

Supplement table 1 Prognostic association between non-invasive liver score and 1- to 5-year chronic kidney disease

Predictors	1-Year CKD		2-Year CKD		3-Year CKD		4-Year CKD		5-Year CKD	
	HR (95%CI)	p-value	HR (95%CI)	p-value	HR (95%CI)	p-value	HR (95%CI)	p-value	HR (95%CI)	p-value
Univariable analysis										
NFS score ^a	1.43 (1.17 – 1.74)	<0.001	1.48 (1.29 – 1.69)	<0.001	1.47 (1.31 – 1.65)	<0.001	1.43 (1.28 – 1.58)	<0.001	1.41 (1.28 – 1.55)	<0.001
FIB-4 score ^b	1.08 (0.94 – 1.22)	0.271	1.13 (1.06 – 1.21)	<0.001	1.14 (1.07 – 1.21)	<0.001	1.14 (1.08 – 1.22)	<0.001	1.14 (1.08 – 1.21)	<0.001
LSM (kPa) ^c	1.02 (0.99 – 1.05)	0.185	1.03 (1.01 – 1.04)	0.012	1.02 (1.00 – 1.04)	0.017	1.02 (1.00 – 1.04)	0.014	1.02 (1.00 – 1.04)	0.010
ALBI score ^c	1.54 (0.57 – 4.18)	0.398	1.65 (0.79 – 3.46)	0.184	1.58 (0.81 – 3.05)	0.177	1.94 (1.10 – 3.41)	0.022	1.85 (1.07 – 3.19)	0.027
Multivariable analysis										
NFS score ^a	1.43 (1.13 – 1.81)	0.002	1.50 (1.27 – 1.77)	<0.001	1.48 (1.28 – 1.70)	<0.001	1.44 (1.26 – 1.63)	<0.001	1.40 (1.25 – 1.58)	<0.001
FIB-4 score ^b	1.05 (0.85 – 1.30)	0.662	1.19 (1.04 – 1.36)	0.011	1.21 (1.07 – 1.38)	0.003	1.21 (1.08 – 1.36)	0.001	1.20 (1.08 – 1.35)	0.001
LSM (kPa) ^c	1.03 (0.99 – 1.07)	0.098	1.02 (0.99 – 1.04)	0.220	1.02 (0.99 – 1.04)	0.218	1.01 (0.99 – 1.04)	0.280	1.01 (0.99 – 1.03)	0.231
ALBI score ^c	0.68 (0.18 – 2.51)	0.561	0.81 (0.31 – 2.11)	0.662	0.85 (0.38 – 1.89)	0.687	1.21 (0.60 – 2.43)	0.595	1.11 (0.58 – 2.13)	0.759

^a Multivariable analysis for NFS adjusted for sex, hypertension, dyslipidemia, controlled attenuation parameter, and liver stiffness measurement.

^b Multivariable analysis for FIB-4 adjusted for sex, body mass index, type 2 diabetes, hypertension, dyslipidemia, controlled attenuation parameter, and liver stiffness measurement.

^c Multivariable analysis for LSM and ALBI adjusted for age, sex, body mass index, type 2 diabetes, hypertension, dyslipidemia, controlled attenuation parameter, and liver stiffness measurement, aspartate aminotransferase, and alanine aminotransferase.

All multivariable analyses for each noninvasive liver score assume proportional hazard assumption with p>0.05.

Abbreviation: ALBI, Albumin-Bilirubin; CKD, Chronic kidney disease; FIB-4, Fibrosis-4; LSM, Liver stiffness measurement; NFS, Non-alcoholic fatty liver disease fibrosis score.

Supplement Table 2 Internal validation of time-dependent area under the receiver operating characteristic curve estimates using bootstrap optimism correction

Scores	Year	Observed AUROC	Bootstrap Mean AUROC	Optimism	Corrected AUROC
NFS	1	0.7745	0.7713	-0.0031	0.7776
	2	0.7821	0.7809	-0.0011	0.7832
	3	0.7898	0.7882	-0.0019	0.7914
	4	0.7337	0.7324	-0.0012	0.7349
	5	0.7250	0.7251	0.0000	0.7250
FIB-4	1	0.7233	0.7227	-0.0006	0.7238
	2	0.7635	0.7626	-0.0009	0.7644
	3	0.7669	0.7657	-0.0012	0.7681
	4	0.7049	0.7053	0.0005	0.7044
	5	0.7316	0.7309	-0.0006	0.7322
LSM	1	0.6682	0.6668	-0.0015	0.6697
	2	0.6559	0.6550	-0.0009	0.6567
	3	0.6709	0.6693	-0.0016	0.6724
	4	0.6409	0.6417	0.0008	0.6401
	5	0.6452	0.6474	0.0022	0.6431
ALBI	1	0.5700	0.5627	-0.0073	0.5773
	2	0.5604	0.5530	-0.0074	0.5678
	3	0.5402	0.5345	-0.0057	0.5459
	4	0.5651	0.5620	-0.0031	0.5681
	5	0.5766	0.5754	-0.0013	0.5779

Abbreviation: ALBI, Albumin-Bilirubin; AuROC, Area under the receiver operating characteristic curve; FIB-4, Fibrosis-4; LSM, Liver stiffness measurement; NFS, Non-alcoholic fatty liver disease fibrosis score