

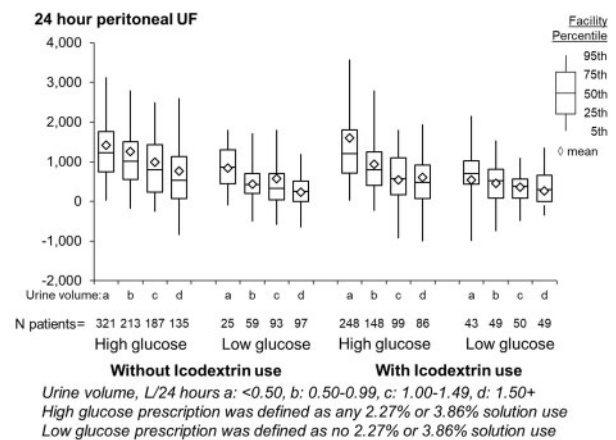
(fast peritoneal solute transfer rate, PSTr), without the need for excessive use of high glucose. Randomized trials have demonstrated these benefits but are insufficiently powered to investigate a clear impact on survival. We aimed to establish international prescription practices and their relationship to clinical outcomes.

METHOD: The Peritoneal Dialysis Outcomes and Practice Patterns Study (PDOPPS) is an international prospective cohort study in collaboration with the International Society for Peritoneal Dialysis. The current analysis was drawn from A/NZ, Canada, Japan, UK, and US in PDOPPS phases 1-2 (2014-2019). Patient demographics, comorbidities, lab measurements, clinic blood pressure, membrane function (both solute transport rate and ultrafiltration capacity), dialysis prescription details, urine and 24-hour ultrafiltration volumes were captured at study enrollment. Mortality and permanent transfer to HD (HDT) events were collected during study follow-up [median (IQR) = 1.1 yrs (0.6, 1.7)]. Linear and logistic models were used to analyze the association between icodextrin and blood pressure. Cox regression, stratified by country, was used to analyze the association of icodextrin with time from study enrollment to (a) death and (b) HDT, and adjusted for demographics, 13 comorbidities, transplant waitlisting, serum albumin, urine volume, facility size and % APD use, study phase, while accounting for facility clustering.

RESULTS: Icodextrin was prescribed in 1,929 (35%) of 5,432 patients studied, but this proportion differed by country, being >44% in all except the US, where it was 17%, and by facility within countries. Patients on icodextrin were more likely to have coronary artery disease and diabetes, have lower residual 24-hour urine volume and function, use less high glucose, have faster PSTr and reduced ultrafiltration capacity, and have been on PD longer (PD vintage: median 1.19, IQR 0.50-2.76). Despite this, patients using icodextrin achieved equivalent ultrafiltration to those using glucose at every level of residual urine volume (see figure). The low use of icodextrin in the US was more than compensated for by much greater use of high glucose and overall higher ultrafiltration volumes at each level of urine volume. Icodextrin use was not associated with blood pressure (effects: 0.90 mmHg, 95% CI: -0.68, 2.47), mortality (Hazard ratio [HR] 1.01, 95% CI: 0.83, 1.23) and HDT (HR 1.05, 95% CI: 0.90, 1.23).

CONCLUSION: There are important national and facility differences in the prescription of icodextrin, with the US a clear outlier, with less icodextrin and more high glucose use, resulting in higher ultrafiltration volumes. These practices and the targeting of patients with less efficient membranes for fluid removal may mask any potential survival advantage associated with icodextrin.

24 hour peritoneal UF by icodextrin, glucose, and by urine volume categories



MO680 **INTERNATIONAL COMPARISONS OF ICODEXTRIN PRESCRIPTION PRACTICE AND ITS ASSOCIATION WITH FLUID REMOVAL, BLOOD PRESSURE, PATIENT AND TECHNIQUE SURVIVAL***

Simon Davies¹, Junhui Zhao², KP McCullough², Yong-Lim Kim³, Ronald Pisoni², Angela Yee-Moon Wang⁴, Rajnish Mehrotra⁵, Talerngsak Kanjanabuch⁶, Hideki Kawanishi⁷, Bruce Robinson², Jeffrey Per⁸

¹Keele University, Stoke-on-Trent, United Kingdom, ²Arbor Research Collaborative for Health, Ann Arbor, MI, United States of America, ³Kyungpook National University Hospital, School of Medicine, Daegu, Korea, Rep. of South, ⁴University of Hong Kong, Hong Kong, Hong Kong, P.R. China, ⁵University of Washington, Department of Medicine, Seattle, WA, United States of America, ⁶Chulalongkorn University, Bangkok, Thailand, ⁷Tsuchiya General Hospital, Hiroshima, Japan and ⁸St. Michael's Hospital, Toronto, ON, Canada

BACKGROUND AND AIMS: Icodextrin is designed to maintain ultrafiltration during the long dwell, especially when there is a risk of increased fluid reabsorption