

Supplementary Table A. Baseline characteristics of the total study cohort according to Rate of Urea Removal (quartiles).

	Rate of Urea Removal				p^a
	Q1 (n=380)	Q2 (n=439)	Q3 (n=434)	Q4 (n=483)	
Male (%)	51.8	51.3	41.7	32.7	<0.001
Age (yrs)	58.5 ±13.6	58.3 ±13.9	57.8 ±14.0	57.0 ±14.4	0.41
Black (%)	68.4	63.6	62.2	57.8	0.02
Vintage (yrs)	2.3 (1.2-4.7)	2.2 (1.1-4.6)	2.4 (1.1-5.0)	2.4 (1.1-5.0)	0.64
Diabetes (%)	47.4	54.6	44.7	40.6	0.22
Ischemic heart disease (%)	43.7	38.5	39.2	37.1	0.24
Congestive Heart Failure (%)					0.61
Mild	30.3	26.7	30.0	25.5	
Moderate/Severe	11.6	10.7	10.4	12.2	
Peripheral Vascular Disease (%)	30.0	26.2	26.54	21.1	0.03
Arrhythmia (%)	33.7	32.4	28.8	27.3	0.15
ICED Score	2.0 (1.0-3.0)	2.0 (1.0-3.0)	2.0 (1.0-3.0)	2.0 (1.0-3.0)	0.53
Pre-dialysis SBP (mmHg)	151.6 ±27.9	151.7 ±24.8	152.0 ±25.0	153.6 ±27.3	0.64
Post-dialysis weight (kg)	72.4 ±15.6	72.0 ±15.2	69.2 ±14.0	65.0 ±14.0	<0.001
UF requirement (L)	2.7±1.4	3.0 ±1.2	2.9 ±1.2	3.0 ±1.3	0.03
UFR (mL/kg/hr)	10.2 ±5.1	11.4 ±5.0	12.2 ±5.2	14.4 ±6.0	<0.001
Access (%)					0.001
AVG	57.1	55.4	63.4	62.9	
AVF	32.6	39.4	32.2	31.3	
Catheter	10.3	5.2	4.4	5.8	
Serum sodium (mmol/L)	137.9 ±3.8	138.2 ±3.8	138.3 ±4.3	138.4 ±3.7	0.24
Serum albumin (g/dL)	3.8 ±0.4	3.8 ±0.4	3.8 ±0.4	3.9 ±0.3	0.001
Serum creatinine (mg/dL)	9.9 ±2.9	10.3 ±2.9	10.3 ±2.9	10.5 ±2.9	0.02
Serum phosphorus (mg/dL)	5.6 ±1.9	5.8 ±1.7	5.8 ±2.0	5.9 ±1.9	0.09
Serum bicarbonate (mmol/L)	21.8 ±3.6	21.5 ±3.5	21.4 ±3.4	21.2 ±3.7	0.14

^a P value for global difference; significance testing was by analysis of variance or Kruskal-Wallis tests for continuous variables and χ^2 test for categorical variables.

ICED, index of co-existent disease; AVF, arteriovenous fistula; AVG, arteriovenous graft; UF, ultrafiltration; UFR, ultrafiltration rate.

Supplementary Table B. Baseline dialysis session characteristics of the total study cohort according to rate of urea removal (quartiles).

	Quartiles of Rate of Urea Removal				p^a
	Q1	Q2	Q3	Q4	
Session length (mins)	216 (200-240)	210 (195-236)	196 (180-215)	180 (170-210)	<0.001
Prescribed Qb (mL/min)	400 (350-450)	400 (310-450)	400 (300-450)	350 (300-400)	<0.001
Prescribed Qd (mL/min)	700 (600-800)	700 (500-800)	700 (500-800)	710 (500-800)	<0.001
KoA_{urea} ≥1000 mL/min (%)	51.7	44.1	47.2	34.1	<0.001
Pre-dialysis BUN (mg/dL)	38.8 ±7.5	52.9 ±7.3	61.9 ±9.0	76.6 ±11.9	<0.001
Post-dialysis BUN (mg/dL)	11.2 ±3.8	15.5 ±4.6	18.2 ±5.4	22.0 ±5.9	<0.001

^a P value for global difference; significance testing was by analysis of variance or Kruskal-Wallis tests.

Qb, blood flow; Qd, dialysate flow; KoA_{urea}, dialyzer mass transfer coefficient for urea; BUN, blood urea nitrogen.