

Supplementary Table 1. Baseline characteristics of Cardiovascular Health Study (CHS) participants without heart failure, by chronic kidney disease (CKD) Stage 3A (eGFR 45–59 ml/min/1.73 m²) versus no-CKD (eGFR ≥ 60 ml/min/1.73 m²), before and after propensity score matching

n (%) or mean (±SD)	Before matching			After matching		
	No-CKD (n=4310)	CKD 3A (n=898)	P value	No-CKD (n=857)	CKD 3A (n=857)	P value
Age, years	73 (±5)	74 (±6)	<0.001	74 (±6)	74 (±6)	0.666
Female	2520 (59%)	497 (55%)	0.085	461 (54%)	473 (55%)	0.590
Nonwhite	708 (16%)	90 (10%)	<0.001	83 (10%)	88 (10%)	0.731
Married	2,889 (67%)	593 (66%)	0.565	573 (67%)	569 (66%)	0.879
College or higher education	1,890 (44%)	381 (42%)	0.434	348 (41%)	365 (43%)	0.432
Annual income ≥ \$25,000	1,592 (37%)	317 (35%)	0.354	306 (36%)	300 (35%)	0.801
Medical history						
Coronary artery disease	688 (16%)	191 (21%)	<0.001	177 (21%)	179 (21%)	0.952
Hypertension	2,384 (55%)	592 (66%)	<0.001	551 (64%)	558 (65%)	0.752
Diabetes mellitus	660 (15%)	140 (16%)	0.834	132 (15%)	130 (15%)	0.945
Stroke	126 (3%)	57 (6%)	<0.001	55 (6%)	50 (6%)	0.691
Chronic obstructive pulmonary disease	532 (12%)	110 (12%)	0.938	108 (13%)	102 (12%)	0.715
Cancer	573 (13%)	153 (17%)	0.003	146 (17%)	143 (17%)	0.899
Arthritis	2,161 (50%)	488 (54%)	0.022	462 (54%)	462 (54%)	1.000
Self-reported fair to poor health	934 (22%)	238 (27%)	0.002	226 (26%)	222 (26%)	0.868
Smoking, pack years	17 (±26)	18 (±27)	0.288	17 (±26)	18 (±27)	0.926
Alcohol, drinks per week	2.7 (±6.8)	1.7 (±4.6)	<0.001	1.6 (±4.2)	1.7 (±4.6)	0.566
Instrumental activities of daily living	0.3 (±0.7)	0.4 (±0.8)	0.004	0.4 (±0.8)	0.4 (±0.7)	0.323
Basic activities of daily living	0.1 (±0.4)	0.1 (±0.5)	0.126	0.1 (±0.5)	0.1 (±0.5)	0.661
Physical findings						
Body mass index, kg/m ²	26.6 (±4.1)	26.5 (±3.9)	0.959	26.8 (±4.1)	26.5 (±3.9)	0.154
Pulse, beats per minute	68 (±11)	68 (±12)	0.623	68 (±11)	68 (±12)	0.811
Systolic blood pressure, mm Hg	136 (±21)	138 (±23)	0.007	137 (±21)	138 (±22)	0.423
Diastolic blood pressure, mm Hg	71 (±11)	71 (±11)	0.803	71 (±11)	71 (±12)	0.485
Ankle arm ratio	1.1 (±0.2)	1.0 (±0.2)	<0.001	1.1 (±0.2)	1.0 (±0.2)	0.914
Walked blocks	41 (±55)	36 (±54)	0.031	36 (±49)	37 (±54)	0.643
Walk time, seconds	5.7 (±2.2)	5.9 (±1.9)	0.005	5.9 (±2.0)	5.8 (±1.9)	0.861
Laboratory data						
Serum glucose, mg/dL	111 (±37)	110 (±37)	0.752	111 (±32)	110 (±37)	0.707
Serum uric acid, mg/dL	5.4 (±1.4)	6.4 (±1.5)	<0.001	6.3 (±1.5)	6.3 (±1.4)	0.954
Serum potassium, mEq/L	4.1 (±0.4)	4.2 (±0.4)	<0.001	4.2 (±0.4)	4.2 (±0.4)	0.372
Serum triglyceride, mg/dL	136 (±76)	148 (±74)	<0.001	148 (±75)	148 (±75)	0.987
Serum total cholesterol	212 (±38)	213 (±41)	0.416	213 (±39)	213 (±41)	0.784
Serum albumin, g/dL	4.0 (±0.3)	4.0 (±0.3)	0.010	4.0 (±0.3)	4.0 (±0.3)	0.439
Serum fibrinogen, mg/dL	320 (±66)	327 (±65)	0.006	328 (±66)	327 (±64)	0.709
Serum insulin	16 (±22)	19 (±30)	0.005	18 (±21)	18 (±27)	0.615
Serum C-reactive protein, mg/dL	4.5 (±8.0)	4.9 (±8.0)	0.175	4.7 (±8.4)	4.8 (±8.0)	0.749
Interleukin-6, pg/ml	2.1 (±1.7)	2.4 (±2.3)	<0.001	2.4 (±2.0)	2.4 (±1.8)	0.576
Factor VII, IU/dL	122 (±28)	130 (±32)	<0.001	130 (±32)	130 (±32)	0.962
Hemoglobin, gram/dL	14.1 (±1.3)	14.0 (±1.4)	0.121	14.0 (±1.3)	14.0 (±1.4)	0.280
White blood cells, 10 ³ /µL	6.2 (±1.8)	6.6 (±3.1)	<0.001	6.5 (±2.1)	6.4 (±2.0)	0.261
Electrocardiogram						
Atrial fibrillation	82 (2%)	24 (3%)	0.137	20 (2%)	22 (3%)	0.878
Left ventricular hypertrophy	161 (4%)	50 (6%)	0.011	52 (6%)	43 (5%)	0.402
Echocardiogram						
Left ventricular systolic dysfunction	293 (7%)	83 (9%)	0.010	69 (8%)	78 (9%)	0.481

Supplementary Table 2. Baseline characteristics of Cardiovascular Health Study (CHS) participants without heart failure, by chronic kidney disease (CKD) stage $\geq 3B$ ($eGFR < 45 \text{ ml/min}/1.73 \text{ m}^2$) versus no-CKD ($eGFR \geq 60 \text{ ml/min}/1.73 \text{ m}^2$), before and after propensity score matching

n (%) or mean ($\pm SD$)	Before matching			After matching		
	No-CKD (n=4310)	CKD $\geq 3B$ (n=242)	P value	No-CKD (n=409)	CKD $\geq 3B$ (n=148)	P value
Age, years	73 (± 5)	77 (± 6)	<0.001	76 (± 6)	76 (± 6)	0.442
Female	2520 (59%)	120 (50%)	0.006	218 (53%)	80 (54%)	0.875
Nonwhite	708 (16%)	36 (15%)	0.526	69 (17%)	23 (16%)	0.709
Married	2,889 (67%)	155 (64%)	0.338	258 (63%)	94 (64%)	0.925
College or higher education	1,890 (44%)	82 (34%)	0.002	150 (37%)	54 (37%)	0.967
Annual income $\geq \$25,000$	1,592 (37%)	86 (36%)	0.660	144 (35%)	53 (36%)	0.895
Medical history						
Coronary artery disease	688 (16%)	69 (29%)	<0.001	115 (28%)	38 (26%)	0.569
Hypertension	2,384 (55%)	192 (79%)	<0.001	301 (74%)	110 (74%)	0.863
Diabetes mellitus	660 (15%)	48 (20%)	0.059	83 (20%)	28 (19%)	0.720
Stroke	126 (3%)	25 (10%)	<0.001	21 (5%)	11 (7%)	0.303
Chronic obstructive pulmonary disease	532 (12%)	32 (13%)	0.686	50 (12%)	19 (13%)	0.846
Cancer	573 (13%)	53 (22%)	<0.001	84 (21%)	31 (21%)	0.916
Arthritis	2,161 (50%)	129 (53%)	0.338	210 (51%)	75 (51%)	0.889
Self-reported fair to poor health	934 (22%)	97 (40%)	<0.001	142 (35%)	50 (34%)	0.837
Smoking, pack years	17 (± 26)	22 (± 32)	0.006	20 (± 29)	21 (± 30)	0.852
Alcohol, drinks per week	2.7 (± 6.8)	1.9 (± 4.6)	0.068	2.2 (± 5.7)	2.2 (± 5.1)	0.975
Instrumental activities of daily living	0.3 (± 0.7)	0.7 (± 1.0)	<0.001	0.5 (± 0.9)	0.5 (± 0.9)	0.777
Basic activities of daily living	0.1 (± 0.4)	0.3 (± 0.7)	<0.001	0.1 (± 0.5)	0.2 (± 0.5)	0.929
Physical findings						
Body mass index, kg/m ²	26.6 (± 4.1)	26.5 (± 4.1)	0.924	26.9 (± 4.1)	26.8 (± 4.2)	0.811
Pulse, beats per minute	68 (± 11)	68 (± 11)	0.808	67 (± 11)	67 (± 10)	0.981
Systolic blood pressure, mm Hg	136 (± 21)	143 (± 24)	<0.001	141 (± 21)	141 (± 24)	0.951
Diastolic blood pressure, mm Hg	71 (± 11)	71 (± 13)	0.920	71 (± 11)	71 (± 12)	0.533
Ankle arm ratio	1.1 (± 0.2)	1.0 (± 0.2)	<0.001	1.0 (± 0.2)	1.0 (± 0.2)	0.973
Walked blocks	41 (± 55)	24 (± 43)	<0.001	28 (± 39)	26 (± 44)	0.739
Walk time, seconds	5.7 (± 2.2)	6.7 (± 3.0)	<0.001	6.5 (± 2.9)	6.3 (± 2.6)	0.448
Laboratory data						
Serum glucose, mg/dL	111 (± 37)	111 (± 32)	0.973	113 (± 36)	110 (± 31)	0.294
Serum uric acid, mg/dL	5.4 (± 1.4)	7.3 (± 1.7)	<0.001	6.6 (± 1.5)	6.7 (± 1.6)	0.407
Serum potassium, mEq/L	4.1 (± 0.4)	4.3 (± 0.5)	<0.001	4.3 (± 0.4)	4.3 (± 0.5)	0.995
Serum triglyceride, mg/dL	136 (± 76)	165 (± 91)	<0.001	156 (± 90)	164 (± 93)	0.349
Serum total cholesterol	212 (± 38)	212 (± 46)	0.908	211 (± 42)	214 (± 45)	0.394
Serum albumin, g/dL	4.0 (± 0.3)	3.9 (± 0.3)	0.003	4.0 (± 0.3)	4.0 (± 0.3)	0.678
Serum fibrinogen, mg/dL	320 (± 66)	353 (± 77)	<0.001	342 (± 75)	345 (± 71)	0.630
Serum insulin	16 (± 22)	21 (± 37)	0.001	20 (± 35)	20 (± 33)	0.968
Serum C-reactive protein, mg/dL	4.5 (± 8.0)	7.2 (± 10.4)	<0.001	5.8 (± 8.4)	6.0 (± 7.8)	0.750
Interleukin-6, pg/ml	2.1 (± 1.7)	2.9 (± 2.0)	<0.001	2.6 (± 2.0)	2.5 (± 1.4)	0.659
Factor VII, IU/dL	122 (± 28)	137 (± 36)	<0.001	132 (± 36)	136 (± 35)	0.255
Hemoglobin, gram/dL	14.1 (± 1.3)	13.3 (± 1.7)	<0.001	13.7 (± 1.4)	13.7 (± 1.6)	0.839
White blood cells, $10^3/\mu\text{L}$	6.2 (± 1.8)	7.0 (± 2.4)	<0.001	6.6 (± 1.9)	6.7 (± 1.9)	0.665
Electrocardiogram						
Atrial fibrillation	82 (2%)	9 (4%)	0.049	15 (4%)	5 (3%)	0.871
Left ventricular hypertrophy	161 (4%)	21 (9%)	<0.001	26 (6%)	12 (8%)	0.469
Echocardiogram						
Left ventricular systolic dysfunction	293 (7%)	34 (14%)	<0.001	44 (11%)	18 (12%)	0.642