**Supplementary Table 1.** The clinical characteristics of diabetic patients based on HIRI

| Characteristic | HIRI | | | | P value | P for trend |
|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | | |
| Age, yr | 51.03±9.50 | 49.66±8.90 | 50.54±8.73 | 50.43±9.59 | 0.566 | 0.767 |
| BMI, kg/m² | 24.90±2.23 | 25.36±2.53 | 25.60±2.48 | 26.63±2.53 | <0.001 | <0.001 |
| SBP, mm Hg | 124.88±11.87 | 124.05±12.75 | 125.06±12.13 | 125.16±12.93 | 0.830 | 0.658 |
| DBP, mm Hg | 79.48±7.30 | 79.69±8.46 | 80.21±7.36 | 80.46±7.60 | 0.609 | 0.183 |
| AST, mmol/L | 22.47±7.66 | 23.09±8.23 | 23.99±8.80 | 26.13±10.08 | <0.001 | 0.005 |
| ALT, IU/L | 27.23±14.06 | 27.32±13.88 | 28.35±14.08 | 31.49±16.09 | 0.020 | <0.001 |
| eGFR, IU/L | 99.86±30.74 | 107.53±34.54 | 115.98±91.98 | 119.49±38.03 | 0.004 | <0.001 |
| TC, mmol/L | 5.10 (4.31–5.86) | 5.09 (4.46–5.72) | 5.11 (4.40–6.01) | 5.44 (4.83–6.04) | 0.008 | 0.006 |
| TG, mmol/L | 1.70 (1.20–2.44) | 1.71 (1.26–2.65) | 1.99 (1.28–2.74) | 2.17 (1.50–3.02) | <0.001 | <0.001 |
| HDL-C, mmol/L | 1.22 (1.03–2.41) | 1.18 (1.04–1.42) | 1.21 (1.04–1.39) | 1.18 (1.01–1.40) | 0.839 | 0.695 |
| LDL-C, mmol/L | 3.15±1.00 | 3.00±0.85 | 3.01±0.92 | 3.10±0.88 | 0.347 | 0.620 |

Values are presented as mean±standard deviation or median (interquartile range).

HIRI, hepatic insulin resistance index; BMI, body mass index; SBP, systolic blood pressure; DBP, diastolic blood pressure; AST, aspartate aminotransferase; ALT, alanine aminotransferase; eGFR, estimated glomerular filtration rate; TC, total cholesterol; TG, triglyceride; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol.