

Supplementary Table 1. Hazard ratios and 95% confidence intervals of tertiles of BUN vs death over a 5 year period in MHD subjects.

Tertiles	Unadjusted	<i>P</i>
Middle vs Lowest	0.8 (0.5-1.2)	0.22
Highest vs Middle	1.0 (0.7-1.6)	0.91
Highest vs Lowest	0.8 (0.5-1.2)	0.26

Supplementary Table 2. Hazard ratios and 95% confidence intervals of tertiles of PBHCit vs cardiovascular death over a 5 year period.

Tertiles	Unadjusted	<i>P</i>	Minimally Adjusted*	<i>P</i>	Case-Mix Adjusted†	<i>P</i>	Full adjustment‡	<i>P</i>
Middle vs Lowest	1.2 (0.6-2.5)	0.56	1.2 (0.6-2.5)	0.56	1.3 (0.6-2.7)	0.52	1.2 (0.7-2.0)	0.45
Highest vs Middle	1.6 (0.9-3.1)	0.12	1.6 (0.9-3.1)	0.14	1.6 (0.9-3.2)	0.13	2.5 (1.5-4.1)	<0.01
Highest vs Lowest	2.0 (1.1-4.0)	0.03	2.0 (1.02-3.9)	0.04	2.1 (1.04-4.3)	0.04	3.0 (1.8-5.0)	<0.01

*Adjusted for age and sex

†Adjusted for age, sex, race (Black, Hispanic), history of cardiovascular disease, diabetes mellitus, Charlson Comorbidity Index, dialysis vintage

‡ Adjusted for age, sex, race (Black, Hispanic), history of cardiovascular disease, diabetes mellitus, Charlson Comorbidity Index, dialysis vintage, myeloperoxidase, IL-6, BUN, creatinine, albumin, CRP, TNFα, BMI, EPO, and NPCR

Supplementary Table 3. Baseline subject demographic, clinical, laboratory, and inflammatory measurements in N=347 maintenance hemodialysis patients over tertiles of PBHCit. Data is expressed as medians with interquartile ranges.

Variable	Lowest Tertile N=116	Middle Tertile N=116	Highest Tertile N=115	Analysis of Variance <i>P</i>
Demographics				
Age (years)	56 (46-65)	56 (46-66)	56 (44-67)	0.69
Sex (% female)	46	46	47	0.98
African American (%)	27	27	27	0.99
Hispanic (%)	48	57	56	0.33
Clinical Characteristics				
History of CVD (%)	43	46	46	0.53
Diabetes Mellitus (%)	56	51	50	0.77
Mortality (%)	35	35	52	0.01
Charlson Comorbidity Index	2 (0.3-1.0)	2 (1.0-3.0)	3 (1.0-3.0)	0.97
Near-Infrared Body Fat (%)	29 (19-36)	26 (19-37)	25 (16-32)	0.06
BMI (kg/m ²)	25.6 (22.2-30.4)	26.4 (23.3-30.4)	24.0 (21.0-28.5)	0.01
Dialysis Vintage (mo)	26 (11-46)	23 (11-48)	34 (15-58)	0.07
Dialysis Dose Kt/V (sp)	1.6 (1.4-1.8)	1.5 (1.4-1.7)	1.5 (1.4-1.7)	0.15
NPCR (g/kg/day)	1.0 (0.84-1.2)	1.0 (0.89-1.2)	1.1 (0.92-1.3)	<0.01
Administered EPO (U/week)	11181 (5846-17483)	12821 (6075-18693)	12649 (7826-20885)	0.02
Predialysis systolic BP (mmHg)	157 (135-171)	148 (132-166)	152 (134-166)	0.43
Laboratory Measurements				
BUN (mg/dl)	59 (48-66)	66 (53-77)	72 (62-82)	<0.01
Creatinine (mg/dl)	10 (7.7-12)	11 (8.5-13)	11 (9.0-14)	0.01
Total Cholesterol (mg/dl)	254 (127-191)	137 (116-162)	135 (105-164)	<0.01
Albumin (g/dl)	3.9 (3.7-4.1)	3.8 (3.6-4.0)	3.9 (3.7-4.1)	0.20
Calcium (mg/dl)	9.4 (8.9-9.8)	9.2 (8.7-9.7)	9.2 (8.9-9.6)	0.60
Phosphorous (mg/dl)	5.5 (4.7-6.6)	5.8 (4.6-5.8)	5.8 (4.9-7.0)	0.21
Intact parathyroid Hormone (pg/ml)	205 (107-338)	220 (121-409)	263 (161-463)	0.12
Blood Hemoglobin (g/dL)	12.0 (11.5-12.5)	12.1 (11.2-12.6)	11.8 (11.2-12.6)	0.66
Bicarbonate (HCO ₃ ⁻) (meq/L)	22.3 (20.6-24.0)	22.0 (20.7-23.7)	21.7 (19.7-23.3)	<0.01
Inflammatory Markers				
Total Homocysteine (μmol/L)	21 (18-28)	22 (19-26)	24 (17-29)	0.34
Myeloperoxidase (pmol/L)	886 (462-1554)	650 (355-1168)	837 (501-1450)	0.09
CRP (mg/L)	4.3 (1.8-8.2)	4.5 (2.2-8.6)	4.4 (1.7-8.3)	0.37
IL-6 (ng/L)	7.7 (4.2-17.4)	9.2 (5.7-16.9)	8.7 (4.8-9.8)	0.85
TNF-α (ng/L)	6.8 (4.9-8.7)	6.4 (4.4-8.9)	7.5 (5.3-9.8)	0.01
Lactate Dehydrogenase (U/L)	154 (132-187)	152 (139-176)	165 (140-196)	0.25
WBCs (x1,000)	7.0 (5.9-8.4)	6.8 (5.6-8.3)	6.9 (5.9-8.6)	0.30

CVD indicates cardiovascular disease; BMI, body mass index; NPCR, normalized protein catabolic rate; EPO, erythropoietin; BP, blood pressure; BUN, blood urea nitrogen; CRP, C-reactive protein; IL-6, interleukin 6; TNFα, tumor necrosis factor α; WBC, white blood cell

Supplementary Table 4. Individual covariate relationship with mortality over a 5 year period in

MHD subjects.

Variable	HZ Ratio	P
Age (years)	57 (20-162)	<0.01
Sex (% female)	1.5 (1.1-2.1)	0.02
African American (%)	1.3 (0.9-1.9)	0.15
Hispanic (%)	0.8 (0.6-1.2)	0.30
Diabetes Mellitus (%)	1.7 (1.2-2.4)	<0.01
Cardiovascular Disease (%)	1.2 (0.9-1.7)	0.26
Charlson Comorbidity Index	1.3 (1.2-1.5)	<0.01
Dialysis Vintage (mo)	0.8 (0.2-3.1)	0.77
Myeloperoxidase (pmol/L)	2.3 (0.8-5.7)	0.13
IL-6 (ng/L)	2.7 (0.7-7.7)	0.13
TNF α (ng/L)	0.9(0.1-6.7)	0.95
CRP (mg/L)	5.8 (1.4-18)	0.02
BMI (kg/m ²)	0.6 (0.3-1.4)	0.25
Albumin (g/dL)	0.05 (0.02-0.1)	<0.01
NPCR (g/kg/day)	0.22 (0.08-0.6)	<0.01
EPO (U/week)	11.0 (2.8-39)	<0.01
Creatinine (mg/dL)	0.12 (0.05-0.3)	<0.01
BUN (mg/dL)	0.3 (0.9-1.0)	0.31