Magnetic Resonance Medicine 70(2): 517-26, August 2013.
13. Ward EVM, Usman AA, Hodnett PA, Carr JC, Edelman RR.: A Comparison of Two Nonenhanced MR Angiography Techniques for the Evaluation of Peripheral Arterial Disease American Journal of Roentgenology 38(6): 1531-8, December 2013.
14. Gentile MS, Usman AA, Neuschler EI, Sathiaseelan V, Hayes JP, Small W Jr. : Contouring Guidelines for the Axillary Lymph Nodes for the Delivery of Radiotherapy in Breast Cancer: Evaluation of the RTOG Breast Cancer Atlas International Journal of Radiation Oncology Biology Physics 93(2): 257-65, October 2015 Notes: <https://doi.org/10.1016/j.ijrobp.2015.07.002>.
15. Usman OA, Usman AA, Ward MA. : Comparison of SIRS, qSOFA, and NEWS for the early identification of sepsis in the Emergency Department. American Journal of Emergency Medicine 37(8): 1490-1497, October 2019 Notes: doi: 10.1016/j.ajem.2018.10.058. Epub 2018 Nov 7.
16. McDonald M, Miano T. Usman AA, Laudanski K, Lane-Fall M, Hadler R, Gutsche J. : The effects of sedation on longterm psychological impairment following extracorporeal life support. Journal of Cardiothoracic and vascular anesthesia 34(3): 663-667, March 2020 Notes: doi: 10.1053/j.jvca.2019.07.147. Epub 2019

Aug 2.

17. Sultan I, Haberttheuer A, Usman AA, Kilic A, Gnall E, Friscia ME, Zubkus D, Hirose H, Sanchez P, Okusanya O, Szeto WY, Gutsche J. : The role of extracorporeal life support for patients with COVID-19: Preliminary results from a statewide experience. Journal of Cardiac Surgery 35(7), July 2020 Notes: Published online 2020 Apr 25. doi: 10.1111/jocs.14583.
18. Ochroch J. Usman AA, Kiefer J, Vernick W, Gutsche JT, Raiten J. : Reducing Opioid use in patients undergoing cardiac surgery - preoperative, intraoperative and critical care strategies. Journal of Cardiothoracic and Vascular Anesthesiology 35(Suppl 1), September 2020 Notes: DOI:10.1053/j.jvca.2020.09.103.
19. Usman AA, Han J, Acker A, Olia S, Bermudez C, MacKay EJ, Cucchiara B, Mikkelsen M, Szeto W, Vernick W, Gutsche JT.: A Case Series of Devastating intracranial Hemorrhage during Venovenous Extracorporeal Membrane Oxygenation for COVID-19. Journal of Cardiovascular and Thoracic Anesthesia 34(11): 3006-3012, November 2020 Notes: doi: 10.1053/j.jvca.2020.07.063. Epub 2020 Jul 28.
20. Tonna JE, Abrams D, Brodie D, Greenwood JC, Mateo-Sidron, Usman AA, Fan E. : Management of Adults Patients supported with Venovenous Extracorporeal membrane (VV ECMO) Guidelines from ELSO American Society of Artificial Internal Organs ASAIO Journal 67(6): 601-610, June 2021 Notes: DOI: 10.1097/mat.0000000000001432
21. Usman AA, Subramanian M, Raney C, Weaver J, Smith B, Gutsche J, Vernick W, Martin N, Fernandez-Moure J.: Recurrent use of VV-ECMO in refractory hypoxemia after penetrating lung injury and multifocal pneumonia in a single patient. Journal of Cardiothoracic and Vascular Anesthesia 35(6), June 2021 Notes: DOI: 10.1053/j.jvca.2020.05.044.
22. Rizer NW, Smood B, Mergler B, Sperry AE, Bermudez CA, Gutsche JT, Usman AA. : Reduced survival in patients requiring chest tubes with COVID-19 Acute Respiratory Distress Syndrome. Journal of Thoracic and Cardiovascular Surgery Open 10: 471-477, June 2022 Notes: doi: 10.1016/j.xjon.2022.03.008. Epub 2022 Apr 20.
23. Spelde AE, DiFrancesco A, Usman AA, Steinberg T, Ibrahim M, Szeto W, Olia S, Acker M, Cevasco M, Bermudez C, Vernick W, Gutsche J.: Bedside percutaneous pulmonary veno-arterial (PV-A) ECMO with intra-aortic balloon pump support for post-infarction ventricular septal rupture: A case report. Journal of Cardiothoracic and Vascular Anesthesia September 2022.
24. Usman AA, Spelde AE, Olia SE, Cevasco M, Bermudez C, Haddle J, Ibrahim M, Szeto W, Vernick W, Gutsche J.: First in-Man successful use of the SPECTRUM

percutaneous dual-stage right ventricle and right atrium to pulmonary artery ventricular assist device. Journal of Cardiac Surgery 37(10): 3403-3407, October 2022 Notes: doi: 10.1111/jocs.16753. Epub 2022 Jul 23.

25. Usman AA, Spelde AE, Cevasco M, Bermudez C, Olia S, Ibrahim M, Atluri P, Szeto W, Vernick W, Gutsche J.: Technical Considerations for Percutaneous Pulmonary Artery Cannulation for Mechanical Circulatory Support. Journal of Thoracic and Cardiovascular Surgery Techniques 18: 65-73, December 2022 Notes: doi: 10.1016/j.xjtc.2022.11.017. eCollection 2023 Apr.
26. Usman AA, Spelde AE, Ibrahim M, Cevasco M, Bermudez C, MacKay E, Khandhar S, Szeto W, Vernick W, Gutsche J.: Comprehensive Monitoring in Patients with Dual Lumen Right Atrium to Pulmonary Artery Right Ventricular Assist Device. American Society of Artificial Internal Organs ASAIO Journal 68(12): 1461-1469, December 2022 Notes: doi: 10.1097/MAT.0000000000001684. Epub 2022 Feb 27.
27. Spelde AE, Usman AA, Olia SE, Ibrahim ME, Szeto WY, Cevasco M, Grimm JC, Bermudez CA, Steinberg TB, Vernick WJ, Gutsche JT.: Intracannula Thrombus Formation Associated With Dual Lumen ProtekDuo Cannula in Extracorporeal Membrane Oxygenation (ECMO). American Society of Artificial Internal Organs ASAIO Journal 69(8): e391-e396, March 2023 Notes: doi: 10.1097/MAT.0000000000001906.
28. Usman AA, Cevasco M, Maybauer MO, Spelde AE, Olia S, Bermudez C, Ibrahim M, Szeto W, Vernick WJ, Gutsche JT.: Oxygenated right ventricular assist device as part of veno-venopulmonary extracorporeal membrane oxygenation to support the right ventricle and pulmonary vasculature. Journal of Cardiothoracic Surgery 18: 134, April 2023 Notes: 10.1186/s13019-023-02264-8.
29. Schurr JW, Sigal I, Usman A, Patel P, Lefebvre B, Kurcik K, Atluri P, Acker M, Bermudez C, Rame JE, Hanff T, Cevasco M, Wald J.: Effect of Anesthesia Induction on Cardiac Hemodynamics in Patients Undergoing Durable Left Ventricular Assist Device Implantation: The EACH-LVAD Study. American Society of Artificial Internal Organs ASAIO Journal 69(10): 907-914, October 2023 Notes: doi: 10.1097/MAT.0000000000002010. Epub 2023 Sep 27.
30. Bermudez C, Bermudez F, Courtwright A, Richards T, Diamond J, Cevasco M, Blumberg E, Christie J, Usman A, Crespo MM.: Lung transplantation for COVID-2019 respiratory failure in the United States: Outcomes 1-year posttransplant and the impact of preoperative extracorporeal membrane oxygenation support. Journal of Thoracic and Cardiovascular Surgery 167(1): 384-395.e3, January 2024 Notes: doi: 10.1016/j.jtcvs.2023.04.016. Epub 2023 Apr 21.
31. Gu Y, Bjelic M, Panda K, Usman AA, Magnuson R, Gosev I.: Cannula-Associated

- Deep Vein Thrombosis After Venovenous Extracorporeal Membrane Oxygenation in Patients with and Without Systemic Anticoagulation. Journal of Cardiothoracic and Vascular Anesthesia 38(1): 230-236, January 2024 Notes: doi: 10.1053/j.jvca.2023.09.009. Epub 2023 Sep 15.
32. Cambria G, Spelde AE, Olia SE, Biscotti M, Mackay E, Ibrahim M, Cevalco M, Bermudez C, Vernick W, Gutsche J, Usman AA.: Extracorporeal Carbon Dioxide Removal to De-escalate Venovenous Extracorporeal Membrane Oxygenation in Severe COVID-19 Acute Respiratory Distress Syndrome. Journal of Cardiothoracic and Vascular Anesthesia 38(3): 717-723, March 2024 Notes: doi: 10.1053/j.jvca.2023.12.029. Epub 2023 Dec 21.
33. Hunt ML, Crespo MM, Richards TJ, Bermudez F, Courtwright A, Usman A, Spelde AE, Diamond J, Patel N, Cantu E, Christie J, Clausen E, Cevalco M, Ahya V, Bermudez CA.: Lung transplant outcomes after acute respiratory distress syndrome requiring extracorporeal life support: Lessons from the COVID-19 pandemic. Journal of Thoracic and Cardiovascular Surgery 168(3): 712-721.e2, September 2024 Notes: doi: 10.1016/j.jtcvs.2023.12.028. Epub 2024 Jan 8.
34. Usman AA, Spelde AE, Lutfi W, Gutsche JT, Vernick WJ, Toubat O, Olia SE, Cantu E, Courtwright A, Crespo MM, Diamond J, Biscotti M, Bermudez CA.: Percutaneous Venopulmonary Extracorporeal Membrane Oxygenation as Bridge to Lung Transplantation. American Society of Artificial Internal Organs ASAIO Journal 70(9): 758-766, September 2024 Notes: doi: 10.1097/MAT.0000000000002179. Epub 2024 Mar 6.
35. Teran F, Owyang CG, Wray TC, Hipskind JE, Lessard J, Bédard Michel W, Lanthier C, Nazerian P, de Villa E, Nogueira J, Doynow D, Clinton M, Myslik F, Prager R, Arntfield R, Salinas PD, Dieiev V, Woo MY, Thavanathan R, Puskas G, Singh K, Bhat P, Horn J, Buchanan BM, Baig N, Burns KM, Kennedy K, Haines L, Naraghi L, Singh H, Secko M, Singer D, Taylor M, Joyce JM, DeMasi S, Jafry ZM, Phan T, Truong N, Robinson E, Haycock KH, Hansen A, Derr C, West FM, Narasimhan M, Horowitz J, Usman A, Anderson KL, Peng Y, Rola P, Andrus P, Razzak J, Hemmings HC, Panchamia R, Palasz J, Kaviyarasu A, Sands NA, Sutton RM, Abella BS.: Development and Implementation of a Multicenter Registry for Resuscitation-Focused Transesophageal Echocardiography. Annals of Emergency Medicine 85(2): 147-162, February 2025 Notes: doi: 10.1016/j.annemergmed.2024.08.004. Epub 2024 Oct 16.
36. Sertic F, Gregorio PH, Tschabrunn C, Broniec G, Bermudez A, Richards T, Alfieri M, Usman AA, Rao S, Salas J, Kasprenski L, Gray K, Chatterjee S, Bermudez C: Venovenous extracorporeal membrane oxygenation with mechanical chest compression for cardiopulmonary resuscitation: a porcine model study. Journal of Thoracic and Cardiovascular Surgery Open 25: 215-224, June 2025.
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Vernick WJ, Gutsche JT, Usman AA: Rescue Transesophageal Echocardiography Matrix for In-hospital Hemodynamic Instability and Cardiac Arrest Imaging. Journal of Cardiothoracic and Vascular Anesthesiology 39(8): 2222-2224, August 2025 Notes: doi: 10.1053/j.jvca.2025.04.040. Epub 2025 May 6.

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