

Supplementary Table 1. Baseline clinical and biochemical characteristic of study subjects based on baseline serum uric acid quartile categories and both sexes

Characteristic	Baseline serum uric acid (male, n = 7,694)				Baseline serum uric acid (female, n = 5,363)					
	Quartile 1 (≤5.1 mg/dL, n = 2,146)	Quartile 2 (5.2–5.8 mg/dL, n = 1,938)	Quartile 3 (5.9–6.6 mg/dL, n = 1,905)	Quartile 4 (≥6.7 mg/dL, n = 1,705)	P value	Quartile 1 (≤3.5 mg/dL, n = 1,392)	Quartile 2 (3.6–4.0 mg/dL, n = 1,259)	Quartile 3 (4.1–4.6 mg/dL, n = 1,449)	Quartile 4 (≥4.7 mg/dL, n = 1,263)	P value
Age, yr	52.7 ± 8.3	51.7 ± 8.1	51.2 ± 8.2	51.1 ± 8.2	<0.001	47.9 ± 6.7	48.5 ± 6.6	49.7 ± 7.3	51.0 ± 8.4	<0.001
Smoking status					0.074					0.178
Current smoker	584 (27.2)	515 (26.6)	544 (28.6)	435 (25.5)		21 (1.5)	15 (1.2)	27 (1.9)	32 (2.5)	
Ex-smoker	944 (44.0)	893 (46.1)	870 (45.7)	825 (48.4)		43 (3.1)	35 (2.8)	40 (2.8)	44 (3.5)	
Non-smoker	618 (28.8)	530 (27.3)	491 (25.8)	445 (26.1)		1,328 (95.4)	1,209 (96.0)	1,382 (95.4)	1,187 (94.0)	
BMI, kg/m ²	23.5 ± 2.2	23.8 ± 2.3	24.2 ± 2.1	24.6 ± 2.3	<0.001	21.5 ± 2.2	21.8 ± 2.3	22.2 ± 2.5	22.9 ± 2.6	<0.001
WC, cm	84.4 ± 6.4	85.3 ± 6.2	86.3 ± 6.1	87.4 ± 6.1	<0.001	73.0 ± 6.0	73.6 ± 6.1	74.8 ± 6.6	76.4 ± 6.9	<0.001
Fat-free mass, %	79.9 ± 5.9	79.6 ± 4.6	79.2 ± 4.5	78.7 ± 4.3	<0.001	73.2 ± 5.2	72.7 ± 5.1	71.8 ± 5.5	70.6 ± 5.5	<0.001
Systolic BP, mm Hg	112.0 ± 13.6	112.4 ± 13.7	113.1 ± 13.8	113.5 ± 14.0	<0.001	108.2 ± 14.1	108.0 ± 14.8	109.2 ± 15.1	109.8 ± 15.1	0.001
Diastolic BP, mm Hg	69.8 ± 9.3	70.4 ± 9.5	71.0 ± 9.6	71.3 ± 9.6	<0.001	65.3 ± 9.8	65.5 ± 10.2	66.0 ± 10.0	66.2 ± 10.0	0.011
eGFR, mL/min/1.73 m ²	90.6 ± 11.9	88.7 ± 11.0	86.8 ± 11.0	84.8 ± 11.2	<0.001	95.1 ± 12.6	91.6 ± 12.0	89.7 ± 11.9	85.8 ± 11.9	<0.001
Fasting glucose, mg/dL	92.6 ± 19.3	90.0 ± 12.7	89.0 ± 11.0	88.9 ± 9.9	<0.001	85.5 ± 10.3	85.3 ± 9.9	85.7 ± 9.6	86.5 ± 9.7	0.012
Fasting insulin, μU/mL ^a	7.6 (6.0–9.8)	7.9 (6.1–10.2)	8.0 (6.3–10.3)	8.4 (6.5–10.9)	<0.001	7.9 (6.2–9.9)	7.7 (6.2–9.5)	7.9 (6.2–10.2)	8.1 (6.1–10.6)	0.061
HOMA-IR ^a	1.7 (1.3–2.2)	1.7 (1.3–2.3)	1.7 (1.3–2.3)	1.8 (1.4–2.4)	0.001	1.7 (1.3–2.1)	1.6 (1.3–2.1)	1.7 (1.3–2.1)	1.8 (1.3–2.3)	0.017
TC, mg/dL	185.8 ± 29.4	187.2 ± 30.2	191.1 ± 30.9	193.9 ± 30.3	<0.001	186.4 ± 31.8	189.2 ± 31.7	194.2 ± 32.8	197.3 ± 34.5	<0.001
TG, mg/dL	101.0 (77.0–135.0)	105.0 (78.0–139.0)	112.0 (84.0–148.0)	123.0 (90.0–162.0)	<0.001	78.0 (60.0–102.0)	81.0 (64.0–106.0)	87.0 (66.0–112.0)	91.0 (69.0–122.0)	<0.001
LDL-C, mg/dL	121.2 ± 26.5	122.7 ± 27.0	126.7 ± 28.0	129.0 ± 27.8	<0.001	114.4 ± 27.8	117.7 ± 27.7	122.1 ± 28.7	127.0 ± 31.1	<0.001
HDL-C, mg/dL	56.7 ± 12.6	56.1 ± 12.5	55.0 ± 11.7	54.6 ± 11.5	<0.001	66.4 ± 13.4	65.4 ± 14.0	65.2 ± 13.8	63.1 ± 13.3	<0.001
hs-CRP, mg/L	0.13 ± 0.46	0.11 ± 0.23	0.12 ± 0.37	0.13 ± 0.41	0.513	0.07 ± 0.24	0.07 ± 0.23	0.07 ± 0.17	0.11 ± 0.47	<0.001
Baseline SUA, mg/dL	4.5 ± 0.6	5.5 ± 0.2	6.2 ± 0.2	7.4 ± 0.7	<0.001	3.1 ± 0.4	3.8 ± 0.1	4.3 ± 0.2	5.2 ± 0.5	<0.001
Change in SUA, %	5.5 ± 15.3	1.4 ± 13.1	-1.9 ± 12.3	-5.8 ± 11.7	<0.001	14.1 ± 19.4	7.5 ± 15.3	3.0 ± 14.3	-3.1 ± 13.2	<0.001
Incident MetS	491 (22.9)	395 (20.4)	532 (27.9)	594 (34.8)	0.002	151 (10.8)	169 (13.4)	253 (17.5)	328 (26.0)	<0.001

Values are presented as mean ± standard deviation, number (%), or median (interquartile range). Characteristics of the study population according to the serum uric acid quartile were compared using one-way analysis of variance (ANOVA) or Kruskal-Wallis test for continuous variables and chi-square test for categorical variables.

BMI, body mass index; WC, waist circumference; eGFR, estimated glomerular filtration rate; HOMA-IR, homeostasis model assessment index for insulin resistance; TC, total cholesterol; TG, triglyceride; LDL-C, low density lipoprotein cholesterol; HDL-C, high density lipoprotein cholesterol; hs-CRP, high-sensitivity C-reactive protein; SUA, serum uric acid; MetS, metabolic syndrome.

^an = 5,188 male, n = 2,792 female.