

CHEST Trial

HYDROXYETHYL STARCH OR SALINE FOR FLUID RESUSCITATION IN INTENSIVE CARE

What is the safety and efficacy of 6% HES (130/0.4) as compared with 0.9% saline alone for fluid resuscitation in a heterogeneous population of adult patients treated in the ICU?

32 centers



6% HES

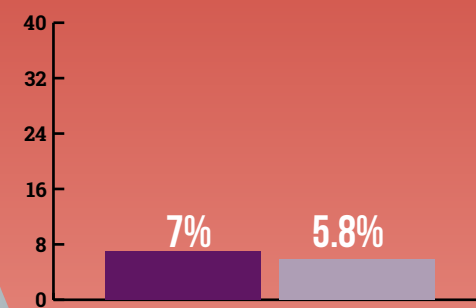
130 kD/0.4
3315 Patients

SALINE

0.9% Sodium Chloride
3336 Patients

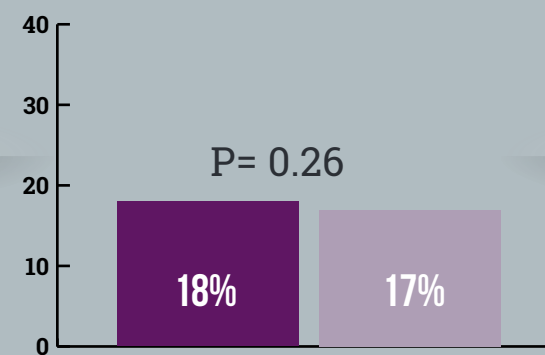
RENAL REPLACEMENT THERAPY

7.0% vs. 5.8%; **P=0.04**; NNH 83..



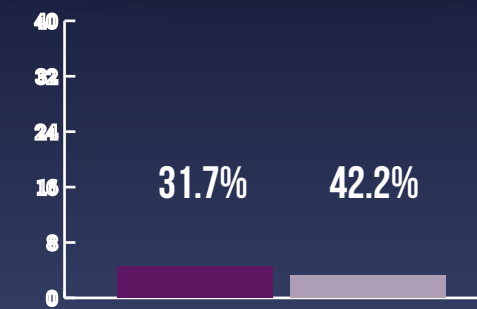
90-day Mortality

P= 0.26



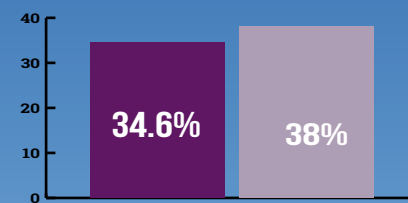
ADVERSE REACTIONS

4.6% vs. 3.3%, **P=0.006**



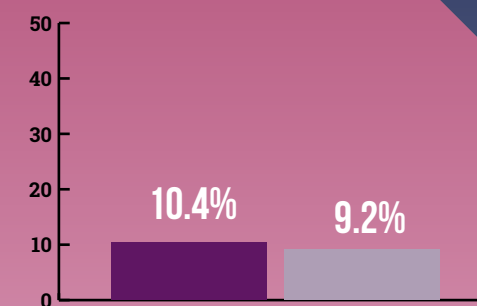
RENAL INJURY

34.6% vs. 38.0%; **P=0.005**



RENAL FAILURE

10.4% vs. 9.2%; **P=0.12**



Resuscitation with HES was associated with higher rate of renal replacement therapy and acute kidney injury with higher adverse events compared to normal saline in critically ill patients with no significant difference in 90-day mortality

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