Appendix S1

Exclusion criteria. Patients were excluded if they met any of the following criteria: Coexistence with other etiology such as alcoholic liver disease, hepatitis C; coexistence with portal thrombosis or Budd-Chiari syndrome; hepatic carcinoma larger than 5 cm; coexistence of other disease of iron overload such as hemochromatosis; incomplete or non-standard MRI.

Appendix S2

MRI scan and parameters. Patients were fasting 6 hours before examination; 3.0 T MR imaging system (Discovery 750 W; GE health care) was used with 8-channel phase abdominal phased array surface coil. Conventional T2WI axial sequence was set with TR, 6,667 msec; TE, 79 msec; layer thickness, 6.0 mm; layer spacing, 2.0 mm; band width, 85 kHz; FOV, 42x42 cm; NEX, 2.00. Patients were requested to hold their breath while scanning. IDEAL-IQ axis sequence: TR, 3.7 msec; TE, 1.7 msec; layer thickness, 5.4 mm; bandwidth, 125 kHz; FOV, 42x42 cm; matrix, 256x256; rotation angle, 3°; NEX, 1.00. The images were analyzed by two doctors with diagnostic experience of >10 years; the fat content and iron content of livers were measured on fat fraction image and R2 relaxation rate image. Besides liver fat and iron content, the following parameters were recorded: Portal vein and splenic vein diameter on the level of hilum of liver and spleen. Intra-group consistency analysis and inter-group consistency analysis were performed after double-blinded measurement and repetition with the same method after 3 months; the average parameter was recorded.

Figure S1. Scatter plots showing the correlation between (A) SVD and PVD and (B) SVD and LIC. SVD, splenic vein diameter; PVD, portal vein diameter; LIC, liver iron content.

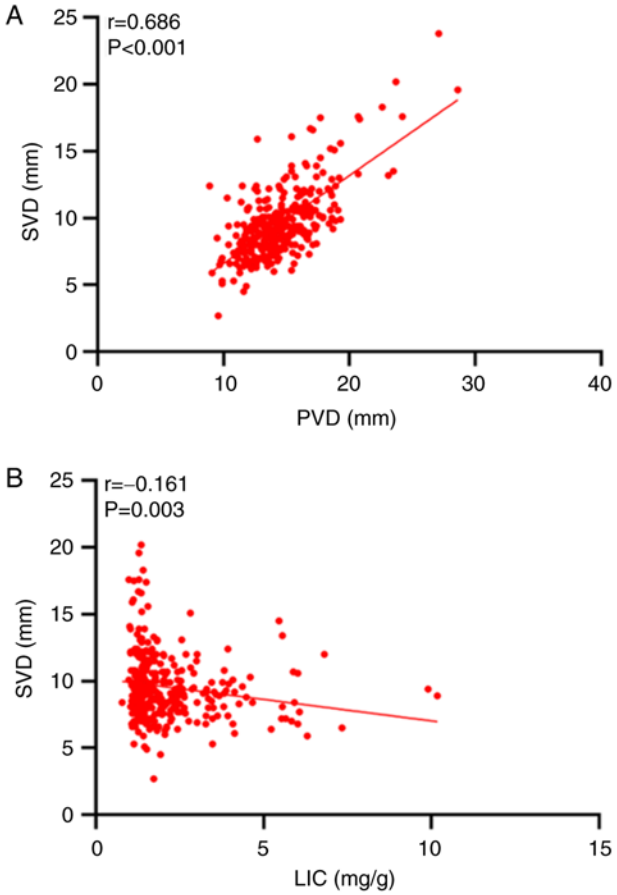

Figure S2. Scatter plot showing the correlation between the MRI features (A) PDFF, (B) LIC, (C) PVD and (D) SVD and serum parameters and indices. LIC, liver iron content; PDFF, proton density fat fraction; PVD, portal vein diameter; SVD, splenic vein diameter; AST, aspartate aminotransferase; ALP, alkaline phosphatase; PLT, platelet count; TB, total bilirubin; ALB, albumin; INR, international normalized ratio; FER, serum ferritin; Cr, creatinine; FIB-4, fibrosis index based on four factors, APRI, aspartate aminotransferase to plateletratio index, ALBI, albumin-bilirubin score, AAR, aspartate aminotransferase-alanine aminotransferase ratio; GPR, gamma glutamyl transpeptidase -plateletratio.

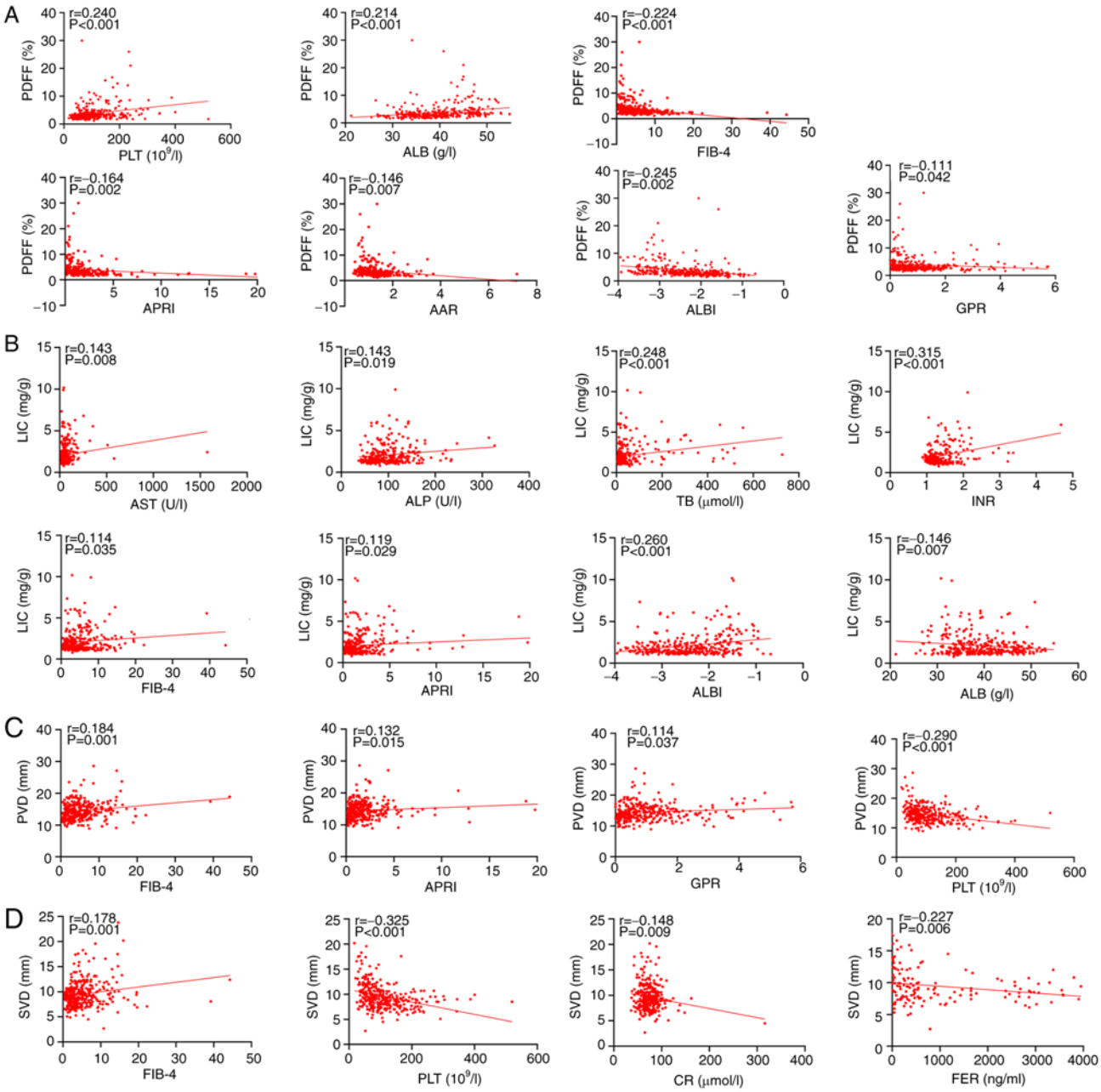

Figure S3. ROC curves of predictive models using a joint indicator of LIC and PDFF for the identification of liver cirrhosis estimated by different non-invasive fibrosis assessment tools (APRI ≥2, ALBI ≥-2.190) among patients with chronic hepatitis B. The area under the ROC curve for each predictive model was 0.717 (95%CI:0.657-0.777) and 0.696 (95%CI:0.636-0.757), P<0.001, respectively. LIC, liver iron content; PDFF, proton density fat fraction; APRI, aspartate aminotransferase-to-platelet ratio index; ALBI, albumin-bilirubin index; ROC, receiver operating characteristic.

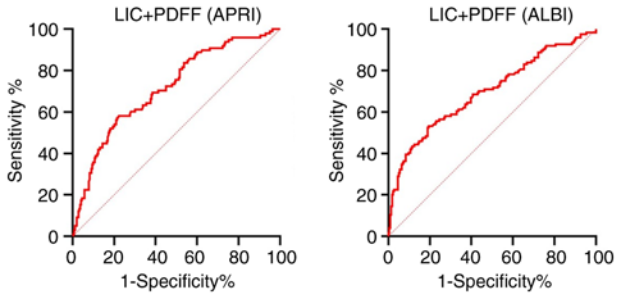

Figure S4. (A) Scatter plot showing the correlation between LIC and FER. (B) ROC curve for the identification of LIC by the FER; the area under the ROC curve was 0.858 (P<0.001). LIC, liver ironcontent; FER, serum ferritin; ROC, receiver operating characteristic.