**Supplementary material**

**Table S1.** Details of the nutritional indices utilized in the study.

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| --- | --- | --- |
| Score | Abbreviation | Calculation Formula |
| Prognostic NutritionalIndex | PNI | serum albumin (g/L) + 5 × Lymphocyte number (1000 cells/uL) |
| ControllingNutritional Status | CONUT | Serum albumin score + total lymphocyte count score + total cholesterol score.For serum albumin levels >3.5, between 3.0 and 3.49, between 2.5 and 2.99 and <2.5 g/dL, 0, 2, 4, and 6 points were assigned, respectively. For serum total cholesterol levels >180, between 140 and 179, between 100 and 139 and <100 mg/dL, 0, 1, 2, and 3 points were assigned, respectively. For serum total lymphocyte count >1600, between 1200 and 1599, between 800 and 1199 and <800/mm3, 0, 1, 2, and 3 points were assigned, respectively. Their sum ranges from <3 to ≥3. |
| Geriatric NutritionalRisk Index | GNRI | [1.489 × albumin (g/L)] + [41.7 × (present weight/ ideal weight)].ideal weight = height - 100 - [(height - 150)/4] (men) orideal weight = height - 100 - [(height - 150)/2.5] (women). If the current weight/ideal weight was >1, the present weight/ideal weight was set to 1. |

**Table S2.** ROC analysis of the diagnostic performances of nutritional status indices for NAFLD.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | AUROCa | 95% CI | Youden Index | Sensitivity | Specificity |
| PNI | 0.774 | 0.751-0.796 | 0.4007 | 0.746 | 0.655 |
| CONUT | 0.767 | 0.744-0.789 | 0.3951 | 0.824 | 0.571 |
| GNRI | 0.770  | 0.747-0.792 | 0.3953 | 0.711 | 0.684 |

aAdjusted for age (in years), sex, race, BMI, smoking, hypertension, and history of CVD.

Abbreviations:NAFLD, nonalcoholic fatty liver disease; PNI, prognostic nutritional index; CONUT, controlling nutritional status; GNRI, geriatric nutritional risk index; AUROC, area under the receiver operating characteristic curve; CI, confidence interval.

**Figure S1.** Directed acyclic graph. Abbreviations: NAFLD Non-alcoholic fatty liver disease, BMI Body mass index.



**Figure S2.** OR (95% CI) of continuous nutritional indices for the risk of NAFLD. Bold lines represent OR, while shaded areas indicate 95% CI. All models were adjusted for race, PIR, BMI, hypertension, diabetes, high cholesterol, total daily energy intake, smoking status and physical activity.

Abbreviations: NAFLD, non-alcoholic fatty liver disease; PNI, prognostic nutritional index; CONUT, controlling nutritional status; GNRI, geriatric nutritional risk index; OR, odds ratio; CI, confidence interval.