

# Summer Project 2025

## 1 List of Variables

### 1.1 Li et al.

Name of Variable	Level/Unit
Age	Year
Gender	Male, Female
BMI	$kg/m^2$
Poverty-income Ratio	—
Race	Mexican-American, other Hispanic, non-Hispanic white and black, other race
Diabetes	Y/N
Smoking	Y/N
Protein	gm
Vitamin-C	mg
Mercury, Total	umol/L
Blood Cadmium	nmol/L
Hypertension	n (%)
Activity	Light, Moderate, Vigorous
Overweight/Obesity	Y/N
Drinking Alcohol	Never, Moderate, Excessive
MAFLD (Metabolic-dysfunction Associated Fatty Liver Disease)	Y/N

Special Variables	Full Abbreviation	Unit/Formula/Criteria
MAFLD	Metabolic-dysfunction Associated Fatty Liver Disease	Histologic Imaging or blood <b>biomarker evidence of hepatic steatosis</b> (must) and one of these three criteria: <b>Overweight/Obesity</b> , Presence of <b>Type-2 Diabetes</b> , Evidence of <b>metabolic derangement</b> .
AGTR	Albumin to glutamyl transpeptidase ratio	albumin (g/L)/ GGT(U/L)
AIP	Plasma Atherogenicity Index	$\log(TG/HDL - c)$
UHR	Serum Uric Acid to High Density Lipoprotein Cholesterol Ratio	Serum Uric Acid (mg/dL)/ HDL-c (mg/dL)
ALP	Alkaline Phosphatase	U/L
WC	Waist Circumference	cm
ALB	Albumin	g/L
ALT	Alanine Aminotransferase	U/L

## 1.2 Shen et al.

Name of Variables (different from Li <i>et al.</i> )	Level/Unit
Height	—
Systolic Blood Pressure	mmHg
Diastolic Blood Pressure	mmHg
Duration of hypertension	< 5 years and > 5 years
AST/ALT	—
GGT	U/L
TBIL	umol/L
DBIL	umol/L
IBIL	umol/L
Serum Creatinin	umol/L
Uric Acid	umol/L
Total Cholesterol	mmol/L
TG	mmol/L
HDL-c	mmol/L
LDL-c	mmol/L
Fasting blood glucose	mmol/L
HbA1c	%
hs-CRP	mg/DL
TYG index	—
AISI	—
SIRI	—
SII	—
NLR	—
PLR	—
MLR	—
Dyslipidimia	—
Coronary Artery Disease	—
ACEI/ARB	—
$\beta$ -blockers	—
Calcium Channel Blockers	—
Diuretic	—
Antidiabetic Agents	—
Lipid Lowering Drugs	—
MAFLD (Metabolic-dysfunction Associated Fatty Liver Disease)	Y/N

\*\* AST: Aspartate Aminotransferase

### 1.3 Moon et al.

Name of Variables (different from 1.1 and 1.2)	Level/Unit
AST	U/L
Platelet	$10^9/\text{L}$
eGFR	$\text{mL}/\text{min}/1.73\text{m}^2$
Homa-IR	—
Chronic Kidney Disease	—
Excess Alcohol Consumption	—
History of Viral Hepatitis	—
MAFLD (Metabolic-dysfunction Associated Fatty Liver Disease)	Y/N

### 1.4 Kim et al.

Name of Variables (different from 1.1-1.3)	Level/Unit
Alcohol Consumption	drinks/week
Lipid-lowering medication	%
Glucose	mg/DL
Insulin	uU/mL
MAFLD (Metabolic-dysfunction Associated Fatty Liver Disease)	Y/N

### 1.5 Tanaka et al.

Name of Variables (different from 1.1-1.4)	Level/Unit
Alcohol Consumption	drinks/week
Lipid-lowering medication	%
Glucose	mg/DL
Insulin	uU/mL
MAFLD (Metabolic-dysfunction Associated Fatty Liver Disease)	Y/N

### 1.6 Musso et al.

Name of Variables (different from 1.1-1.5)	Level/Unit
Metabolic Syndrome	—
Cirrhosis	—

## 1.7 Huang et al.

Name of Variables (different from 1.1-1.6)	Level/Unit
ALP	U/L
NFS Score	–
APRI Score	–
FIB-4 Score	–
Severity of Hepatic Steatosis	None, Mild, Moderate, Severe
History of Miocardial Infraction	Y/N
History of Congestive Heart Failure	Y/N
History of Stroke	Y/N
Elevated Liver Enzymes	Y/N
Iron Overload	Y/N