FRONTLINE FIVE EM

Albumin and Acute Kidney Injury

Journal Club Guide

A step-by-step critical appraisal worksheet for emergency medicine and critical care

Jeanmougin T, James A, Collet L, et al. Critical Care. Published October 27, 2026. doi:10.1186/s13054-026-06423-w

Study design	Systematic review and random-effects meta-analysis of randomized trials
Population	Nine randomized trials involving 11,778 critically ill adults requiring fluid resuscitation
Comparison	Human serum albumin versus alternative resuscitation fluids or usual care
Reported result	AKI RR was 1.00 (95% CI 0.91-1.11; I-squared 47.2%). RRT RR was 1.26 (95% CI 1.07-1.48), a low-certainty signal driven by 20% albumin trials; mortality RR was 0.98.

STEP 1 - Frame the question

Write the PICO or descriptive research question in one sentence.

STEP 2 - Test the design

Was this design appropriate for the question? Identify the strongest protection against bias and the biggest remaining threat.

STEP 3 - Examine the population

Who was included and excluded? How closely do these patients and settings resemble your ED or ICU?

STEP 4 - Interrogate the outcomes

Was the primary outcome patient-centered? Separate the prespecified primary result from secondary, subgroup, or surrogate findings.

STEP 5 - Interpret effect and uncertainty

Record the absolute risks, relative effect, confidence interval, and whether the study excluded a clinically important benefit or harm.

STEP 6 - Identify limitations

List selection bias, confounding, measurement limitations, missing data, power, and external-validity concerns.

STEP 7 - Decide what changes

What should change today, what should only prompt discussion, and what requires confirmation?

FINAL APPRAISAL

Bottom line in one sentence; evidence certainty (high/moderate/low); and whether you would teach, read, or change practice.