## Supplemental material

**Table S1** The odd ratios (OR) of one unit increment of NAFLD-related indexes for mild, moderate and severe NAFLD.

| Models | Mild NAFLD | Moderate NAFLD | Severe NAFLD |
|--------|------------|----------------|--------------|
|        | OR (95%CI) | Adjusted OR (95%CI) | OR (95%CI) | Adjusted OR (95%CI) | OR (95%CI) | Adjusted OR (95%CI) |
| FLI    | 1.06 (1.05, 1.07) | 1.04 (1.03, 1.05) | 1.09 (1.08, 1.10) | 1.08 (1.07, 1.10) | 1.10 (1.09, 1.12) | 1.09 (1.07, 1.11) |
| FLD    | 1.42 (1.38, 1.47) | 1.50 (1.41, 1.60) | 1.74 (1.66, 1.81) | 2.10 (1.94, 2.29) | 1.87 (1.76, 2.00) | 2.15 (1.93, 2.41) |
| ZJU    | 1.42 (1.38, 1.46) | 1.44 (1.36, 1.52) | 1.73 (1.66, 1.81) | 1.85 (1.72, 1.99) | 1.85 (1.74, 1.97) | 1.89 (1.72, 2.07) |
| LAP    | 1.05 (1.05, 1.06) | 1.03 (1.02, 1.03) | 1.07 (1.06, 1.07) | 1.04 (1.03, 1.05) | 1.07 (1.06, 1.07) | 1.04 (1.03, 1.05) |
| CAP    | 1.07 (1.06, 1.07) | 1.09 (1.06, 1.12) | 1.10 (1.09, 1.11) | 1.23 (1.19, 1.27) | 1.12 (1.11, 1.13) | 1.24 (1.19, 1.30) |
| WHtR   | 1.27 (1.24, 1.30) | 1.10 (1.07, 1.14) | 1.41 (1.36, 1.45) | 1.19 (1.14, 1.25) | 1.56 (1.47, 1.65) | 1.29 (1.20, 1.39) |
| TyG    | 5.96 (5.01, 7.08) | 3.68 (3.02, 4.47) | 12.56 (9.90, 15.92) | 8.65 (6.60, 11.35) | 14.62 (10.23, 20.88) | 9.59 (6.37, 14.45) |
| VAI    | 1.95 (1.81, 2.11) | 1.51 (1.40, 1.63) | 2.24 (2.06, 2.44) | 1.72 (1.58, 1.87) | 2.29 (2.09, 2.50) | 1.76 (1.60, 1.92) |

*all P < 0.001; b adjusted for sex, age and BMI.*
Abbreviations: OR, odd ratio; NAFLD, nonalcoholic fatty liver disease; FLI, fatty liver index; FLD, fatty liver disease index; ZJU, Zhejiang University index; TyG, triglyceride and glucose index; CAP, controlled attenuation parameter; LAP, lipid accumulation product; WHtR, waist-to-height ratio; VAI, visceral adiposity index.

Table S2 Cut-off values and diagnostic accuracy of FLI and FLD in total, male and female population

| Model | Total Cut-off | Sensitivity (%) | Specificity (%) | Male Cut-off | Sensitivity (%) | Specificity (%) | Female Cut-off | Sensitivity (%) | Specificity (%) |
|-------|---------------|-----------------|-----------------|--------------|-----------------|-----------------|----------------|----------------|----------------|
| FLI   | 13.5          | 90.0            | 60.6            | 16.5         | 90.0            | 55.1            | 7.3            | 90.0           | 73.7           |
|       | 37.6          | 54.3            | 90.0            | 45.8         | 48.0            | 90.0            | 14.1           | 65.0           | 90.0           |
| FLD   | 27.2          | 90.0            | 38.6            | 27.6         | 90.0            | 53.6            | 26.0           | 90.0           | 73.5           |
|       | 30.9          | 54.8            | 90.0            | 31.6         | 50.1            | 90.0            | 27.9           | 66.3           | 90.0           |

Abbreviations: FLI, fatty liver index; FLD, fatty liver disease index.