Table 2

Common non-invasive serum markers of fibrosis

Serum marker panels of fibrosis	Test components	Conditions in which test has been applied	Sensitivity (> F2)	Specificity (> F2)
Enhanced liver fibrosis (ELF) test[39,40]	Hyaluronic acid, N-terminal propeptide of type III collagen, tissue inhibitors of matrix metalloproteinase-1	HCV, HBV ALD, NAFLD PBC	87-90%	27-77%
FIBROSpect II[14]	Hyaluronic acid, tissue inhibitors of matrix metalloproteinase-1, alpha 2-macroglobulin	HCV NAFLD	70–83%	66–79%
FibroTest/FibroSure[41]	γ2-macroglobulin, γ2-globulin, γ-globulin, apolipoprotein A1, γ glutamyl transferase, total bilirubin	HCV	75%	85%
Fib-4[42]	(Age x AST)/((platelet count) x (ALT)$^{1/2}$)	NAFLD, HCV ± HIV	70%	97%
Serum hyaluronic acid level, serum AST and albumin level (SHASTA) index[15]	Hyaluronic acid, AST, albumin	HCV HIV+HCV	100%	52%
Aspartate aminotransferase to platelet ratio index (APRI)[43]	(AST elevation/platelet count) x 100	HCV, HCV+HIV NAFLD	76%	72%
NAFLD fibrosis score[44,45]	Age, body mass index, blood glucose levels, aminotransferase levels, platelet count, and albumin	NAFLD	77%	71%
Hepascore[46]	Age, gender, bilirubin, GGT, hyaluronic acid, γ2-macroglobulin	HCV ALD	63%	89%
BARD score[47]	BMI, AST:ALT ratio, type 2 diabetes	NAFLD	85%	67%

Key: HCV = hepatitis C virus; HBV = hepatitis B virus; ALD = alcoholic liver disease; NAFLD = non-alcoholic fatty liver disease; PBC = primary biliary cirrhosis; HIV = human immunodeficiency virus; F2 = fibrosis ± septal growth of most portal areas on liver biopsy (see table 5, p18)