SUPPLEMENTARY DATA

Supplementary Table 1. . Baseline characteristics of the study participants according to the number of baseline MetS-free components (N=13,084)

Characteristics	Number of the baseline MetS components			P-for trend[*]
	0 (N=4,634)	1 (N=4,901)	2 (N=3,549)	
Total person-year	17,556.9	17,424.5	10,937.9	
Average person-year	3.79 ± (1.39)	3.55 ± (1.48)	3.08 ± (1.53)	<0.001
Age (years)	42.5 ± (6.2)	43.9 ± (6.4)	44.5 ± (6.2)	<0.001
BMI (kg/m^2)	22.8 ± (2.2)	24.0 ± (2.3)	25.2 ± (2.4)	<0.001
WC (cm)	79.4 ± (6.0)	82.9 ± (6.4)	86.2 ± (6.7)	<0.001
Systolic BP (mmHg)	105.8 ± (9.4)	111.8 ± (12.6)	117.8 ± (14.6)	<0.001
Diastolic BP (mmHg)	72.9 ± (6.7)	77.4 ± (8.6)	81.4 ± (9.8)	<0.001
Total cholesterol (mg/dL)	186.1 ± (28.5)	195.6 ± (30.8)	200.0 ± (32.0)	<0.001
Triglyceride (mg/dL)	92 (72-115)	121 (90-159)	159 (116-206)	<0.001
HDL-cholesterol (mg/dL)	54.5 ± (9.9)	51.3 ± (10.3)	48.5 ± (9.5)	<0.001
LDL-cholesterol (mg/dL)	109.6 ± (25.4)	115.7 ± (26.2)	117.3 ± (27.0)	<0.001
Fasting serum glucose (mg/dL)	91.0 ± (5.3)	97.0 ± (13.7)	102.0 ± (18.6)	<0.001
HOMA-IR	1.6 (1.3-2.0)	1.9 (1.5-2.4)	2.2 (1.8-2.9)	<0.001
Insulin (uU/dL)	7.5 ± (2.5)	8.5 ± (3.0)	9.7 ± (3.5)	<0.001
Serum creatinine (mg/dL)	1.12 ± (0.10)	1.13 ± (0.11)	1.14 ± (0.10)	<0.001
hsCRP (mg/L)	0.04 (0.02-0.08)	0.05 (0.03-0.10)	0.07 (0.04-0.13)	0.001
WBC (×10^9/L)	6.0 ± (1.5)	6.3 ± (1.5)	6.6 ± (1.6)	<0.001
GGT (U/L)	22 (16-32)	29 (20-45)	36 (25-57)	<0.001
AST (U/L)	22 (19-26)	23 (20-27)	25 (21-29)	<0.001
ALT (U/L)	21 (16-27)	24 (18-33)	28 (21-38)	<0.001
Ferritin (mg/dL)	104.2 ± (57.9)	112.3 ± (62.6)	123.6 ± (71.9)	<0.001
TIBC (µg/dL)	297.9 ± (35.7)	307.8 ± (36.2)	312.9 ± (37.2)	<0.001
Hemoglobin (g/dL)	15.4 ± (0.9)	15.6 ± (0.9)	15.7 ± (0.9)	<0.001
Iron (µg/dL)	129.9 ± (47.4)	129.6 ± (47.1)	129.2 ± (48.3)	0.596
Transferrin saturation (%)	44.1 ± (16.6)	42.6 ± (16.0)	41.8 ± (16.2)	<0.001

Current smoker (%)	38.3	40.7	43.1	0.001
Alcohol intake (%)	9.4	13.6	16.2	<0.001
Regular exercise (%)	18.5	18.3	17.7	0.375
Diabetes mellitus (%)	0.2	2.3	5.9	<0.001
Hypertension (%)	1.3	13.7	28.4	<0.001
Development of MetS (%)	3.7	14.3	35.3	<0.001

Data are means (standard deviation), medians (interquartile range), or percentages.
[*]P-value by ANOVA-test for continuous variables and Chi square test for categorical variables.

Supplementary Table 2. Adjusted Hazard ratios (HRs) and 95% confidence intervals (CI) for the incidence of MetS by quintile groups of serum ferritin level according to clinically relevant subgroups.

Subgroup	*Adjusted Hazard ratios (HRs) and 95% confidence intervals (CI)					
	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	P for trend
Blood pressure < 130/85 mmHg (n=10,465)	1.00 (reference)	1.16 (0.92 - 1.46)	1.09 (0.86 - 1.38)	1.30 (1.03 - 1.64)	1.64 (1.31 - 2.05)	0.001
Fasting serum glucose < 100 mg/dL (n=9,779)	1.00 (reference)	1.34 (1.05 - 1.70)	1.21 (0.95 - 1.55)	1.39 (1.10 - 1.77)	1.58 (1.25 - 2.00)	0.009
Triglyceride < 150 mg/dL (n=9,584)	1.00 (reference)	1.05 (0.80 - 1.37)	1.09 (0.84 - 1.43)	1.39 (1.08 - 1.80)	1.51 (1.17 - 1.96)	0.003
HDL-cholesterol > 40 mg/dL (n=12,103)	1.00 (reference)	1.29 (1.04 - 1.61)	1.33 (1.07 - 1.65)	1.53 (1.23 - 1.89)	1.87 (1.52 - 2.30)	<0.001
WC <90 cm (n=11,490)	1.00 (reference)	1.18 (0.94 - 1.48)	1.22 (0.98 - 1.53)	1.31 (1.05 - 1.64)	1.54 (1.23 - 1.92)	<0.001
HOMA-IR <75th percentile (n=9,880)	1.00 (reference)	1.18 (0.91 - 1.53)	1.10 (0.84 - 1.43)	1.37 (1.06 - 1.77)	1.66 (1.29 - 2.15)	<0.001
AST <75th percentile (n=9,945)	1.00 (reference)	1.24 (0.98 - 1.55)	1.15 (0.92 - 1.45)	1.27 (1.01 - 1.60)	1.52 (1.21 - 1.91)	0.002
GGT <75th percentile (n=9,658)	1.00 (reference)	1.02 (0.81 - 1.30)	0.87 (0.68 - 1.11)	1.16 (0.91 - 1.47)	1.41 (1.11 - 1.78)	0.014

* Adjusting for age, WBC, GGT, log(hsCRP), HOMA-IR, serum creatinine, TIBC, current smoking status, regular exercise, alcohol intake, hypertension and diabetes mellitus.
The 75th percentile for HOMA-IR, AST and GGT was 2.416, 28 and 43, respectively.