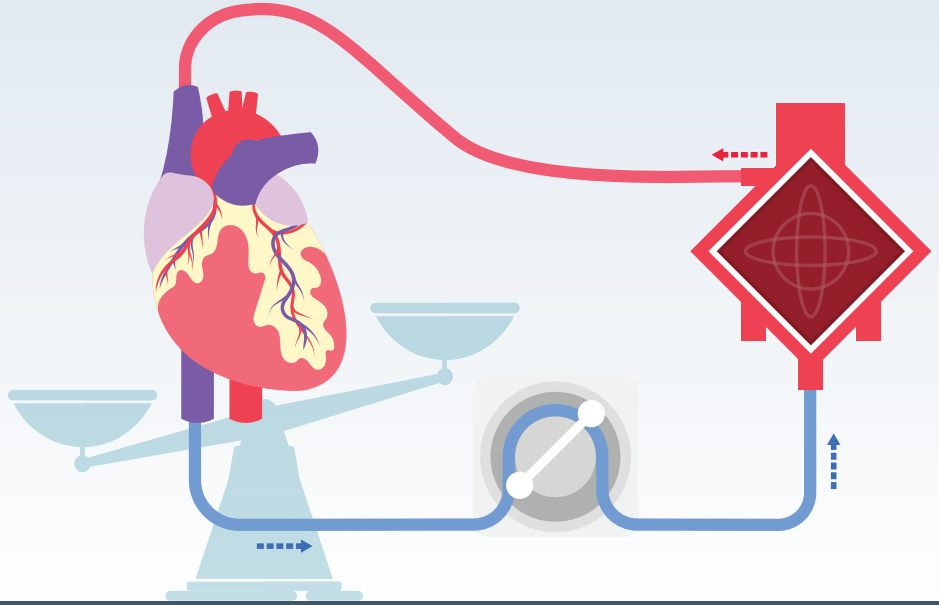
Low- vs Moderate-Dose Anticoagulation in Venovenous Extracorporeal Membrane Oxygenation: Time for a Randomized Controlled Trial?

STUDY DESIGN

- Multicenter, randomized pilot trial of 26 critically ill adults on venovenous extracorporeal membrane oxygenation (VV-ECMO) assigned to receive either low-dose (venous thromboembolism prophylaxis dosing) anticoagulation or moderate-intensity anticoagulation (activated partial thromboplastin time 40-60 or Xa 0.2-0.3)
- Primary outcome of major bleeding event was monitored until 24 hours after decannulation

RESULTS



Moderate-Dose Anticoagulation

0 of 14 had thrombotic event
4 of 14 had major bleeding event

Low-Dose Anticoagulation

1 of 12 had thrombotic event
1 of 12 had major bleeding event

The results of this study demonstrate a feasible and safe approach to enroll and differentiate between anticoagulation strategies for groups of patients on VV-ECMO to complete a randomized controlled trial.

Gannon WD, et al. *CHEST* September 2025 | @journal_CHEST | https://doi.org/10.1016/j.chest.2025.02.032