

Supplementary Table 1. Comparison of baseline characteristics between patients with and without serum magnesium data

	Patients with Mg data n = 113,683	Patients without Mg data n = 53,618	Standardized mean difference
<i>Demographics</i>			
Age, year	64.9 (12.3)	65.1 (12.4)	0.02
Female, %	37.5	37.4	0.003
Body mass index, kg/m ²	22.4 (4.2)	22.4 (3.7)	0.008
Poor physical activity, %	8.2	8.8	0.02
Diabetes mellitus, %	34.8	34.9	0.002
Dialysis vintage, year	6 [3, 11]	6 [3, 11]	0.07
Duration of dialysis, hrs per week	11.7 (1.8)	11.6 (1.8)	0.05
Urea reduction rate, %	67.9 (9.9)	66.9 (13.1)	0.09
<i>Laboratory Data</i>			
Albumin, g/dL	3.7 (0.4)	3.7 (0.4)	0.03
Calcium, mg/dL	9.3 (0.9)	9.3 (0.9)	0.05
Phosphate, mg/dL	5.1 (1.4)	5.1 (1.5)	<0.001
C-reactive protein, mg/dL	0.1 [0, 0.3]	0.1 [0, 0.3]	0.03
Hemoglobin, g/dL	10.6 (1.2)	10.5 (1.3)	0.08
Alkaline phosphatase, IU/L	258 (133)	260 (135)	0.008
intact PTH, pg/mL	126 [65, 210]	130 [67, 214]	0.03
<i>Past history</i>			

Myocardial infarction, %	6.5	6.7	0.006
Cerebral infarction, %	11.1	11.2	0.003
Cerebral hemorrhage, %	4.1	4.0	0.006
Amputation, %	2.4	2.3	0.003
Parathyroidectomy, %	5.9	4.9	0.04
<i>Medication</i>			
CaCO ₃ , %	62.0	59.5	0.05
Sevelamer hydrochloride, %	29.5	27.4	0.05
Lanthanum carbonate, %	13.8	14.0	0.007
Vit.D (i.v.), %	27.3	24.6	0.06
Vit.D (p.o.), %	39.0	38.2	0.02
Cinacalcet, %	12.2	10.9	0.04

Data presented as mean (standard deviation), or median [interquartile range], or percent.

Abbreviations: PTH, parathyroid hormone; Vit.D, active vitamin D analog

Supplementary Table 2. Baseline characteristics according to quartiles of serum magnesium levels weighted by inverse probability weighting

	Quartiles of serum magnesium levels			
	(Range of serum magnesium levels [mg/dL])			
	Q1	Q2	Q3	Q4
	(- 2.3)	(2.4 - 2.6)	(2.7 - 2.8)	(2.9 -)
<i>Demographics</i>				
Age, year	66.2 (12.2)	65.5 (12.5)	65.0 (12.3)	64.9 (12.2)
Female, %	37.8	38.0	38.3	39.1
Body mass index, kg/m ²	22.4 (3.9)	22.3 (4.4)	22.3 (3.6)	22.3 (3.6)
Poor physical activity, %	10.5	10.3	8.2	9.5
Diabetes mellitus, %	35.6	35.3	35.2	35.1
Dialysis vintage, year	6 [3, 11]	6 [3, 11]	6 [3, 11]	7 [3, 11]
Dialysis time, hrs per week	11.7 (1.9)	11.7 (1.8)	11.8 (1.6)	11.8 (1.6)
Urea reduction rate, %	68.0 (8.4)	68.0 (10.7)	68.4 (9.2)	68.5 (9.8)
<i>Laboratory Data</i>				
Albumin, g/dL	3.7 (0.4)	3.7 (0.4)	3.7 (0.4)	3.7 (0.4)
Albumin-adjusted calcium, mg/dL	9.3 (0.9)	9.3 (0.9)	9.3 (0.9)	9.3 (0.9)
Phosphate, mg/dL	5.0 (1.4)	5.1 (1.4)	5.2 (1.4)	5.2 (1.4)
C-reactive protein, mg/dL	0.1 [0, 0.4]	0.1 [0, 0.3]	0.1 [0, 0.3]	0.1 [0, 0.3]
Hemoglobin, g/dL	10.6 (1.2)	10.6 (1.2)	10.7 (1.2)	10.7 (1.2)

Alkaline phosphatase, IU/L	265 (137)	263 (146)	258 (130)	260 (135)
intact PTH, pg/mL	125 [65, 208]	125 [65, 207]	126 [66, 209]	123 [63, 205]
<i>Past history</i>				
Myocardial infarction, %	7.6	7.4	7.0	6.8
Cerebral infarction, %	12.7	12.3	11.6	11.8
Cerebral hemorrhage, %	4.6	4.4	4.3	4.6
Limb amputation, %	2.7	2.6	2.5	2.6
Parathyroidectomy, %	6.0	6.0	6.1	6.2
<i>Medication</i>				
CaCO ₃ , %	61.1	61.4	63.6	63.1
Sevelamer hydrochloride, %	27.2	29.3	30.7	31.0
Lanthanum carbonate, %	13.4	13.8	14.6	14.8
Vit.D (i.v.), %	27.4	27.7	28.3	28.4
Vit.D (p.o.), %	40.1	39.2	39.4	38.5
Cinacalcet hydrochloride, %	12.3	12.4	12.9	13.1

Abbreviations: PTH, parathyroid hormone; Vit.D, active vitamin D analogue.