

**Table S1. Descriptive statistics of outcome, predictors and covariates: Overall (N = 568 with UACR data) and by UACR group**

<b>Outcome Covariates and Predictors</b>	<b>Overall N = 568</b>	<b>UACR &gt; 300 N = 119</b>	<b>UACR 30 - 300 N = 153</b>	<b>UACR &lt; 30 N = 296</b>
<b>SPPB group: binary N (%)</b>				
0-9	220 (38.7)	56 (47.1)	78 (51.0)	86 (29.1)
10 – 12	348 (61.3)	63 (52.9)	75 (49.0)	210 (70.9)
<b>SPPB group: 4-level N (%)</b>				
0 – 6	86 (15.1)	23 (19.3)	32 (20.9)	31 (10.5)
7 – 9	134 (23.6)	33 (27.7)	46 (30.1)	55 (18.6)
10 – 11	188 (33.1)	40 (33.6)	45 (29.4)	103 (34.8)
12	160 (28.2)	23 (19.3)	30 (19.6)	107 (36.2)
<b>SPPB total score: Mean (SD)</b>	9.4 (2.7)	8.9 (2.9)	8.8 (2.7)	10.0 (2.5)
<b>Gait speed: m/sec, Mean (SD)</b>	0.96 (0.27)	0.93 (0.29)	0.90 (0.28)	0.99 (0.25)
<b>eGFR<sub>Cr</sub> group: ml/min/1.73m<sup>2</sup>, 4-level N (%)</b>				
<30	156 (27.5)	71 (59.7)	52 (34.0)	33 (11.2)
30 - <45	193 (34.0)	39 (32.8)	63 (41.2)	91 (30.7)
45 - <60	82 (14.4)	6 (5.0)	20 (13.1)	56 (18.9)
≥60	137 (24.1)	3 (2.5)	18 (11.8)	116 (39.2)
<b>eGFR<sub>Cr</sub>: ml/min/1.73m<sup>2</sup>, Mean (SD)</b>	45.0 (23.2)	28.5 (14.4)	38.8 (19.5)	54.9 (23.0)
<b>eGFR<sub>CysC</sub>: ml/min/1.73m<sup>2</sup>, 4-level N (%)</b>				
< 30	302 (55.3)	90 (79.0)	86 (58.9)	126 (44.1)
30 - <45	84 (15.4)	19 (16.7)	26 (17.8)	39 (13.6)
45 - <60	56 (10.3)	3 (2.6)	13 (8.9)	40 (14.0)
≥60	104 (19.1)	2 (1.8)	21 (14.4)	81 (28.3)
<b>eGFR<sub>CysC</sub>: ml/min/1.73m<sup>2</sup>, Mean (SD)</b>	36.1 (31.9)	21.6 (14.3)	31.1 (26.8)	44.5 (36.6)
<b>UACR group: mg/g, 3-level N (%)</b>				
<30	296 (52.1)			296 (100)
30 - 300	153 (26.9)		153 (100)	
>300	119 (21.0)	119 (100)		
<b>UACR: mg/g, Median [IQR]</b>	26.3 [0.0, 193]	1081 [563, 2189]	81 [48, 140]	0.0 [0.0, 0.0]
<b>Hgb: g/dL, N (%)</b>				
≤12	171 (30.2)	62 (52.1)	51 (33.6)	58 (19.6)
>12	396 (69.8)	57 (47.9)	101 (66.4)	238 (80.4)
<b>Hgb: g/dL, Mean (SD)</b>	12.95 (1.71)	12.1 (1.8)	12.8 (1.8)	13.4 (1.4)
<b>Bicarbonate (CO<sub>2</sub>): mEq/L, N (%)</b>				
<20	24 (4.2)	10 (8.4)	10 (6.5)	4 (1.4)
≥20	544 (95.8)	109 (91.6)	143 (93.5)	292 (98.6)
<b>Bicarbonate (CO<sub>2</sub>): mEq/L Mean (SD)</b>	25.8 (3.4)	24.5 (3.5)	25.0 (3.6)	26.7 (3.0)
<b>SBP group: mmHg, 3-level N (%)</b>				
<120	152 (26.9)	17 (14.4)	35 (22.9)	100 (33.9)
120 - <140	217 (38.3)	39 (33.1)	59 (38.6)	119 (40.3)
≥140	197 (34.8)	62 (52.5)	59 (38.6)	76 (25.8)
<b>SBP: mmHg, Mean (SD)</b>	132.5 (18.6)	141.3 (20.2)	133.9 (17.2)	128.1 (17.2)
<b>Pulse Pressure: mmHg</b>	63.6 (16.7)	70.3 (19.3)	65.1 (15.6)	60.1 (15.1)
<b>Serum Albumin group: mg/dL, N (%)</b>				

<4	121 (21.3)	56 (47.1)	34 (22.2)	31 (10.5)
≥4	447 (78.7)	63 (52.9)	119 (77.8)	265 (89.5)
<b>Serum Albumin: mg/dL Mean (SD)</b>	4.2 (0.39)	3.9 (0.43)	4.3 (0.37)	4.3 (0.33)
<b>BMI group: kg/m<sup>2</sup>, 3-level N (%)</b>				
Not Overweight: BMI <25	107 (18.9)	15 (12.7)	27 (17.7)	65 (22.1)
Overweight: BMI 25 - <30	159 (28.1)	31 (26.3)	49 (32.0)	79 (26.9)
Obese: BMI ≥30	299 (52.9)	72 (61.0)	77 (50.3)	150 (51.0)
<b>BMI: kg/m<sup>2</sup>, Mean (SD)</b>	31.3 (7.2)	32.5 (7.0)	31.3 (7.4)	30.9 (7.2)
<b>Tobacco use group: N (%)</b>				
Never	247 (43.5)	39 (32.8)	58 (37.9)	150 (50.7)
Previous	263 (46.3)	58 (48.7)	79 (51.6)	126 (42.6)
Current	58 (10.2)	22 (18.5)	16 (10.5)	20 (6.8)
<b>Diabetes group, N (%)</b>				
No DM	296 (52.1)	38 (31.9)	67 (43.8)	191 (64.5)
Controlled DM, A1c <7.5%	161 (28.4)	51 (42.9)	41 (26.8)	69 (23.3)
Uncontrolled DM, A1c ≥7.5%	111 (19.5)	30 (25.2)	45 (29.4)	36 (12.2)
<b>CVD, history of</b>				
No	329 (57.9)	58 (48.7)	72 (47.1)	199 (67.2)
Yes	239 (42.1)	61 (51.3)	81 (52.9)	97 (32.8)
<b>CHF, history of</b>				
No	488 (85.9)	96 (80.7)	119 (77.8)	273 (92.2)
Yes	80 (14.1)	23 (19.3)	34 (22.2)	23 (7.8)
<b>Stroke/TIA, history of</b>				
No	476 (83.8)	98 (82.4)	121 (79.1)	257 (86.8)
Yes	92 (16.2)	21 (17.6)	32 (20.9)	39 (13.2)
<b>Age: Mean (SD)</b>	69.3 (9.8)	66.2 (9.7)	70.4 (9.9)	69.9 (9.6)
<b>Years of Education: Mean (SD)</b>	14.3 (2.8)	13.7 (2.8)	14.0 (2.8)	14.7 (2.7)
<b>Black Race: N (%)</b>	89 (15.7)	27 (22.7)	31 (20.3)	31 (10.5)
<b>Gender: N (%)</b>				
Male	282 (49.7)	78 (65.6)	90 (58.8)	114 (38.5)
Female	286 (50.4)	41 (34.4)	63 (41.2)	182 (61.5)

**Table S2. Comparison of the Univariate and Multivariable Association Between Different Measures of Kidney Function and Low Physical Function modeled as a 4-level ordinal outcome**

Measure of kidney function	Unadjusted Proportional OR (95% CI)	Adjusted <sup>a</sup> Proportional OR (95% CI) in models without UACR	Adjusted <sup>a</sup> Proportional OR (95% CI) in models with UACR
<b>eGFR<sub>Cr</sub> ml/min/1.73m<sup>2</sup></b> <b>reference = ≥ 60</b>			
<30	3.32 (2.17, 5.07)	1.06 (0.63, 1.78)	0.86 (0.49, 1.49)
30 - <45	1.90 (1.27, 2.84)	0.86 (0.55, 1.36)	0.75 (0.47, 1.20)
45 - <60	1.96 (1.19, 3.23)	1.10 (0.64, 1.89)	1.04 (0.61, 1.79)
<b>UACR mg/g</b> <b>reference = &lt; 30</b>			
>300	2.21 (1.50, 3.25)		1.60 (0.95, 2.67) <sup>b</sup>
30 - 300	2.43 (1.70, 3.47)		1.64 (1.08, 2.48) <sup>b</sup>
<b>eGFR<sub>CysC</sub> ml/min/1.73m<sup>2</sup></b> <b>reference = ≥ 60</b>			
<30	2.61 (1.72, 3.94)	1.45 (0.91, 2.30)	1.36 (0.85, 2.18)
30 - <45	1.74 (1.03, 2.94)	1.05 (0.59, 1.87)	0.98 (0.55, 1.76)
45 - <60	2.27 (1.25, 4.10)	1.62 (0.85, 3.07)	1.63 (0.86, 3.08)
<b>UACR mg/g</b> <b>reference = &lt; 30</b>			
>300			1.32 (0.80, 2.18) <sup>c</sup>
30 - 300			1.49 (0.99, 2.26) <sup>c</sup>

<sup>a</sup>Model adjusted for hemoglobin, serum bicarbonate, serum albumin, body mass index, diabetes (none, controlled, not controlled), pulse pressure, cardiovascular disease, congestive heart failure, stroke or transient ischemic attack, smoking status (current, former, never), race (black vs other), sex, age, age<sup>2</sup>, years of education.

<sup>b</sup>Adjusted Proportional OR (95% CI) for UACR in model with eGFR<sub>Cr</sub> and covariates listed above.

<sup>c</sup>Adjusted Proportional OR (95% CI) for UACR in model with eGFR<sub>CysC</sub> and covariates listed above.

**Table S3. LS Means for SPPB score by kidney function category**

Measure of Kidney Function	N	LS Mean (SE)
<b>eGFR-Cr category</b>		
< 30	155	7.87 (0.31)
30 - <45	192	8.17 (0.34)
45 - <60	81	7.67 (0.40)
≥ 60 (Normal)	135	7.65 (0.39)
<b>eGFR-CysC category</b>		
< 30	300	7.87 (0.31)
30 - <45	83	8.21 (0.39)
45 - <60	56	7.55 (0.42)
≥ 60 (Normal)	102	8.20 (0.39)
<b>UACR category</b>		
< 30 (Normal)	293	8.23 (0.35)
30 - 300	152	7.62 (0.34)
>300	118	7.67 (0.37)
LS Mean is adjusted for hemoglobin, bicarbonate, lserum albumin, BMI category, diabetes, pulse pressure, CVD, CHF, Stroke/ TIA, Smoking, Black race, gender, years of education, age, and age <sup>2</sup>		

**Table S4. Association Between Covariates and Gait Speed in Models Using eGFR<sub>Cr</sub> and eGFR<sub>cysC</sub>**

Predictor or Covariate	Adjusted Slope (SE) for model using eGFR <sub>Cr</sub>	p-value	Adjusted Slope (SE) for model using eGFR <sub>cysC</sub>	p-value
eGFR <30 vs ≥ 60	0.025 (0.033)	0.46	-0.062 (0.028)	0.03
eGFR 30 - <45 vs ≥ 60	0.007 (0.028)	0.81	-0.027 (0.035)	0.44
eGFR 45 - <60 vs ≥ 60	-0.006 (0.032)	0.85	-0.027 (0.038)	0.47
UACR: mg/g, 30- 300 vs <30	-0.039 (0.025)	0.12	-0.024 (0.025)	0.33
UACR: mg/g, > 300 vs <30	-0.036 (0.031)	0.25	-0.006 (0.031)	0.84
Hgb: g/dL, ≤ 12 vs >12	-0.050 (0.024)	0.04	-0.039 (0.024)	0.10
Bicarbonate (CO <sub>2</sub> ): mEq/L, < 20 vs ≥ 20	-0.122 (0.050)	0.02	-0.112 (0.050)	0.03
Serum Albumin: mg/dL, < 4 vs ≥4	0.005 (0.026)	0.85	0.010 (0.027)	0.71
BMI: kg/m <sup>2</sup> , OW: 25 - <30 vs Not OW: <25	-0.102 (0.029)	< 0.001	-0.105 (0.029)	< 0.001
BMI: kg/m <sup>2</sup> , Obese: ≥ 30 vs Not OW: <25	-0.138 (0.028)	< 0.001	-0.143 (0.028)	< 0.001
DM (A1c < 7.5%) controlled vs No DM	-0.052 (0.025)	0.04	-0.045 (0.026)	0.08
DM not controlled (A1c ≥ 7.5%) vs No DM	-0.071 (0.028)	0.01	-0.064 (0.029)	0.03
Pulse Pressure: 1 mmHg increase	-0.0003 (0.0007)	0.64	-0.0004 (0.0007)	0.61
CVD: Yes vs No	-0.039 (0.022)	0.07	-0.040 (0.022)	0.07
CHF: Yes vs No	-0.119 (0.029)	< 0.001	-0.123 (0.030)	< 0.001
Stroke/TIA: Yes vs No	-0.022 (0.028)	0.42	-0.029 (0.028)	0.31
Current smoker vs Never smoked	-0.0002 (0.036)	0.10	-0.009 (0.038)	0.82
Previous smoker vs Never smoked	0.019 (0.021)	0.36	0.020 (0.022)	0.37
Black race: Yes vs No	-0.103 (0.030)	< 0.001	-0.091 (0.035)	0.009
Gender: Female vs Male	-0.118 (0.020)	< 0.001	-0.123 (0.021)	< 0.001
Age, each additional year	-0.004 (0.011)	0.74	-0.0008 (0.011)	0.94
Age <sup>2</sup>	-0.00003 (0.00008)	0.67	-0.00005 (0.00008)	0.52
Years of education, each additional year	0.009 (0.004)	0.02	0.008 (0.004)	0.04