

# BALANCED MULTIELECTROLYTE SOLUTION VERSUS SALINE IN CRITICALLY ILL ADULTS

## THE PLUS TRIAL

Does the use of balanced multielectrolyte solution (BMES) in preference to 0.9% sodium chloride solution (saline) in critically ill patients reduce the risk of acute kidney injury?



**SALINE**

2413 patients

Double-blind, randomized, controlled trial



5037 patients - 53 ICUs



**BMES**

2433 patients

### 90-day Mortality

Odd Ratio, 0.99 (95% CI, 0.86 to 1.14)  
Difference of -0.15 percentage points  
(95% CI, -3.60 to 3.30; P=0.90)



### New Renal Replacement Therapy

Odd Ratio, 0.98 (95% CI, 0.83 to 1.16)  
Difference of -0.2 percentage points  
(95% CI, -2.96 to 2.56)



★ kidney injury measure was a secondary outcome - medication delivery used NS mainly - fluids outside ICU were not tracked! ★

Balanced crystalloid fluid did not result in a lower mortality rate or a lower need of renal replacement therapy in critically ill patients!

