

Table 1. Formulas of non-invasive indices for hepatic steatosis and fibrosis used for the study

Non-invasive index	Required parameters	Equation
NAFLD liver fat score	MetS (yes=1/no=0) # T2DM (yes=1/no=0) Fasting serum insulin (mU/L) AST (U/L) AST/ALT (each in U/L)	$-2.89 + 1.18 \times (\text{MetS}) + 0.45 \times (\text{T2DM}) + 0.15 \times (\text{fasting serum insulin}) + 0.04 \times (\text{AST}) - 0.94 \times (\text{AST/ALT})$
LAP	WC (cm) Triglycerides (mmol/L)	For women: $(\text{waist circumference} - 58) \times \text{triglycerides}$
HIS	ALT/AST (each in U/L) BMI (kg/m ²) T2DM (yes=1/no=0) Female (yes=1/no=0)	$8 \times (\text{ALT/AST}) + \text{BMI} + 2 \times (\text{female}) + 2 \times (\text{T2DM})$
FIB-4	Age (years) AST (U/L) ALT (U/L) Platelets (N*10 ³ /μL)	$(\text{Age} \times \text{AST}) / (\text{platelets} \times \text{ALT}^{1/2})$
APRI	AST (U/L) Platelets (N*10 ³ /μL)	$100 \times (\text{AST}/(\text{upper normal limit of AST})) / \text{platelets}$
BAAT	Age ≥50 years (yes=1/no=0) BMI ≥28 kg/m ² (yes=1/no=0) Triglycerides ≥1.7 mmol/L (150 mg/dL) (yes=1/no=0) ALT ≥2 times upper normal limit (yes=1/no=0)	Age + BMI + triglycerides + ALT
BARD	BMI ≥28 kg/m ² (yes=1/no=0) T2DM (yes=1/no=0) AST/ALT ≥0.8 (yes=1/no=0)	BMI + T2DM + 2 × (ALT/AST)

#According to International Diabetes Federation (IDF) definition.

ALT: alanine transaminase; APRI: AST to Platelet Ratio Index; AST: aspartate transaminase; BAAT: BMI Age ALT Triglycerides; BARD: BMI AST/ALT Ratio Diabetes; BMI: body mass index; HIS: hepatic steatosis index; LAP: lipid accumulation product; MetS: metabolic syndrome; NAFLD: non-alcoholic fatty liver disease; T2DM: type 2 diabetes mellitus; WC: waist circumference.