

**Table S1** Univariable and multivariable logistic regression analysis of parameters for patients with HVPG  $\geq 16$  mmHg

Variable	Univariable			Multivariable		
	Odds ratio	95% CI	P	Odds ratio	95% CI	P
Age	1.039	0.989–1.092	0.13			
Male sex	0.625	0.198–1.974	0.42			
BMI	1.038	0.906–1.188	0.59			
Albumin	0.935	0.861–1.016	0.11			
Total bilirubin	1.016	0.995–1.038	0.13			
Serum creatinine	0.975	0.939–1.012	0.18			
AST	1.001	0.996–1.007	0.67			
ALT	0.997	0.991–1.003	0.36			
Platelet count	0.978	0.961–0.995	0.01			
Prothrombin time	0.941	0.627–1.410	0.77			
INR	13.118	0.716–240.506	0.08			
MRE-LS	1.209	0.925–1.580	0.17			
MRE-SS	1.614	1.202–2.166	0.001	1.614	1.202–2.166	0.001
Child-Pugh score	1.516	1.072–2.142	0.02			
MELD score	1.049	0.923–1.192	0.46			
Fibrosis 4	1.314	1.096–1.577	0.003			
APRI	1.112	0.958–1.290	0.16			
King's score	1.004	0.998–1.010	0.15			

Bolded type indicates variables included in the multivariable analysis. HVPG, hepatic venous pressure gradient; CI, confidence interval; BMI, body mass index; AST, aspartate transaminase; ALT, alanine transaminase; INR, international normalized ratio; MRE-LS, magnetic resonance elastography–liver stiffness; MRE-SS, magnetic resonance elastography–spleen stiffness; MELD, model for end-stage liver disease; APRI, aspartate aminotransferase-to-platelet ratio index.

**Table S2** Univariable and multivariable logistic regression analysis of parameters for patients with HVPG  $\geq 20$  mmHg

Variable	Univariable			Multivariable		
	Odds ratio	95% CI	P	Odds ratio	95% CI	P
Age	1.053	0.994–1.117	0.08	1.108	1.010–1.216	0.03
Male sex	0.727	0.222–2.387	0.60			
BMI	1.003	0.874–1.151	0.96			
Albumin	0.934	0.852–1.025	0.15			
Total bilirubin	0.999	0.988–1.009	0.79			
Serum creatinine	0.985	0.948–1.023	0.43			
AST	1.002	0.997–1.007	0.51			
ALT	0.997	0.991–1.004	0.41			
Platelet count	0.980	0.962–0.998	0.03			
Prothrombin time	0.768	0.470–1.254	0.29			
INR	14.318	0.836–245.294	0.07	206.962	2.309–18,547.320	0.02
MRE-LS	1.107	0.854–1.435	0.44			
MRE-SS	1.685	1.232–2.304	0.001	2.096	1.318–3.333	0.002
Child-Pugh score	1.390	1.005–1.923	0.05			
MELD score	1.005	0.883–1.145	0.94			
Fibrosis 4	1.142	1.030–1.266	0.01			
APRI	1.097	0.968–1.242	0.15			
King's score	1.004	0.999–1.009	0.10			

Bolded type indicates variables included in the multivariable analysis. HVPG, hepatic venous pressure gradient; CI, confidence interval; BMI, body mass index; AST, aspartate transaminase; ALT, alanine transaminase; INR, international normalized ratio; MRE-LS, magnetic resonance elastography–liver stiffness; MRE-SS, magnetic resonance elastography–spleen stiffness; MELD, model for end-stage liver disease; APRI, aspartate aminotransferase-to-platelet ratio index.

**Table S3** Univariable and multivariable logistic regression analysis of parameters for patients with high-risk EVs

Variable	Univariable			Multivariable		
	Odds ratio	95% CI	P	Odds ratio	95% CI	P
Age	1.026	0.964–1.091	0.42			
Male sex	0.656	0.173–2.488	0.54			
BMI	0.965	0.819–1.137	0.67			
Albumin	0.894	0.797–1.004	0.06			
Total bilirubin	0.964	0.934–0.995	0.02			
Serum creatinine	0.977	0.933–1.022	0.31			
AST	0.993	0.984–1.002	0.14			
ALT	0.991	0.981–1.001	0.09			
Platelet count	0.972	0.951–0.993	0.01			
Prothrombin time	0.798	0.473–1.348	0.40			
INR	0.241	0.006–10.266	0.46			
MRE-LS	0.814	0.603–1.097	0.18			
MRE-SS	2.076	1.282–3.362	0.003	2.076	1.282–3.362	0.003
Child-Pugh score	0.977	0.718–1.332	0.89			
MELD score	0.831	0.697–0.991	0.04			
Fibrosis 4	1.019	0.912–1.139	0.74			
APRI	0.913	0.774–1.077	0.28			
King's score	0.997	0.991–1.002	0.26			

Bolded type indicates variables included in the multivariable analysis. EVs, esophageal varices; CI, confidence interval; BMI, body mass index; AST, aspartate transaminase; ALT, alanine transaminase; INR, international normalized ratio; MRE-LS, magnetic resonance elastography–liver stiffness; MRE-SS, magnetic resonance elastography–spleen stiffness; MELD, model for end-stage liver disease; APRI, aspartate aminotransferase-to-platelet ratio index.

**Table S4** Difference in the AUC between noninvasive markers in the diagnosis of HVPG  $\geq 16$  mmHg

	MRE-SS	albumin	PLT count	Child-Pugh score	Fibrosis 4	APRI
Albumin	0.095, 0.36					
PLT count	0.019, 0.77	0.076, 0.46				
Child-Pugh score	0.082, 0.43	0.013, 0.46	0.063, 0.52			
Fibrosis 4	0.054, 0.53	0.149, 0.08	0.073, 0.30	0.136, 0.08		
APRI	0.046, 0.66	0.050, 0.58	0.026, 0.76	0.037, 0.61	0.100, 0.09	
King's score	0.007, 0.95	0.102, 0.23	0.026, 0.77	0.089, 0.17	0.047, 0.32	0.052, 0.11

Data are expressed as the difference between areas, P value. Differences in the AUC between two markers were determined using the DeLong test. AUC, area under the curve; HVPG, hepatic venous pressure gradient; MRE-SS, magnetic resonance elastography–spleen stiffness; PLT, platelet; APRI, aspartate aminotransferase-to-platelet ratio index.

**Table S5** Difference in the AUC between noninvasive markers for the diagnosis of HVPG  $\geq 20$  mmHg

	MRE-SS	Albumin	PLT count	Fibrosis 4	APRI
Albumin	0.115, 0.28				
PLT count	0.082, 0.34	0.033, 0.77			
Fibrosis 4	0.044, 0.66	0.070, 0.50	0.037, 0.53		
APRI	0.137, 0.21	0.022, 0.82	0.056, 0.47	0.093, 0.08	
King's score	0.080, 0.46	0.035, 0.72	0.002, 0.98	0.035, 0.36	0.057, 0.08

Data are expressed as the difference between areas, P value. Differences in AUC between two markers were determined using the DeLong test. AUC, area under the curve; HVPG, hepatic venous pressure gradient; MRE-SS, magnetic resonance elastography–spleen stiffness; PLT, platelet; APRI, aspartate aminotransferase-to-platelet ratio index.

**Table S6** Difference in the AUC between noninvasive markers for the diagnosis of high-risk EVs

	MRE-SS	Albumin	PLT count	Total bilirubin
Albumin	0.181, 0.15			
PLT count	0.083, 0.36	0.098, 0.42		
Total bilirubin	0.143, 0.23	0.038, 0.81	0.060, 0.66	
MELD score		0.016, 0.92	0.083, 0.54	0.022, 0.74

Data are expressed as the difference between areas, P value. Differences in the AUC between the two markers were determined using the DeLong test. AUC, area under the curve; EVs, esophageal varices; MRE-SS, magnetic resonance elastography–spleen stiffness; PLT, platelet; MELD, model for end stage liver disease.