

**Supplementary Table 1.** Equations and examples of metabolic syndrome severity score

Sex	Equation (40–59 years)	Example
Men	$8.2939+0.0126\times\text{FPG}+0.0063\times\text{SBP}+0.0382\times\text{WC}-0.0210\times\text{HDL}+0.8432\times\ln(\text{TG})$	Age 45 years, FPG 110 mg/dL, SBP 150 mm Hg, WC 95 cm, HDL 30 mg/dL, TG 160 mg/dL → Patient's metabolic syndrome Z-score: 1.315486561 → Patient's the top risk of metabolic syndrome: 9.42% <sup>a</sup>
Women	$-7.5210+0.0156\times\text{FPG}+0.0073\times\text{SBP}+0.0292\times\text{WC}-0.0207\times\text{HDL}+0.9065\times\ln(\text{TG})$	Age 53 years, FPG 80 mg/dL, SBP 120 mm Hg, WC 70 cm, HDL 70 mg/dL, TG 80 mg/dL → Patient's metabolic syndrome Z-score: 1.315486561 → Patient's the top risk of metabolic syndrome: 79.66% <sup>a</sup>

FPG, fasting plasma glucose; SBP, systolic blood pressure; WC, waist circumference; HDL, high density lipoprotein; TG, triglyceride.

<sup>a</sup>Metabolic syndrome Z-score for predicting the presence of metabolic syndrome.