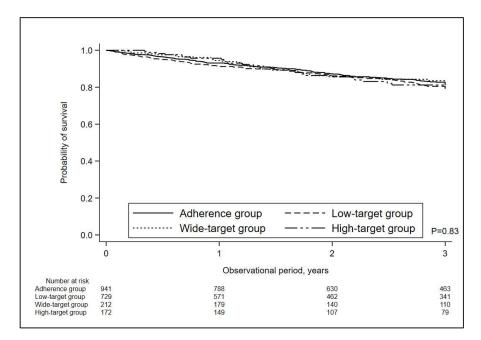
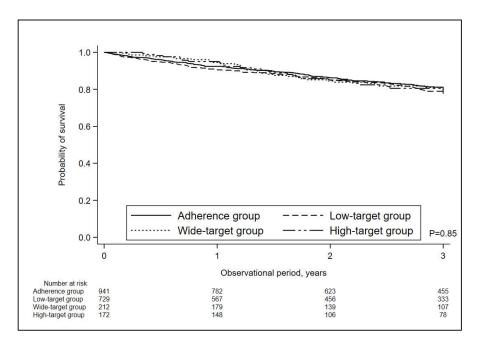


Supplementary Figure S1. Change of serum phosphorus concentration by exposure groups throughout the study.



Supplementary Figure S2. Event-free survival rate for all-cause mortality.



**Supplementary Figure S3. Event-free survival rate for MACEs.** MACEs included acute myocardial infarction, stroke, and all-cause mortality. MACEs, major adverse cardiovascular events.

Supplementary Table S1. Association between facility-level target ranges of phosphorous and all-cause mortality.

	Unadjusted HR	95% CI	P-value	Adjusted HR	95% CI	P-value
Facility-level target						
Adherence group	1.00	Reference		1.00	Reference	
Low-target group	1.12	(0.88 to 1.42)	0.36	1.04	(0.76 to 1.43)	0.79
Wide-target group	1.07	(0.74 to 1.55)	0.71	1.11	(0.68 to 1.81)	0.68
High-target group	1.09	(0.72 to 1.63)	0.69	1.95	(1.12 to 3.38)	0.018
Age				1.06	(1.04 to 1.07)	< 0.001
Men				1.46	(1.14 to 1.86)	0.003
Dialysis vintage				1.02	(1.01 to 1.04)	0.005
Serum albumin				0.58	(0.51 to 0.67)	< 0.001
Serum phosphorus				0.82	(0.65 to 1.02)	0.63
Corrected serum calcium				0.95	(0.76 to 1.18)	0.073
Diabetes mellitus				1.55	(1.21 to 1.97)	< 0.001
Liver disease				1.09	(0.77 to 1.54)	0.62
Hypertension				0.85	(0.63 to 1.13)	0.25
Heart disease				1.23	(0.97 to 1.56)	0.091
Stroke or TIA				1.16	(0.86 to 1.58)	0.33
Cancer				1.35	(1.01 to 1.82)	0.046

Adherence group, lower limit of serum phosphorus value (LL)  $\geq$  3.5 mg/dL and upper limit of serum phosphorus value (UL)  $\leq$  6.0 mg/dL; Low-target group, LL  $\leq$  3.5 mg/dL and UL  $\leq$  6.0 mg/dL; Wide-target group, LL  $\leq$  3.5 mg/dL and UL  $\geq$  6.0 mg/dL; High-target group, LL  $\geq$  3.5 mg/dL and UL  $\geq$  6.0 mg/dL. Heart disease included coronary heart disease, coronary artery disease, angina, myocardial infarction, bypass surgery, and coronary angioplasty. HR, hazard ratio; CI, confidence interval; TIA, transient ischemic attack.

Supplementary Table S2. Association between facility-level target ranges of phosphorous and MACEs

	Unadjusted HR	95% CI	P-value	Adjusted HR	95% CI	P-value
Facility-level target						
Adherence group	1.00	Reference		1.00	Reference	
Low-target group	1.11	(0.88 to 1.40)	0.38	1.06	(0.79 to 1.42)	0.71
Wide-target group	1.08	(0.76 to 1.54)	0.68	1.15	(0.73 to 1.81)	0.56
High-target group	1.04	(0.70 to 1.54)	0.86	1.85	(1.10 to 3.11)	0.020
Age				1.05	(1.04 to 1.06)	< 0.001
Men				1.50	(1.18 to 1.90)	0.001
Dialysis vintage				1.02	(1.01 to 1.04)	0.005
Serum albumin				0.59	(0.52 to 0.67)	< 0.001
Serum phosphorus				0.83	(0.67 to 1.03)	0.093
Corrected serum calcium				0.93	(0.76 to 1.14)	0.48
Diabetes mellitus				1.52	(1.20 to 1.92)	< 0.001
Liver disease				1.05	(0.75 to 1.47)	0.76
Hypertension				0.89	(0.68 to 1.18)	0.42
Heart disease				1.24	(0.98 to 1.56)	0.071
Stroke or TIA				1.14	(0.85 to 1.54)	0.38
Cancer				1.30	(0.97 to 1.74)	0.075

Adherence group, lower limit of serum phosphorus value (LL)  $\geq$  3.5 mg/dL and upper limit of serum phosphorus value (UL)  $\leq$  6.0 mg/dL; Low-target group, LL  $\leq$  3.5 mg/dL and UL  $\geq$  6.0 mg/dL; Wide-target group, LL  $\leq$  3.5 mg/dL and UL  $\geq$  6.0 mg/dL; High-target group, LL  $\geq$  3.5 mg/dL and UL  $\geq$  6.0 mg/dL. Heart disease included coronary heart disease, coronary artery disease, angina, myocardial infarction, bypass surgery, and coronary angioplasty. MACEs included acute myocardial infarction, stroke, and all-cause mortality. MACEs, major adverse cardiovascular events.HR, hazard ratio; CI, confidence interval; TIA, transient ischemic attack.