

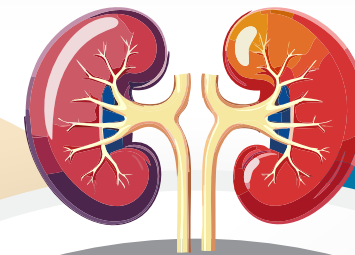
A RANDOMIZED TRIAL OF INTRAVENOUS AMINO ACIDS FOR KIDNEY PROTECTION

A multinational, double-blind, randomized controlled trial.

1759

AMINO ACID GROUP

A balanced mixture of amino acids, at a dose of 2 g per kilogram of ideal body weight per day for up to 3 days.



1752

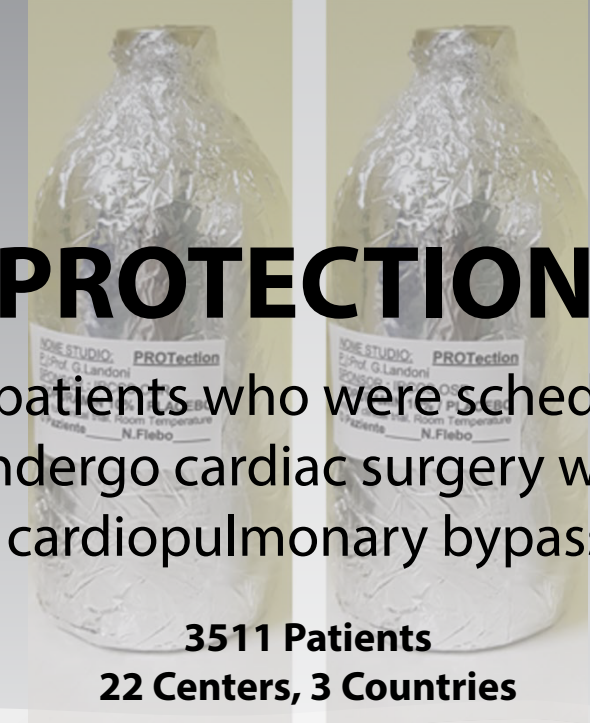
PLACEBO GROUP

(Ringer's solution) for up to 3 days.

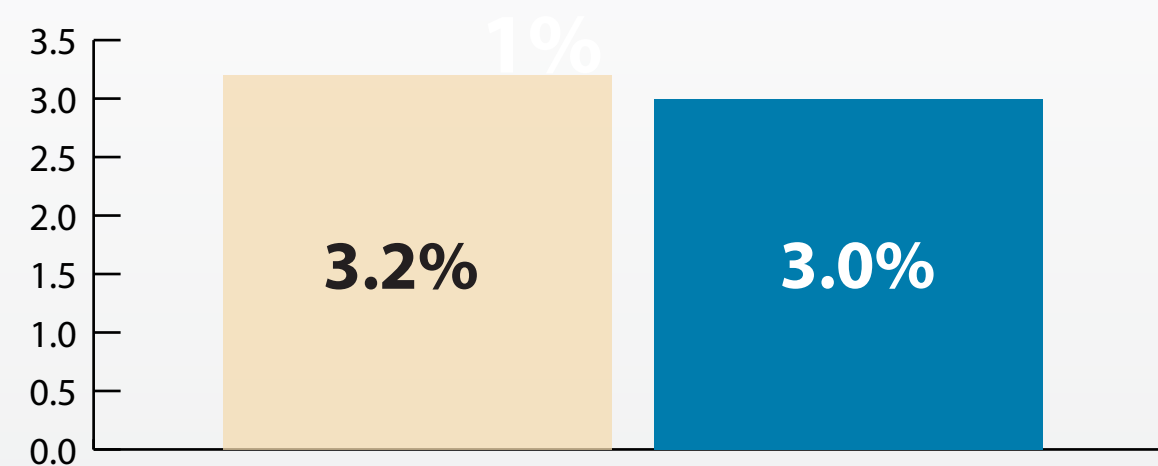
The PROTECTION Trial

Adult patients who were scheduled to undergo cardiac surgery with cardiopulmonary bypass

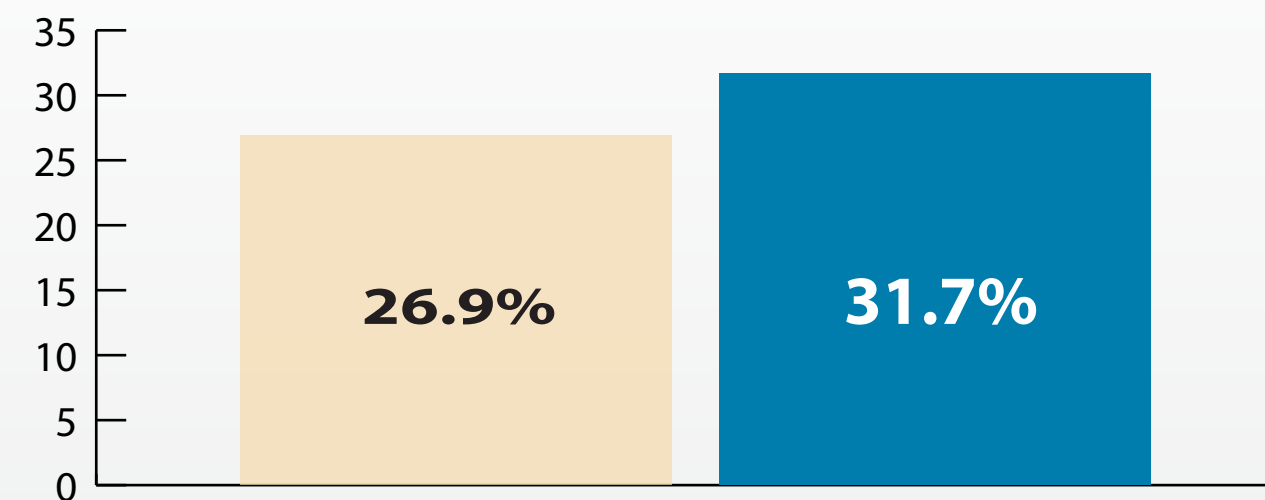
3511 Patients
22 Centers, 3 Countries



90-day Mortality

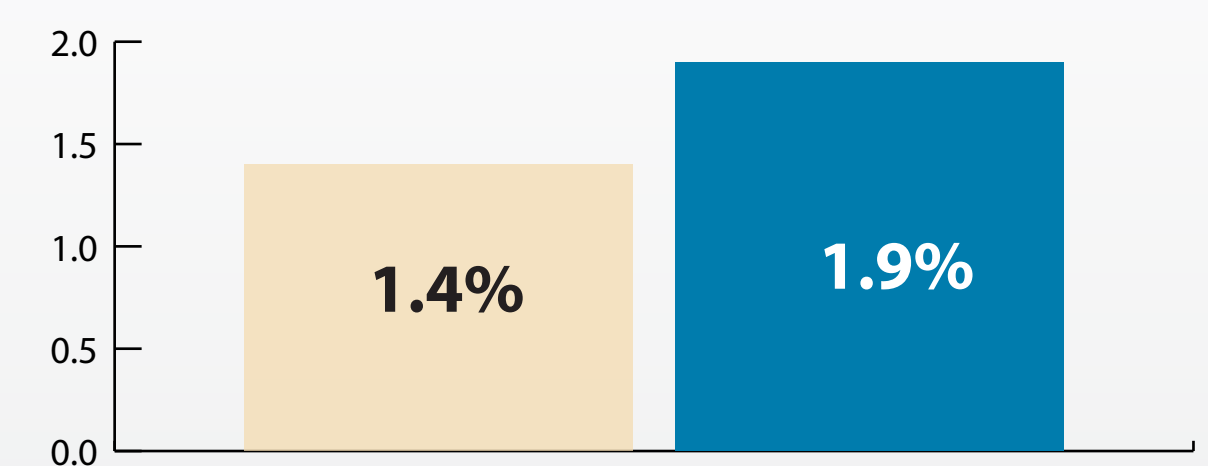


AKI within 1 Week After Surgery



RR, 0.85; 95% confidence interval [CI], 0.77 to 0.94; P=0.002

Use of Kidney Replacement Therapy



Among adult patients undergoing elective cardiac surgery with cardiopulmonary bypass, the infusion of amino acids significantly decreased the occurrence of acute kidney injury in the first week after surgery.