

Supplementary Table 1. Cohort characteristics.

	China cohort	Korean cohort
Enrolment dates (first and last inclusion)	Dec. 2016 - Dec. 2019	Jan. 2013 – May. 2020
Study design	Cross-sectional single center study	Cross-sectional single center study
Center description	Hepatology tertiary care	Hepatology tertiary care
Eligibility criteria	Adults (≥ 18 years) with suspected NAFLD (abnormal imaging findings e.g. bright echogenic liver on ultrasound scanning) or unexplained alanine aminotransferase levels above the upper normal limit)	(i) ≥ 18 years old, (ii) bright echogenic liver on ultrasound scanning (increased liver/kidney echogenicity and posterior attenuation), and (iii) unexplained high alanine aminotransferase (ALT) levels above the reference range within the past 6 months
Exclusion criteria	(i) significant alcohol intake (≥ 140 g/week in men or ≥ 70 g/week in women); (ii) use of steatosis-inducing drugs; (iii) presence of viral hepatitis, autoimmune hepatitis or other known chronic liver diseases; (iv) incomplete clinical and genetic data; (v) steatosis $<5\%$	(i) hepatitis B or C virus infection, (ii) autoimmune hepatitis, (iii) drug-induced liver injury or steatosis, (iv) Wilson disease or hemochromatosis, (v) excessive alcohol consumption (male >30 g/day, female >20 g/day), and (vi) diagnosis of malignancy within the past year
Indication for liver biopsy	Suspected NAFLD/NASH	Of the eligible study participants, those with at least two of the following risk factors underwent liver biopsy: diabetes mellitus, central obesity (waist circumference ≥ 90 cm for men or ≥ 80 cm for women), high level of triglycerides (≥ 150 mg/dl), low levels of HDL-

		cholesterol (<40 mg/dl for men or <50 mg/dl for women), presence of insulin resistance, hypertension, and clinically suspected NASH or fibrosis.
Liver histology interpretation	Single expert histopathologist	Single expert histopathologists
Time interval between clinical data evaluation and liver biopsy	No more than 24 hours	No more than 48 hours

Note: ALT, alanine aminotransferase; HDL-C, high-density lipoprotein cholesterol; NASH, nonalcoholic steatohepatitis; NAFLD, non-alcoholic fatty liver disease.