Longitudinal changes in protein carbamylation and mortality risk after initiation of hemodialysis

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SUPPLEMENTAL MATERIALS

Table S1.
Dialyzer type utilized by study population

Dialyzer type	Percent cases (n= 122)	Percent controls (n=244)
Fresenius Optiflux 160NR	56%	55%
Fresenius Optiflux 180NR	36%	37%
Fresenius Optiflux 200NR	8%	8%

All individuals dialyzed through Fresenius brand polysulfone high flux dialyzers (Fresenius Optiflux 160, 180, and 200 types). The distribution of the three observed dialyzer types was nearly identical between cases and controls as shown above.

Table S2.
Predictors of *change* in carbamylated albumin level across the entire study population (n=366)

Predictor variable*	Average measure for the entire cohort	Parameter estimate (SE)	*P*-value**
Hemoglobin (g/dl)	11.7 (0.8)	-1.0 (0.5)	0.10
Albumin (g/dl)	3.6 (0.4)	-3.1 (1.0)	<0.001
Blood urea nitrogen (mg/dl)	48 (15)	0.1 (0.02)	<0.001
Protein catabolic rate (g/kg/d)	0.8 (0.2)	-5.3 (1.5)	0.07
Systolic blood pressure (mmHg)	146 (25)	-0.1 (0.04)	0.09

Measures are mean (SD).
*All variables represent time averaged values across the entire study period for the entire cohort.
**P-values are result of linear regression analysis with change in carbamylated albumin measure across the study (baseline to final) as the outcome, adjusted for baseline carbamylated albumin.

28 possible predictors of *change* in carbamylated albumin were studied including baseline hs-CRP, study average albumin, hemoglobin, ferritin, transferrin saturation, phosphorous, parathyroid hormone, dialysis treatment time, blood urea nitrogen, urea reduction ratio, Kt/V, estimated residual renal function, systolic blood pressure, diastolic blood pressure, body mass index, and normalized protein catabolic rate. Additional variables examined included co-morbid conditions such as diabetes, coronary artery disease, hypertension, COPD, malignancy, lipid disorders, anemia, peripheral vascular disease, cerebral vascular accident, congestive heart failure, atrial fibrillation and, liver disease.
 Table only shows predictors that were statistically notable (P < 0.10) in univariate linear regression models adjusted for baseline carbamylated albumin level.