Supplementary Table 1 Multiple linear regression analysis for the correlation of liver stiffness and serum biomarkers, histological features

Factors	B (95%CI)	STD	Beta	t	P
Fibrosis stages	4.82 (3.95-5.70)	0.443	0.660	10.90	.000
Total bilirubin	0.025 (0.008-0.043)	0.009	0.174	2.87	.005

STD: Standard deviation.

Supplementary Table 2 Influence of necro-inflammation stage for the LS values of two-dimensional shear-wave elastography for predicting liver fibrosis stage in autoimmune hepatitis-primary biliary cholangitis overlap syndrome participants

Variables	S0-S1	S2	S3	S4
Necro- Inflammation stage				
G0-G2	7.0 (6.3-9.3)	10.7 (9.0-12)	13.6 (12-15.7)	21.2 (18.5-27.7)
G3-G4	8.5 (6.5-11.2)	10.7 (8.5-12.4)	16.6 (12.2-21.9)	20.9 (17.1-29.2)
P	0.52	0.51	0.62	0.77

Supplementary Table 3 Influence of necro-inflammation stage for two-dimensional shear-wave elastography for predicting liver fibrosis stage in autoimmune hepatitis-primary biliary cholangitis overlap syndrome participants

Variables	N (%)	≥ S2	≥ S3	≥ S4
Necro-inflammation stage				
G0-G2	63 (37%)	0.91 (0.83-0.98)	0.97 (0.92-1.0)	0.99 (0.97-1.0)
G3-G4	85 (63%)	0.86 (0.73-0.99)	0.96 (0.93-1.0)	0.93 (0.86-0.99)
P	-	0.57	0.89	0.03

Supplementary Table 4 Observed and predicted fibrosis stages

	Predicted fibrosis stage by liver stiffness of 2D-SWE			
Liver fibrosis stage in liver biopsy	S0-S1	S2	S3	S4
S0-S1 (25)	15	8	1	1
S2 (48)	6	26	10	6
S3 (13)	0	3	4	6
S4 (62)	0	1	3	58
	(22)	(37)	(17)	(72)