Conclusions: Diabetes, low serum albumin, or fewer months on dialysis at randomization did not substantively increase the trend for better survival or fewer composite endpoints in patients assigned to high- vs. low-flux membranes. Grouping by center-delivered ß2-M clearance also failed to improve the trend for a flux effect. These results appear to differ from analyses of the MPO study presented at ASN 2007 that suggested a greater benefit of high flux dialysis in patients with low serum albumin and/or diabetes.

Disclosure of Financial Relationships: nothing to disclose

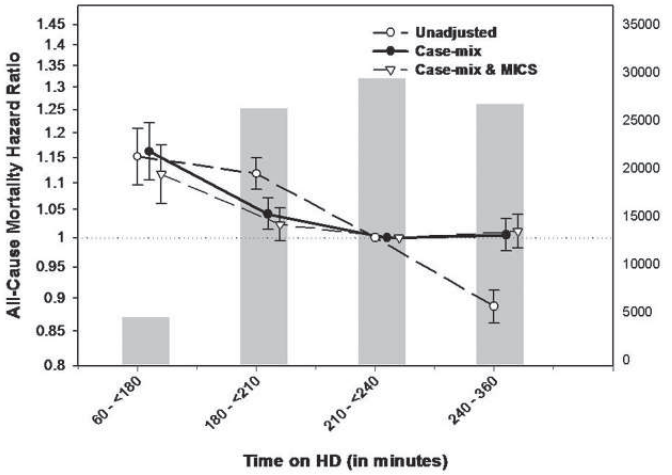
SA-PO2612

Independent Association of Hemodialysis Treatment Session Time and 5-Year Survival in 88,153 Maintenance Hemodialysis Patients Jessica E. Miller,[1] Csaba P. Kovesdy,[2] Jennie Jing,[1] David Van Wyck,[3] Kamyar Kalantar-Zadeh.[1] *[1]Harold Simmons Center, Harbor-UCLA, Torrance, CA; [2]Renal, Salem VA, Salem, VA; [3]OCMO, DaVita, El Segundo, CA.*

Background: The impact of the duration of hemodialysis treatment time on survival independent of the dialysis dose (Kt/V) in maintenance hemodialysis (MHD) patients is not clear. We hypothesized that higher HD Rx session time is associated with greater survival. **Methods**: We examined associations between reported HD treatment time and 5-year survival in the national database of 88,153 MHD patients from all Legacy DaVita dialysis facilities between 7/2001 and 6/2006 after deleting those who received HD <30 min or >6 hrs during any given treatment session. Survival models were adjusted for case-mix (demographics, dialysis vintage, and Kt/Vsp) and malnutrition-inflammation complex syndrome (MICS) (BMI, weight, and blood/serum levels of creatinine, albumin, hemoglobin, WBC, ferritin, TIBC, lymphocyte%, calcium, phosphorus & bicarbonate). **Results**: MHD patients who underwent HD treatment less than 3 hrs had 13% to 17% higher mortality compared to those who treated 3.5 to 4 hrs (see Figure & Table):

5-year death hazard Ratios

Death HR (95%CI)	<3 hrs	3 to <3.5 hrs	3.5 to <4 hrs	>/=4 hrs
number of patients	4,889	26,603	29,744	26,917
Unadjusted HR	1.15 (1.09-1.21)	1.12 (1.09-1.15)	1.00 (ref.)	0.89 (0.86-0.91)
Case-mix adj. HR	1.17 (1.11-1.22)	1.05 (1.02-1.07)	1.00 (ref.)	1.00 (0.97-1.03)
+MICS adj. HR	1.13 (1.07-1.19)	1.03 (1.00-1.06)	1.00 (ref.)	1.01 (0.98-1.03)



Conclusions: In a large contemporary cohort of MHD patients, HD-time> 3.5 hrs per treatment session is associated with survival advantages up to over 5 years even after adjustment for Kt/V and other confounders.

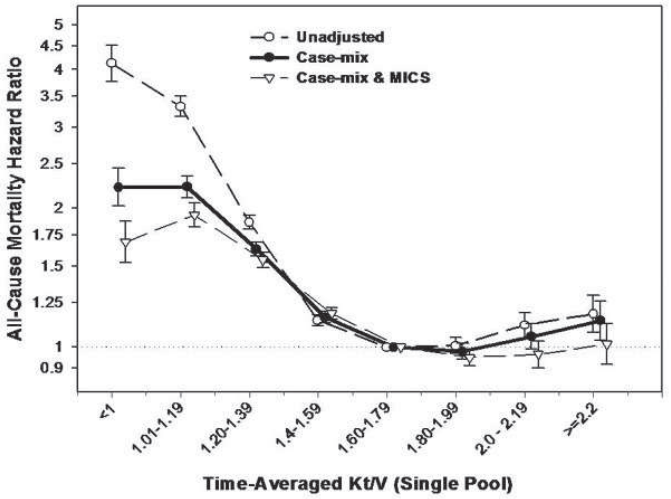
Disclosure of Financial Relationships: nothing to disclose

SA-PO2613

Association between Time-Averaged (Cumulative) Hemodialysis Dose and 5-Year Survival CKD Patients Jessica E. Miller,[1] Elani Streja,[1] Csaba P. Kovesdy,[2] David Van Wyck,[3] Kamyar Kalantar-Zadeh.[1] *[1]Harold Simmons Center, Harbor-UCLA, Torrance, CA; [2]Renal, Salem VA, Salem, VA; [3]OCMO, DaVita, El Segundo, CA.*

Background: The cumulative effect of dialysis dose on survival of maintenance hemodialysis (MHD) patients is not known. We hypothesized that higher time-averaged HD dose is associated with better survival independent of body mass or HD time. **Methods**: We averaged all monthly achieved Kt/Vsp values in 88,153 MHD patients whose monthly Kt/V were between 0.5 and 5.0 (to exclude outliers) from all Legacy DaVita dialysis clinics over 5 yrs (7/2001-6/2006). Cox regression models were adjusted for case-mix, HD time and malnutrition-inflammation complex syndrome (MICS) including BMI and serum/blood creatinine, albumin, Hb, WBC, ferritin, TIBC, lymphocyte%, calcium, phosphorus and bicarbonate. **Results**: An incrementally higher death risk was noted with each 0.1 unit decline in time-averaged Kt/V: fully adjusted death HR: 1.16 (95% CI: 1.14-1.18). Cumulative Kt/V values below 1.5 (ref: 1.5-1.8) were associated with increased mortality, but Kt/V values above 1.8 did not appear to offer additional survival advantages (see Table). Smaller Kt/V increments (0.2) confirmed these data (see figure):

Death HR (95%CI)	Kt/V <1.2	1.20 to <1.5	1.5 to <1.8	>/= 1.8
Unadjusted	3.37 (3.23-3.53)	1.48 (1.44-1.52)	1.00 (ref.)	1.02 (0.98-1.05)
Case-mix	2.11 (2.01-2.22)	1.37 (1.33-1.41)	1.00 (ref.)	0.97 (0.94-1.01)
MICS	1.49 (1.41-1.57)	1.24 (1.21-1.28)	1.00 (ref.)	1.01 (0.97-1.04)



Conclusions: In a large contemporary cohort of 88,153 MHD patients, if the average of all monthly achieved Kt/V values is below 1.5, there appears to be an association with at least 30% increased death risk compared to higher cumulative Kt/V values even after adjustment for nutritional status.

Disclosure of Financial Relationships: nothing to disclose

SA-PO2614

Relationship between Dialysis Schedule and Day-of-Week Association with Mortality in the Dialysis Outcomes and Practice Patterns Study (DOPPS) Hui Zhang,[1] Douglas E. Schaubel,[1] John D. Kalbfleisch,[1] Jennifer L. Bragg-Gresham,[2] Bruce Robinson,[2] Ronald L. Pisoni,[2] Bernard Canaud,[3] Michel Jadoul,[4] Takashi Akiba,[5] Akira Saito,[6] Rajiv Saran.[1] *[1]University of Michigan, Ann Arbor, MI; [2]Arbor Research, Ann Arbor, MI; [3]Lapeyronie University Hospital, Montpellier, France; [4]Cliniques Universitaires St-Luc, Bruxelles, Belgium; [5]Tokyo Women's Medical University, Tokyo, Japan; [6]Tokai University, Kanagawa, Japan.*

With a thrice weekly hemodialysis (HD) schedule, the highest risk of death is said to be on Monday/Tuesday since these days are preceded by the longest interval without dialysis. However, whether this phenomenon occurs uniformly across countries is not known.

Data from 27,650 HD patients in DOPPS I (96-01) and II (02-04) from 12 countries were analyzed. Time-dependent Cox models were employed to quantify the relationship between day-of-week, dialysis schedule, and mortality. Models were adjusted for age, sex, race, time on ESRD and 14 summary comorbid conditions, and accounted for facility clustering and country. Sunday was chosen as the reference day for death risk.

Crude death rates were highest on Monday (16.8%) and Tuesday (16.1%) with the lowest rates on Sunday (12.2%), although the distributions varied greatly by country. Based on a day-specific Cox model, covariate-adjusted death rates were elevated by 39% on Mondays and 34% on Tuesdays. Based on the dayschedule-specific model, patients on a M/W/F schedule experienced 53% and 19% higher mortality on Mondays and Tuesdays, respectively, while for patients on a Tu/Th/Sa schedule, the corresponding values were 22% and 54% for Monday and Tuesday. The day-of-week effect was evident only among US patients and was stronger for cardiovascular (CV) compared with non-CV death. In the US, CV mortality risk was higher by 62% on Mondays and 41% on Tuesdays; the corresponding values for non-CVD death being 40% and 35%.

HD patients in the US, but not other countries in the DOPPS, have elevated mortality risk (especially due to CV causes) on Mondays and Tuesdays, the pattern of risk increasing depending on dialysis schedule. Examination of practices may explain these country differences.

Disclosure of Financial Relationships: nothing to disclose

SA-PO2615

Economic Impact of Dialysis Modality Switch in Incident ESRD Patients B. Chui, J. Dong, Scott Klarenbach. *Medicine, University of Alberta, Edmonton, AB.*

Provision of dialysis in end stage renal disease (ESRD) consumes large amounts of health care resources. Peritoneal dialysis (PD) is significantly less costly, and available evidence suggests that clinical outcomes are similar compared with hemodialysis (HD). As such, it has been suggested that peritoneal dialysis be aggressively promoted, including in patients initially started on hemodialysis. However, the economic impact of modality switch and failure is not clear in Canada. We sought to determine the economic impact of modality switch in incident ESRD patients in Alberta.

A clinical dataset of incident dialysis patients from 1997 to 2001 was linked to provincial administrative datasets. Cumulative health care costs were calculated for each patient, and