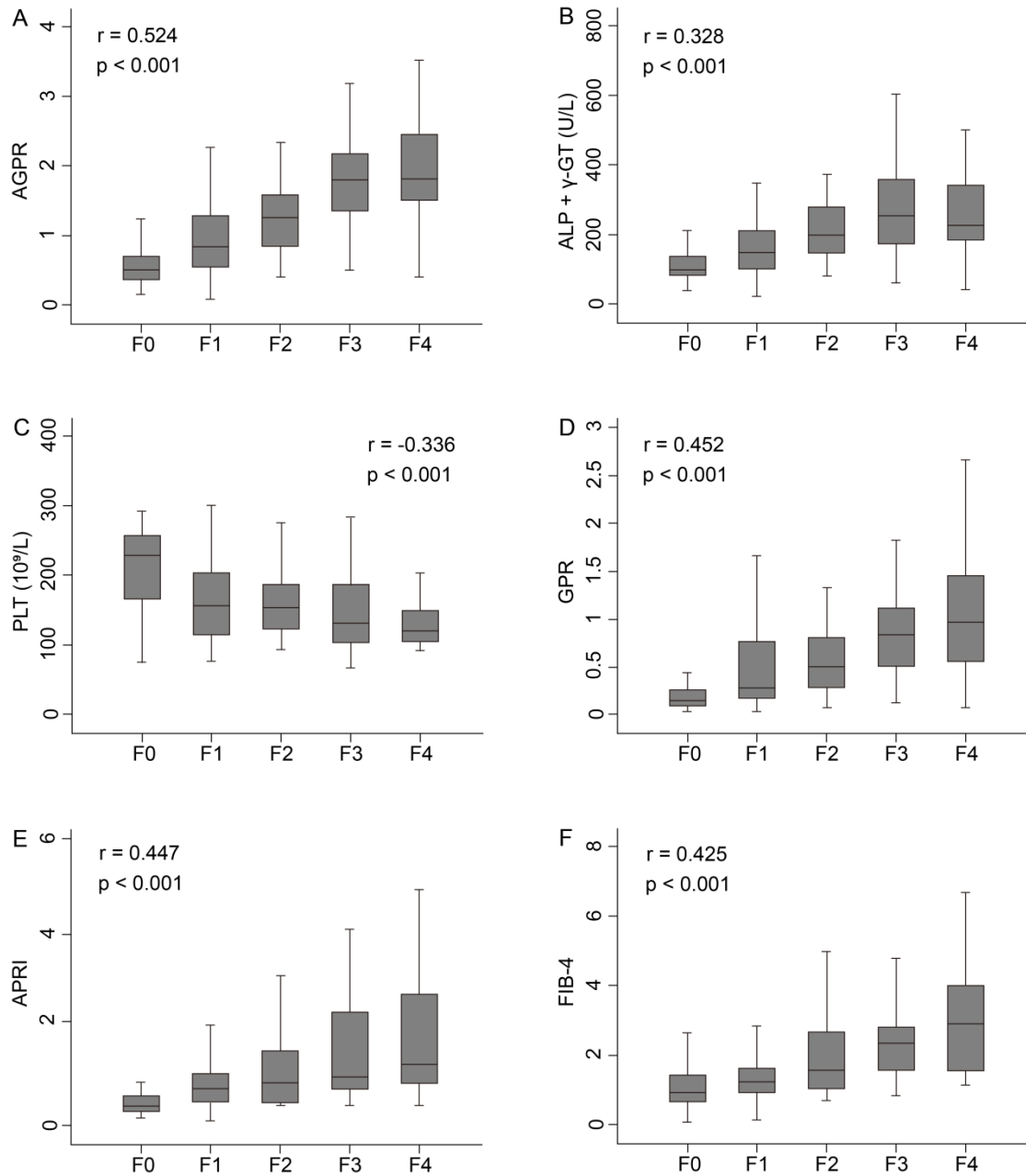


Supplementary Material



Supplementary Figure 1 A-F: Box plots of AGPR (A), ALP + γ -GT (B), PLT (C), GPR (D), APRI (E), and FIB-4 (F) according to the METAVIR fibrosis stage the validation cohort. AGPR: alkaline phosphatase [U/L] + gamma-glutamyl transpeptidase [U/L]/platelet [10⁹/L]; ALP + γ -GT: alkaline phosphatase + gamma-glutamyl transpeptidase; PLT: platelet; GPR: gamma-glutamyl transpeptidase to platelet ratio; APRI: aspartate aminotransferase-to-platelet ratio index; FIB-4: age \times aspartate transaminase

/platelet × alanine aminotransferase.

Supplementary Table 1 Univariate analysis in the validation cohort

Parameter	Fibrosis (F0-1)	Fibrosis (F2-4)	P value
	(n = 94)	(n = 117)	
Age (years)	40.96±15.62	43.69±12.21	0.157
Gender: female/male (n)	20/74	17/100	0.200
WBC (×10 ⁹ /L)	7.03±5.92	5.77±2.16	0.036
NEUT (×10 ⁹ /L)	4.21±3.24	3.21±1.85	0.006
LYMPH (×10 ⁹ /L)	1.74±0.57	1.86±0.68	0.201
PLT (×10 ⁹ /L)	192.20±61.28	153.20±52.19	< 0.001
Albumin (g/L)	41.19±4.79	38.92±5.08	0.001
Globulin (g/L)	26.97±4.55	30.90±6.12	< 0.001
TBIL (μmol/L)	14.76±6.68	18.31±7.99	0.001
DBIL (μmol/L)	6.02±4.23	7.91±4.24	0.002
ALT (U/L)	84.88±86.01	110.13±96.77	0.049
AST (U/L)	60.38±54.69	91.14±75.04	0.001
ALP (U/L)	80.76±30.31	123.25±53.32	< 0.001
γ-GT (U/L)	61.11±54.27	127.62±77.01	< 0.001
AGPR	0.85±0.61	1.71±0.89	< 0.001

*Data presented as the mean ± SD or proportions.

N: number of patients; WBC: white blood cell; NEUT: neutrophil count; LYMPH: lymphocyte count; PLT: platelets; TBIL: total bilirubin; DBIL: direct bilirubin; ALT: alanine aminotransferase; AST: aspartate aminotransferase; γ-GT: γ-glutamyl transpeptidase; AGPR: (ALP [U/L] + γ-GT [U/L])/PLT [10⁹/L].

Supplementary Table 2 Correlation analysis between the noninvasive markers and liver fibrosis grade

	Training cohort (n = 296)		Validation cohort (n = 211)	
	r	P value	r	P value
AGPR	0.567	< 0.001	0.524	< 0.001
ALP + γ -GT	0.352	< 0.001	0.328	< 0.001
PLT	-0.362	< 0.001	-0.336	< 0.001
GPR	0.509	< 0.001	0.452	< 0.001
APRI	0.428	< 0.001	0.447	< 0.001
FIB-4	0.416	< 0.001	0.425	< 0.001

AGPR: $(\text{ALP [U/L]} + \gamma\text{-GT [U/L]}) / \text{PLT count [10}^9\text{/L]}$; ALP: alkaline phosphatase; γ -GT: γ -glutamyl transpeptidase; PLT: platelet; GPR: γ -GT to PLT ratio; APRI: aspartate aminotransferase-to-PLT ratio index; FIB-4: $\text{age (years)} \times \text{aspartate aminotransferase [U/L]} / (\text{PLT [10}^9\text{/L]} \times (\text{alanine aminotransferase [U/L]})^{1/2})$.