

Supplementary Table 1. Baseline characteristics of the study population according to weight variability classified by the presence of CKD

Characteristic	Participants without CKD				Participants with CKD			
	BMI VIM Q1	BMI VIM Q2	BMI VIM Q3	BMI VIM Q4	BMI VIM Q1	BMI VIM Q2	BMI VIM Q3	BMI VIM Q4
No. of patients	2,397,458	2,409,352	2,403,490	2,394,302	93,270	87,708	87,973	98,009
Age (yr)	50.60 ± 12.38	49.66 ± 12.59	48.84 ± 13.1	47.52 ± 14.51	62.82 ± 11.06	62.54 ± 11.46	62.85 ± 11.81	64.46 ± 12.67
<40	471,987 (19.7)	549,403 (22.8)	643,493 (26.8)	834,455 (34.9)	2,077 (2.2)	2,434 (2.8)	2,888 (3.3)	4,195 (4.3)
40-64	1,594,282 (66.5)	1,548,582 (64.3)	1,449,220 (60.3)	1,212,841 (50.7)	46,516 (49.9)	43,827 (50.0)	41,977 (47.7)	38,987 (39.8)
≥65	331,189 (13.8)	311,367 (12.9)	310,777 (12.9)	347,006 (14.5)	44,677 (47.9)	41,447 (47.3)	43,108 (49)	54,827 (55.9)
Male sex	1,395,622 (58.2)	1,357,329 (56.3)	1,342,842 (55.9)	1,228,779(51.3)	43,979 (47.2)	38,205 (43.6)	37,027 (42.1)	36,031 (36.8)
Height (cm)	164.44 ± 8.99	164.17 ± 9.12	164.30 ± 9.25	163.89 ± 9.53	160.72 ± 8.92	160.01 ± 8.94	159.69 ± 9.00	158.24 ± 9.30
Income, lower 20%	301,632 (12.6)	311,447 (12.9)	314,336 (13.1)	319,191 (13.3)	14,659 (15.7)	14,676 (16.7)	15,098 (17.2)	16,886 (17.2)
Smoking								
Nonsmoker	1,418,967 (59.2)	1,435,352 (59.6)	1,423,975 (59.3)	1,467,769 (61.3)	64,822 (69.5)	62,234 (71.0)	63,153 (71.8)	73,192 (74.7)
Ex-smoker	435,120 (18.2)	409,520 (17)	397,490 (16.5)	365,424 (15.3)	17,663 (18.9)	15,205 (17.3)	14,390 (16.4)	14,132 (14.4)
Current smoker	543,371 (22.7)	564,480 (23.4)	582,025 (24.2)	561,109 (23.4)	10,785 (11.6)	10,269 (11.7)	10,430 (11.9)	10,685 (10.9)
Drinking								
Nondrinker	1,188,673 (49.6)	1,201,456 (49.9)	1,201,430 (45.0)	1,257,771 (52.5)	64,084 (68.7)	61,510 (70.1)	62,773 (71.4)	74,852 (76.4)
Mild drinker	1,029,945 (43.0)	1,035,345 (43.0)	1,029,616 (42.8)	973,810 (40.7)	25,663 (27.5)	23,002 (26.2)	22,086 (25.1)	20,051 (20.5)
Heavy drinker	178,840 (7.5)	172,551 (7.2)	172,444 (7.2)	162,721 (6.8)	3,523 (3.8)	3,196 (3.6)	3,114 (3.5)	3,106 (3.2)
Regular exercise	517,010 (21.6)	507,961 (21.1)	491,801 (20.5)	460,779 (19.2)	22,833 (24.5)	20,891 (23.8)	19,748 (22.5)	19,024 (19.4)
BMI (kg/m ²)	23.86 ± 3.04	23.65 ± 3.07	23.73 ± 3.13	23.88 ± 3.51	24.75 ± 2.94	24.46 ± 2.98	24.38 ± 3.07	24.03 ± 3.48
<18.5	70,573 (2.9)	75,863 (3.2)	74,116 (3.1)	92,476 (3.9)	1,183 (1.3)	1,218 (1.4)	1,638 (1.9)	3,683 (3.8)
≥18.5, <23	861,310 (35.9)	956,352 (39.7)	947,323 (39.4)	925,298 (38.7)	23,561 (25.3)	26,205 (29.9)	27,242 (31.0)	35,434 (36.2)
≥23, <25	633,256 (26.4)	618,842 (25.7)	611,547 (25.4)	560,530 (23.4)	25,462 (27.3)	24,202 (27.6)	23,695 (26.9)	23,390 (23.9)
≥25, <30	762,533 (31.8)	687,733 (28.5)	687,479 (28.6)	689,140 (28.8)	39,087 (41.9)	32,494 (37.1)	31,507 (35.8)	30,262 (30.9)
≥30	69,786 (2.9)	70,562 (2.9)	83,025 (3.5)	126,858 (5.3)	3,977 (4.3)	3,589 (4.09)	3,891 (4.4)	5,240 (5.4)
Waist circumference (cm)	80.85 ± 8.88	80.15 ± 8.90	80.25 ± 8.94	80.40 ± 9.46	83.52 ± 8.60	82.67 ± 8.70	82.54 ± 8.85	81.99 ± 9.34
Fasting glucose (mg/dL)	97.86 ± 20.21	97.40 ± 20.47	97.44 ± 21.48	97.50 ± 23.94	103.98 ± 26.10	103.88 ± 26.98	104.47 ± 28.59	105.92 ± 33.04
Systolic BP (mmHg)	122.25 ± 14.31	121.80 ± 14.33	121.77 ± 14.34	121.56 ± 14.50	126.91 ± 15.24	126.61 ± 15.52	126.69 ± 15.71	126.92 ± 16.19
Diastolic BP (mmHg)	76.29 ± 9.73	76.06 ± 9.74	76.02 ± 9.74	75.81 ± 9.80	77.38 ± 9.83	77.18 ± 9.95	77.17 ± 10.03	77.05 ± 10.26
Total cholesterol (mg/dL)	196.91 ± 35.67	196.41 ± 35.72	195.95 ± 35.89	195.06 ± 36.6	198.90 ± 39.31	198.64 ± 39.56	198.05 ± 40.27	195.87 ± 41.80
HDL (mg/dL)	54.75 ± 16.54	55.29 ± 16.87	55.43 ± 16.87	56.02 ± 16.86	52.51 ± 16.33	53.13 ± 17.30	53.36 ± 17.48	53.49 ± 16.89
LDL (mg/dL)	116.23 ± 33.53	115.69 ± 33.63	115.19 ± 33.63	114.15 ± 33.77	117.49 ± 36.15	117.22 ± 36.66	116.58 ± 37.09	114.68 ± 37.87
eGFR (mL/min/1.73 m ²)	91.82 ± 41.41	92.31 ± 39.76	92.92 ± 40.18	94.49 ± 40.83	52.51 ± 10.10	52.38 ± 10.18	52.01 ± 10.53	50.96 ± 11.22
Comorbidities								
Diabetes mellitus	208,099 (8.7)	200,918 (8.3)	206,957 (8.6)	222,099 (9.3)	18,802 (20.2)	17,907 (20.4)	19,287 (21.9)	25,465 (26.0)
Hypertension	671,687 (28.0)	633,115 (26.3)	619,331 (25.8)	604,360 (25.2)	54,794 (58.8)	50,559 (57.6)	51,687 (58.8)	61,330 (62.6)
Dyslipidemia	529,355 (22.4)	508,219 (21.1)	497,960 (20.7)	482,884 (20.2)	37,913 (40.7)	35,365 (40.3)	35,545 (40.4)	39,757 (40.6)

Data are expressed as number only, mean ± standard deviation, or number (%). BMI, body mass index; BP, blood pressure; CKD, chronic kidney disease; eGFR, estimated glomerular filtration rate; HDL, high-density lipoprotein; LDL, low-density lipoprotein; Q, quartile; VIM, variability independent of the mean.