

December 2023 Literature Review Series References

Special Guests: Hannah Millard, PharmD

Jenna Self, PharmD

Featured Articles

ARIES-HM3 Investigators. Aspirin and Hemocompatibility Events With a Left Ventricular Assist Device in Advanced Heart Failure: The ARIES-HM3 Randomized Clinical Trial. *JAMA*. 2023 Dec 12;330(22):2171-2181. <https://pubmed.ncbi.nlm.nih.gov/37950897/>

INSPIRES Investigators. Dual Antiplatelet Treatment up to 72 Hours after Ischemic Stroke. *N Engl J Med*. 2023 Dec 28;389(26):2413-2424. <https://pubmed.ncbi.nlm.nih.gov/38157499/>

TEXAIS Investigators. Management of Poststroke Hyperglycemia: Results of the TEXAIS Randomized Clinical Trial. *Stroke*. 2023 Dec;54(12):2962-2971. <https://pubmed.ncbi.nlm.nih.gov/38011235/>

PRONECMO Investigators, the REVA Network, and the International ECMO Network (ECMONet). Prone Positioning During Extracorporeal Membrane Oxygenation in Patients With Severe ARDS: The PRONECMO Randomized Clinical Trial. *JAMA*. 2023 Dec 26;330(24):2343-2353. <https://pubmed.ncbi.nlm.nih.gov/38038395/>

Arnold S, Armahizer M, Torres LF, et al. Minimizing Shivering During Targeted Normothermia: Comparison Between Novel Transnasal and Surface Temperature-Modulating Devices. *Neurocrit Care*. 2023 Dec;39(3):639-645. <https://pubmed.ncbi.nlm.nih.gov/37498457/>

MINT Investigators. Restrictive or Liberal Transfusion Strategy in Myocardial Infarction and Anemia. *N Engl J Med*. 2023 Dec 28;389(26):2446-2456. <https://pubmed.ncbi.nlm.nih.gov/37952133/>

Cardiology

Pong T, Cyr K, Aparicio-Valenzuela J, et al. A Modified 4Ts Score for Heparin-Induced Thrombocytopenia in the Mechanical Circulatory Support Population. *J Cardiothorac Vasc Anesth*. 2023 Dec;37(12):2499-2507. <https://pubmed.ncbi.nlm.nih.gov/37407329/>

Khandekar DA, Seelhammer TG, Mara KC, Stephens EH, Wittwer ED, Wieruszewski PM. Intraoperative Versus Postoperative Hydroxocobalamin for Vasoplegic Shock in Cardiothoracic Surgery. *J Cardiothorac Vasc Anesth*. 2023 Dec;37(12):2538-2545. <https://pubmed.ncbi.nlm.nih.gov/37723020/>

Normand S, Matthews C, Brown CS, et al. Risk of arrhythmia in post-resuscitative shock after out-of-hospital cardiac arrest with epinephrine versus norepinephrine. *Am J Emerg Med*. 2024 Mar;77:72-76. <https://pubmed.ncbi.nlm.nih.gov/38104386/>

Heradstveit BE, Sunde GA, Asbjørnsen H, et al. Pharmacokinetics of epinephrine during cardiac arrest: a pilot study. *Resuscitation*. 2023 Dec;193:110025. [https://www.resuscitationjournal.com/article/S0300-9572\(23\)00340-4/fulltext](https://www.resuscitationjournal.com/article/S0300-9572(23)00340-4/fulltext)

Obling LER, Beske RP, Meyer MAS, et al. Prehospital high-dose methylprednisolone in resuscitated out-of-hospital cardiac arrest patients (STEROHCA): a randomized clinical trial. *Intensive Care Med*. 2023 Dec;49(12):1467-1478. <https://pubmed.ncbi.nlm.nih.gov/37943300/>

Ghia S, Savadjian A, Shin D, et al. Hypothermic Circulatory Arrest in Adult Aortic Arch Surgery: A Review of Hypothermic Circulatory Arrest and its Anesthetic Implications. *J Cardiothorac Vasc Anesth*. 2023 Dec;37(12):2634-2645. <https://pubmed.ncbi.nlm.nih.gov/37723023/>

Potpourri

Feldman R, Autry B, Dukes J, et al. A systematic review of phenibut withdrawal focusing on complications, therapeutic approaches, and single substance versus polysubstance withdrawal. *Clin Toxicol (Phila)*. 2023 Nov;61(11):941-951. <https://pubmed.ncbi.nlm.nih.gov/38112312/>

Sohail MA, Vachharajani TJ, Lane JE, et al. Thromboelastography-Guided Correction of Coagulopathy Before Tunneled Central Venous Access in Critically Ill Patients With Liver Disease: A Propensity Score-Matched Study. *Crit Care Explor*. 2023 Dec 18;5(12):e1023. <https://pubmed.ncbi.nlm.nih.gov/38115819/>

Graboyes SDT, Owen PS, Evans RA, et al. Review of anticoagulation considerations in extracorporeal membrane oxygenation support. *Pharmacotherapy*. 2023 Dec;43(12):1339-1363. <https://pubmed.ncbi.nlm.nih.gov/37519116/>

Tamma PD, Harris PNA, Mathers AJ, et al. Breaking Down the Breakpoints: Rationale for the 2022 Clinical and Laboratory Standards Institute Revised Piperacillin-Tazobactam Breakpoints Against Enterobacterales. *Clin Infect Dis*. 2023 Nov 30;77(11):1585-1590.
<https://pubmed.ncbi.nlm.nih.gov/36001445/>

Greco Kinney A, Kovacic Scherrer N, Sarkar S, et al. β -Lactams plus doxycycline versus azithromycin for treatment of severe community-acquired pneumonia in critically ill patients. *J Antimicrob Chemother*. 2023 Dec 1;78(12):2816-2823.
<https://pubmed.ncbi.nlm.nih.gov/37814829/>

Sepsis

Lai PC, Lai CH, Lai EC, et al. Do We Need to Administer Fludrocortisone in Addition to Hydrocortisone in Adult Patients With Septic Shock? An Updated Systematic Review With Bayesian Network Meta-Analysis of Randomized Controlled Trials and an Observational Study With Target Trial Emulation. *Crit Care Med*. 2024 Apr 1;52(4):e193-e202.
<https://pubmed.ncbi.nlm.nih.gov/38156911/>

Khader A, Zelnick LR, Sathe NA, et al. The Interaction of Acute Kidney Injury with Resuscitation Strategy in Sepsis: A Secondary Analysis of a Multicenter, Phase 3, Randomized Clinical Trial (CLOVERS). *Am J Respir Crit Care Med*. 2023 Dec 15;208(12):1335-1338.
<https://pubmed.ncbi.nlm.nih.gov/37870416/>

Leisman DE, Handisides DR, Chawla LS, et al. Angiotensin II treatment is associated with improved oxygenation in ARDS patients with refractory vasodilatory shock. *Ann Intensive Care*. 2023 Dec 16;13(1):128. <https://pubmed.ncbi.nlm.nih.gov/38103056/>

Pharmacist-Featured Articles

Abu Sardaneh A, Penm J, Oliver M, Gattas D, McLachlan AJ, James C, Cella C, Aljuhani O, Acquisto NM, Patanwala AE. International pharmacy survey of peripheral vasopressor infusions in critical care (INFUSE). *J Crit Care*. 2023 Dec;78:154376.
<https://pubmed.ncbi.nlm.nih.gov/37536012/>

Gilchrist HE, Hatton CJ, Roginski MA, et al. Impact on Diabetic Ketoacidosis Resolution After Implementation of a 2-Bag Fluid Order Set. *Ann Pharmacother*. 2023 Dec;57(12):1361-1366.
<https://pubmed.ncbi.nlm.nih.gov/37021360/>

Morley H, Seabury R, Parsels K, Miller C, Darko W, Schrader J, Meola G. Preparation/administration of push-dose versus continuous infusion epinephrine and phenylephrine: A simulation. *Am J Emerg Med*. 2023 Dec;74:135-139. <https://pubmed.ncbi.nlm.nih.gov/37832396/>

Sweet Emotion

Arteaga DN, Hong AS, Lalani HS. Trainee-Led Intervention to Motivate Resident Physician Voter Registration. *JAMA Intern Med*. 2024 Feb 1;184(2):216-218. <https://pubmed.ncbi.nlm.nih.gov/38109080/>

Kasashi K, Suzuki S, Sato A, et al. Clinical pharmacy services at the Tokyo Olympic and Paralympic Games and the sports pharmacist training program. *J Am Coll Clin Pharm*. 2023; 6: 1336-1345. <https://accpjournals.onlinelibrary.wiley.com/doi/epdf/10.1002/jac5.1869>

Other Articles/Guidelines Referenced

CHANCE Investigators. Clopidogrel with aspirin in acute minor stroke or transient ischemic attack. *N Engl J Med*. 2013 Jul 4;369(1):11-9. <https://pubmed.ncbi.nlm.nih.gov/23803136/>

SOCRATES Steering Committee and Investigators. Ticagrelor versus Aspirin in Acute Stroke or Transient Ischemic Attack. *N Engl J Med*. 2016 Jul 7;375(1):35-43. <https://pubmed.ncbi.nlm.nih.gov/27160892/>

Clinical Research Collaboration, Neurological Emergencies Treatment Trials Network, and the POINT Investigators. Clopidogrel and Aspirin in Acute Ischemic Stroke and High-Risk TIA. *N Engl J Med*. 2018 Jul 19;379(3):215-225. <https://pubmed.ncbi.nlm.nih.gov/29766750/>

Rosso C, Corvol JC, Pires C, et al. Intensive versus subcutaneous insulin in patients with hyperacute stroke: results from the randomized INSULINFARCT trial. *Stroke*. 2012 Sep;43(9):2343-9. <https://pubmed.ncbi.nlm.nih.gov/22700528/>

Neurological Emergencies Treatment Trials Network and the SHINE Trial Investigators. Intensive vs Standard Treatment of Hyperglycemia and Functional Outcome in Patients With Acute Ischemic Stroke: The SHINE Randomized Clinical Trial. *JAMA*. 2019 Jul 23;322(4):326-335. <https://pubmed.ncbi.nlm.nih.gov/31334795/>

Cooper HA, Rao SV, Greenberg MD, et al. Conservative versus liberal red cell transfusion in acute myocardial infarction (the CRIT Randomized Pilot Study). *Am J Cardiol*. 2011 Oct 15;108(8):1108-11. <https://pubmed.ncbi.nlm.nih.gov/21791325/>

Nick Peters, PharmD

Pharmacy To Dose: The Critical Care Podcast

December 2023 Literature Review Series References

PHARMACY TO DOSE

THE CRITICAL CARE PODCAST 

Carson JL, Brooks MM, Abbott JD, et al. Liberal versus restrictive transfusion thresholds for patients with symptomatic coronary artery disease. *Am Heart J*. 2013 Jun;165(6):964-971.e1. <https://pubmed.ncbi.nlm.nih.gov/23708168/>

REALITY Investigators. Effect of a Restrictive vs Liberal Blood Transfusion Strategy on Major Cardiovascular Events Among Patients With Acute Myocardial Infarction and Anemia: The REALITY Randomized Clinical Trial. *JAMA*. 2021 Feb 9;325(6):552-560. <https://pubmed.ncbi.nlm.nih.gov/33560322/>