

Is There a Difference Between Using Vancomycin and Piperacillin-Tazobactam, Vancomycin and Cefepime, or Vancomycin and Meropenem and Incidence of Acute Kidney Injury in ICU Patients?

STUDY DESIGN

- Retrospective cohort study of data from eICU Research Institute of **35,654 patients** between 2010 and 2015

Vancomycin and
piperacillin-tazobactam (VPT)
N = 27,459

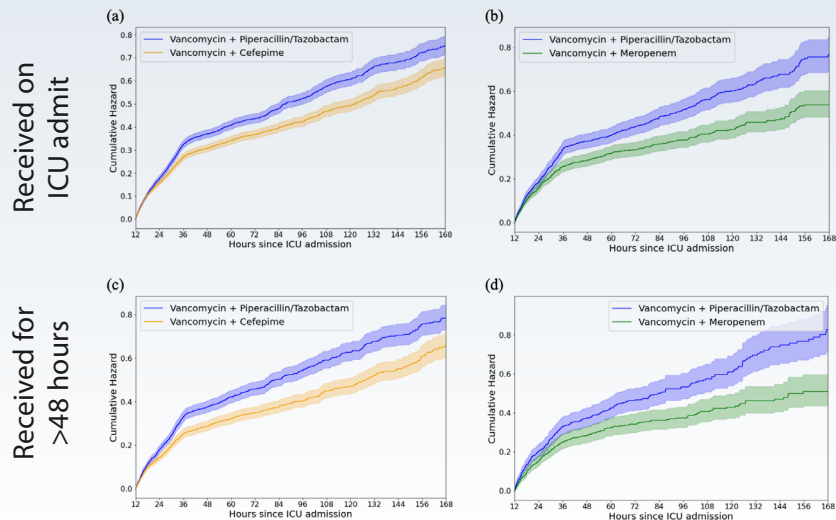
Vancomycin and cefepime (VC)
N = 6,371

Vancomycin and meropenem (VM)
N = 1,824

- Primary outcome = development of acute kidney injury (AKI) after antibiotic exposure

RESULTS

Cumulative Hazard Plot for Stage 1, 2, and 3 AKI



Vancomycin and piperacillin-tazobactam is associated with a higher risk of AKI than both vancomycin and cefepime and vancomycin and meropenem in ICU patients, especially for patients with normal initial kidney function requiring longer durations of therapy.