Prevention of Serious Adverse Events Following Angiography (PRESERVE) trial

**Discussant:**

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Discussant Conflicts -- Funding

• American Heart Association
  • “Kidney Council” KCVD, Chair #AHA2017
• Women in Nephrology, Co-President @womeninnephro
• American Journal of Physiology, Editorial Board
• Frontiers in Renal and Epithelial Physiology, Editorial Board

• University Kidney Research Organization (UKRO) @UKRO
• Wright Foundation
• Keck School of Medicine of USC
STRENGTHS of the PRESERVE trial

• Double-blind placebo-controlled trial on an important clinical question
• Previously studied question without consistent trial results
• International enrollment
• Clear rationale for the study and study design presented in a separate publication
  • Is there a benefit of urine alkaninization ± scavanging of reactive oxygen species to prevent contrast-induced AKI?
• “Sliding scale” protocol for fluid administration
• Routine angiographic procedures
• Clinically relevant endpoints: important sequelae
Some **PRESERVE** trial limitations

- Centralized lab for VA blood samples
  - Local laboratory for urine samples
- Study enrollment stopped at interim point at the recommendation of the VA based on conditional power analysis
- More Hispanic patients assigned to the bicarbonate group
- Predominantly male population
- Sliding scale for fluid dosage (capped for highest BMI category)
Potential Next Steps...

• Longer follow-up of the study population
  • to evaluate same endpoints

• Evaluation of differences between these treatments:
  • in biomarkers of acute and persistent kidney damage (CKD progression)
  • in the setting of emergency angiography procedures
  • in the setting of radiographic/angiographic procedures requiring larger IV contrast loads

• Evaluation of sex-differences in the outcomes after IV contrast administration among the PRESERVE treatments
Thank you