

Supplementary Table 1. All-cause mortality according to serum levels of corrected calcium, phosphorus, calcium-phosphorus product, and intact parathyroid hormone by Cox proportional hazard models

Variable	Unadjusted HR (95% CI)	<i>P</i> value	Adjusted HR* (95% CI)	<i>P</i> value
Corrected calcium (mg/dL)				
< 8.0	0.858 (0.728–1.010)	0.066	0.882 (0.703–1.106)	0.276
8.0–8.4	1.027 (0.900–1.173)	0.692	0.895 (0.745–1.077)	0.241
8.4–8.8	1.045 (0.936–1.166)	0.436	0.911 (0.785–1.058)	0.221
8.8–9.2	Reference		Reference	
9.2–9.6	1.060 (0.947–1.186)	0.312	1.096 (0.943–1.274)	0.230
9.6–10.0	1.137 (1.000–1.293)	0.051	1.380 (1.164–1.635)	< 0.001
≥ 10.0	1.459 (1.296–1.643)	< 0.001	1.508 (1.276–1.782)	< 0.001
Phosphorus (mg/dL)				
< 3.0	2.030 (1.815–2.272)	< 0.001	1.267 (1.081–1.486)	0.004
3.0–4.0	1.305 (1.183–1.439)	< 0.001	1.158 (1.015–1.321)	0.029
4.0–5.0	Reference		Reference	
5.0–6.0	0.771 (0.692–0.859)	< 0.001	0.945 (0.819–1.091)	0.440
6.0–7.0	0.735 (0.645–0.838)	< 0.001	1.121 (0.942–1.334)	0.199
≥ 7.0	0.535 (0.457–0.627)	< 0.001	0.923 (0.738–1.155)	0.486
Calcium-phosphorus product (mg ² /dL ²)				
< 30	1.661 (1.475–1.870)	< 0.001	1.090 (0.928–1.282)	0.294
30–35	1.185 (1.036–1.355)	0.013	0.872 (0.728–1.044)	0.136
35–40	1.061 (0.927–1.215)	0.391	0.909 (0.760–1.088)	0.298
40–45	Reference		Reference	
45–50	0.882 (0.760–1.022)	0.095	0.829 (0.680–1.011)	0.063
50–55	0.844 (0.715–0.996)	0.045	0.958 (0.772–1.189)	0.696
55–60	0.852 (0.710–1.023)	0.086	1.091 (0.860–1.384)	0.473
≥ 60	0.699 (0.599–0.815)	< 0.001	1.014 (0.825–1.246)	0.897
Intact parathyroid hormone (pg/mL)				
< 50	1.414 (1.288–1.552)	< 0.001	1.237 (1.088–1.406)	0.001
50–150	Reference		Reference	
150–300	0.849 (0.775–0.930)	< 0.001	1.088 (0.960–1.233)	0.186
300–600	0.733 (0.653–0.824)	< 0.001	1.214 (1.032–1.428)	0.019
≥ 600	0.665 (0.548–0.808)	< 0.001	1.356 (1.035–1.778)	0.027

CI, confidence interval; HR, hazard ratio.

*Adjusted for age, sex, dialysis vintage, etiology of renal failure, history of cardiovascular disease, body mass index, hemoglobin, albumin, single-pool Kt/V, corrected calcium, phosphorus, and intact parathyroid hormone.

Supplementary Table 2. All-cause mortality according to serum albumin level by Cox proportional hazard models

Variable	Albumin < 3.8 g/dL		Albumin ≥ 3.8 g/dL	
	Adjusted HR* (95% CI)	P value	Adjusted HR* (95% CI)	P value
Age (per 1 yr)	1.046 (1.040–1.053)	< 0.001	1.057 (1.049–1.064)	< 0.001
Sex (male)	1.150 (0.998–1.326)	0.053	1.195 (1.017–1.405)	0.030
Dialysis vintage (per 1 mo)	1.002 (1.001–1.003)	< 0.001	1.001 (1.000–1.003)	0.047
Etiology of renal failure				
Diabetic nephropathy	Reference		Reference	
Hypertensive nephropathy	0.784 (0.661–0.929)	0.005	0.545 (0.451–0.660)	< 0.001
Glomerulonephritis	0.606 (0.450–0.816)	0.001	0.420 (0.313–0.565)	< 0.001
Others	0.911 (0.770–1.079)	0.280	0.544 (0.447–0.664)	< 0.001
History of CVD [†]	1.352 (1.171–1.561)	< 0.001	1.400 (1.189–1.648)	< 0.001
Body mass index (per 1 kg/m ²)	0.922 (0.901–0.942)	< 0.001	0.935 (0.912–0.958)	< 0.001
Hemoglobin (per 1 g/dL)	0.902 (0.853–0.954)	< 0.001	0.907 (0.846–0.972)	0.006
Albumin (per 1 g/dL)	0.417 (0.359–0.486)	< 0.001	0.660 (0.483–0.901)	0.009
Single-pool Kt/V (per 1)	0.599 (0.476–0.753)	< 0.001	0.673 (0.504–0.899)	0.007
Corrected calcium (mg/dL)				
Q1 ≤ 8.40	0.810 (0.646–1.017)	0.069	0.873 (0.693–1.101)	0.251
Q2 8.41–8.80	0.919 (0.747–1.129)	0.420	0.848 (0.676–1.064)	0.155
Q3 8.81–9.14	Reference		Reference	
Q4 9.15–9.60	1.033 (0.841–1.269)	0.759	1.023 (0.822–1.274)	0.838
Q5 ≥ 9.61	1.503 (1.231–1.835)	< 0.001	1.176 (0.939–1.474)	0.158
Phosphorus (mg/dL)				
Q1 ≤ 3.59	1.301 (1.081–1.567)	0.005	1.152 (0.922–1.439)	0.212
Q2 3.60–4.39	1.171 (0.957–1.432)	0.125	0.965 (0.778–1.196)	0.744
Q3 4.40–5.10	Reference		Reference	
Q4 5.11–6.10	1.036 (0.827–1.297)	0.761	0.988 (0.797–1.224)	0.911
Q5 ≥ 6.11	1.063 (0.815–1.387)	0.650	1.032 (0.823–1.295)	0.782
Intact parathyroid hormone (pg/mL)				
Q1 ≤ 59.6	1.155 (0.957–1.393)	0.134	1.211 (0.970–1.513)	0.091
Q2 59.7–119.8	0.883 (0.720–1.083)	0.232	1.094 (0.878–1.364)	0.421
Q3 119.9–189.7	Reference		Reference	
Q4 189.8–310.9	0.970 (0.778–1.209)	0.786	1.109 (0.878–1.401)	0.387
Q5 ≥ 311.0	1.177 (0.931–1.488)	0.172	1.350 (1.058–1.723)	0.016

BP, blood pressure; CI, confidence interval; CVD, cardiovascular disease; HR, hazard ratio; Q, quintile.

*Adjusted for age, sex, dialysis vintage, etiology of renal failure, history of cardiovascular diseases, body mass index, hemoglobin, albumin, single-pool Kt/V, corrected calcium, phosphorus, and intact parathyroid hormone.

[†]CVD: composite of coronary artery disease, heart failure, cerebrovascular disease, peripheral artery disease/diabetic foot.