

Supplementary Table 1. Phosphate Binder Use in CKiD

	Of those on phosphate binder:			% of cohort on binder
	% calcium-based	% non-calcium-based	% both	
Baseline	85	13	2	19
Year 1	83	13	4	23
Year 2	81	13	6	21
Year 3	82	14	4	22
Year 4	87	9	4	22
Year 5	76	21	3	21
Year 6	69	31	0	30

Supplementary Table 2. Concentrations of Corrected Calcium, Phosphorus, and Parathyroid Hormone (PTH) by Phosphate Binder Use

	Calcium (mg/dl)	Phosphorus (mg/dl)	PTH (pg/ml) ^a
Baseline			
On binder	9.4 (9.1, 9.7)	4.7 (4.2, 5.3)	58.0 (33.0, 95.0)
Not on binder	9.4 (9.1, 9.6)	4.4 (4.0, 4.9)	47.0 (28.2, 81.8)
P value	0.81	0.003	0.24
Year 1			
On binder	9.3 (9.1, 9.6)	5.0 (4.4, 5.5)	----
Not on binder	9.4 (9.1, 9.6)	4.6 (4.0, 5.0)	----
P value	0.39	<0.001	
Year 2			
On binder	8.9 (8.8, 9.4)	4.5 (3.9, 5.5)	54.4 (16.2, 97.0)
Not on binder	9.2 (9.0, 9.5)	4.6 (3.9, 5.1)	44.3 (27.6, 63.7)
P value	0.11	0.82	0.72
Year 3			
On binder	9.3 (9.0, 9.5)	5.1 (4.5, 5.8)	----
Not on binder	9.2 (9.0, 9.5)	4.5 (3.9, 4.9)	----
P value	0.13	<0.001	
Year 4			
On binder	9.1 (8.7, 9.3)	4.7 (4.4, 5.2)	67.7 (37.8, 137.3)
Not on binder	9.0 (8.8, 9.3)	4.4 (3.9, 4.8)	53.5 (35.2, 81.6)
P value	0.62	<0.001	0.04
Year 5			
On binder	9.1 (8.9, 9.3)	4.8 (4.2, 5.2)	----
Not on binder	9.0 (8.8, 9.2)	4.3 (3.8, 4.8)	----
P value	0.27	0.005	
Year 6			
On binder	8.9 (8.8, 9.1)	4.4 (4.1, 5.1)	68.2 (32.1, 116.6)
Not on binder	9.0 (8.8, 9.2)	4.2 (3.7, 4.6)	62.9 (42.5, 93.1)
P value	0.49	0.21	0.96

Data presented as median (inter-quartile range). ^aPTH first measured 3-6 months after baseline in 379 participants and then at alternating visits from the second annual visit onwards.

Supplementary Figure 1. CKiD Fracture History Form

FOLLOW-UP MEDICAL HISTORY (F14)

SECTION D: ORTHOPEDIC HISTORY

The next set of questions asks about any orthopedic injuries the participant may currently have or that the participant has had in the past year. Orthopedic injuries are injuries to the bones.

	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
D1. In the past year, has a doctor or any other health professional told you that (name of participant) has had any broken bones?	1	2 (Skip to D2)	-8 (Skip to D2)

a. Please indicate which of the following bones (name of participant) has broken.

(Please circle "Yes", "No" or "Don't Know" for EACH of the following.)

	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
1. Skull.....	1	2	-8
2. Neck.....	1	2	-8
3. Back.....	1	2	-8
4. Shoulder.....	1	2	-8
5. Arm/Elbow.....	1	2	-8
6. Wrist/Hand.....	1	2	-8
7. Hip.....	1	2	-8
8. Knee.....	1	2	-8
9. Ankle.....	1	2	-8
10. Foot.....	1	2	-8
11. Leg.....	1	2	-8
12. Fingers.....	1	2	-8
13. Toes.....	1	2	-8
14. Ribs.....	1	2	-8
15. Collar Bone.....	1	2	-8