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Supplemental Table 1 –
Characteristics of Control Subjects and Hemodialysis Patients

	Control	Hemodialysis
Age (years)	50 ± 14	63 ± 13
M / F	11 / 6	12 / 3
BSA (m ²)	1.8 ± 0.2	1.9 ± 0.3
Weight (kg)	70 ± 12	76 ± 18
Dialysis vintage (years)	-	3.2 ± 1.9
spKt/V _{urea}	-	1.6 ± 0.4

Results are mean ± standard deviation.

The height was missing for three hemodialysis patients so BSA could not be calculated. All hemodialysis patients were maintained on thrice weekly treatment.

Supplemental Table 2 –

**Urine Concentration, Plasma Concentration, and Urine to Plasma Concentration Ratio in
Control Subjects and Acute Kidney Injury Patients**

Solute	Control			AKI		
	Urine (mg/dl)	Plasma (mg/dl)	Urine/ Plasma	Urine (mg/dl)	Plasma (mg/dl)	Urine/ Plasma
Creatinine	103 ± 74	0.95 ± 0.20	111 ± 78	50 ± 23	3.5 ± 1.4	17 ± 11
Urea	760 ± 422	14 ± 2	55 ± 28	526 ± 269	89 ± 29	6.6 ± 4.5
PAG	12 ± 9	0.029 ± 0.018	463 ± 297	6.6 ± 5.2	0.34 ± 0.39	36 ± 25
HIPP Free	60 ± 75	0.047 ± 0.039	1759 ± 1586	15 ± 13	0.26 ± 0.47	157 ± 115
HIPP Total		0.16 ± 0.12	502 ± 492		0.49 ± 0.76	64 ± 35
IS Free	4.6 ± 2.8	0.002 ± 0.001	3375 ± 2647	1.5 ± 1.5	0.032 ± 0.073	199 ± 174
IS Total		0.094 ± 0.042	55 ± 43		0.23 ± 0.31	11 ± 8
PCS Free	5.6 ± 4.2	0.32 ± 0.15	1121 ± 726	2.3 ± 2.4	0.048 ± 0.048	64 ± 50
PCS Total		0.005 ± 0.002	19 ± 14		0.64±0.60	3.9 ± 2.4

Results are mean ± standard deviation. AKI, acute kidney injury; PAG, phenylacetylglutamine; HIPP, hippurate; IS, indoxyl sulfate; PCS, p-cresol sulfate.

Free refers to the unbound solute concentration in the plasma and Total refers to the total solute concentration in the plasma for the protein-bound solutes.

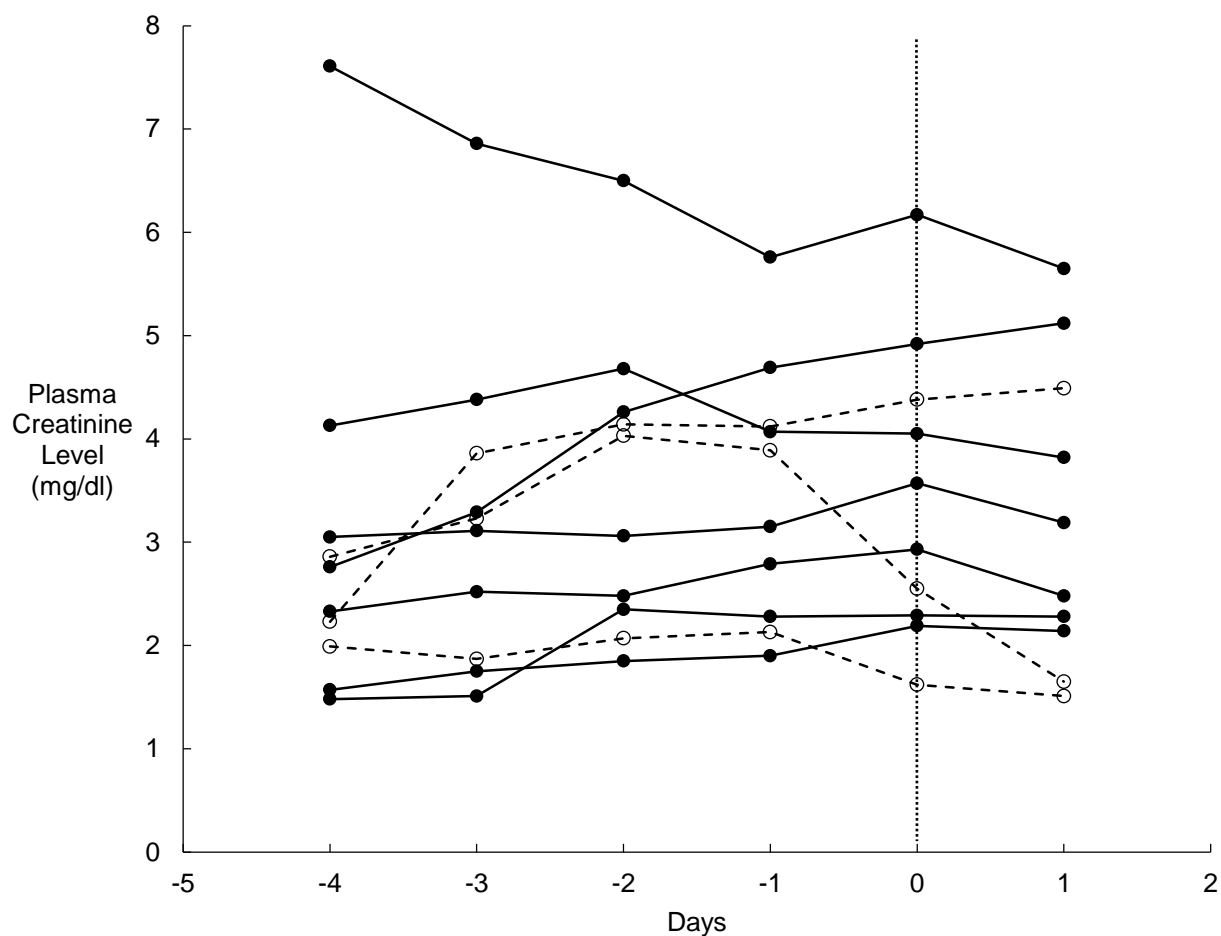
Supplemental Table 3 –**Solute Free Concentration and % Free in Acute Kidney Injury and Hemodialysis Patients**

Solute		AKI	HD
HIPP	Free concentration (mg/dl)	0.26 ± 0.47	2.7 ± 1.5
	% Free	51 ± 14	54 ± 8
IS	Free concentration (mg/dl)	0.032 ± 0.073	0.24 ± 0.16
	% Free	9.7 ± 7.0	8.0 ± 3.0
PCS	Free concentration (mg/dl)	0.048 ± 0.048	0.28 ± 0.17
	% Free	7.9 ± 5.6	6.8 ± 2.5

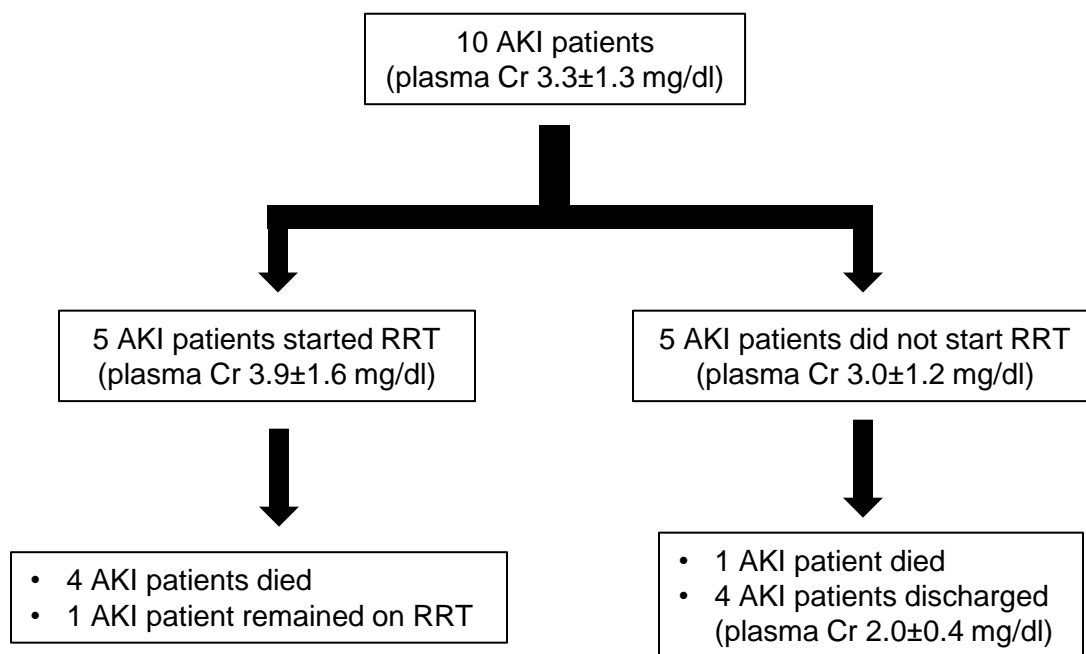
Results are mean ± standard deviation. AKI, acute kidney injury; HD, hemodialysis; HIPP, hippurate; IS, indoxyl sulfate; PCS, p-cresol sulfate.

Supplemental Figure 1 –

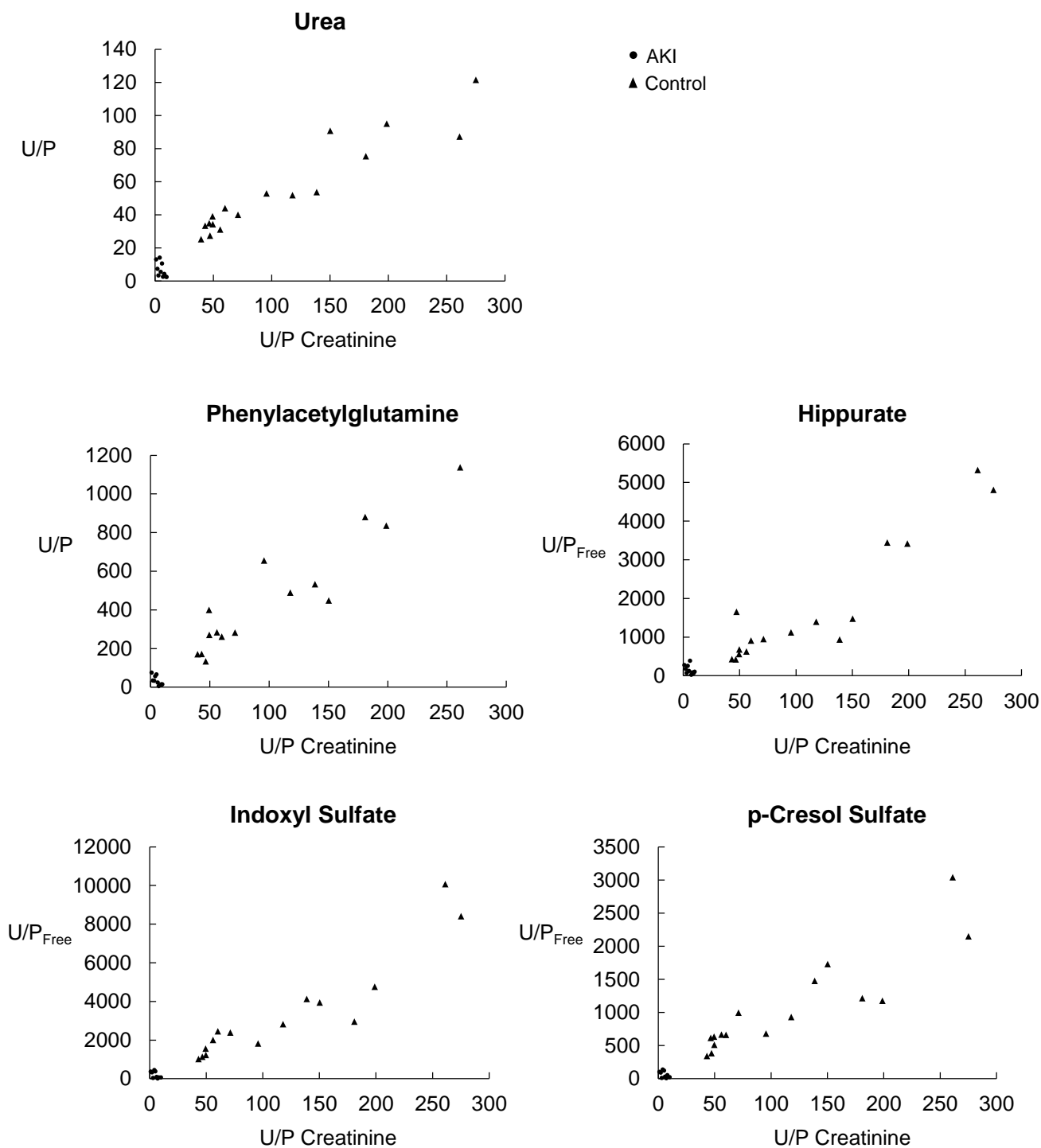
Evolution of Plasma Creatinine Level in Acute Kidney Injury Patients



The black circles and solid lines represent the 7 AKI patients with FENa >1%. The open circles and dashed lines represent the 3 AKI patients with FENa <1%. Data for plasma creatinine levels are shown for up to the four days preceding the study and for one day after the study. The dotted vertical line represents the day of sample collection for solute fractional clearance measurements for the study.

Supplemental Figure 2 –**Flow Chart of the Course of Acute Kidney Injury Patients**

AKI, acute kidney injury; RRT, renal replacement therapy.

Supplemental Figure 3 –**Urine to Plasma Concentration Ratio of Solute Relative to Creatinine**

Supplemental Figure 3 Legend

The urine to plasma concentration ratio (U/P) of each solute is plotted versus the urine to plasma concentration ratio of creatinine. For the protein-bound solutes hippurate, indoxyl sulfate, and p-cresol sulfate, the urine to plasma concentration ratios are expressed in terms of the free, unbound plasma solute level (U/P_{Free}). The circles represent the 10 AKI patients and the triangles represent the 17 control subjects.