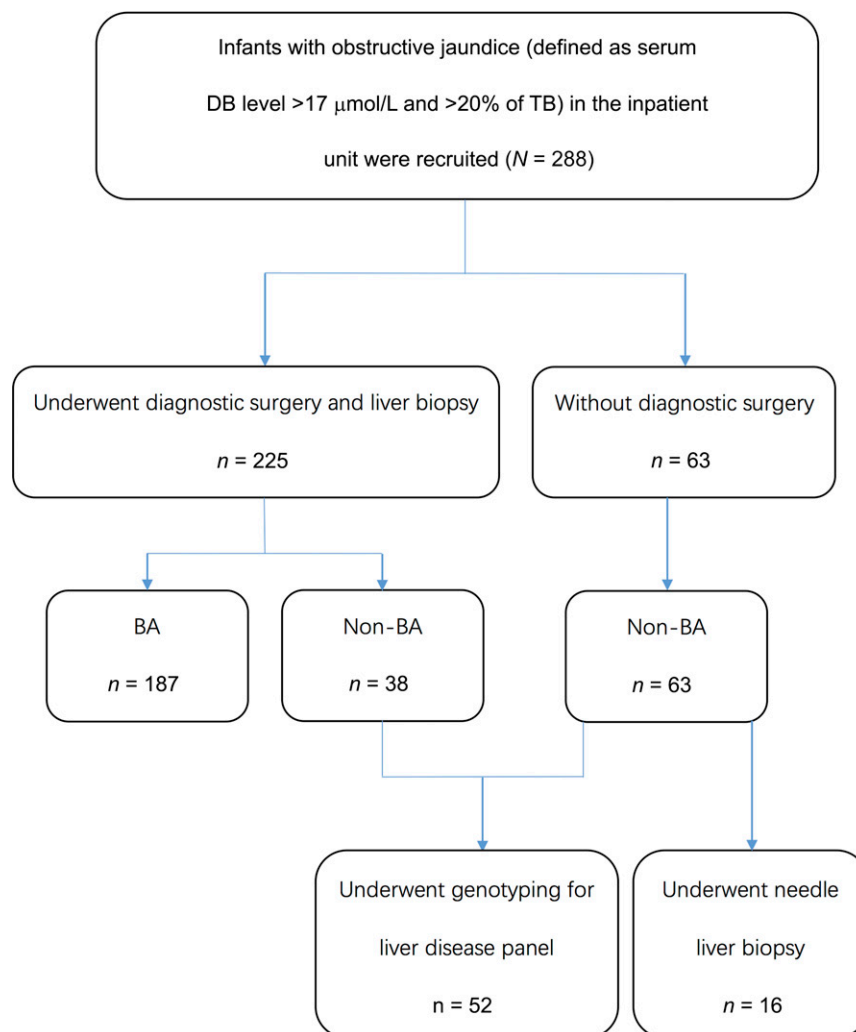
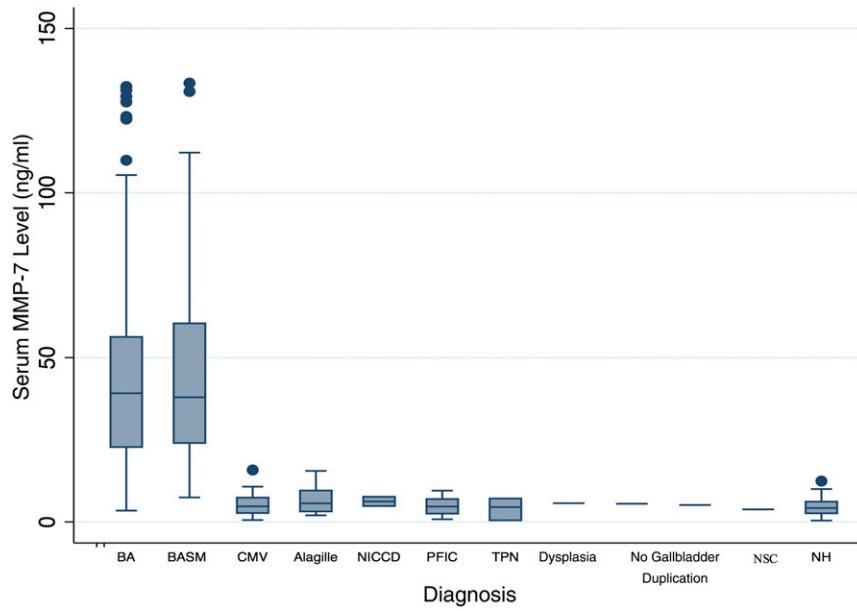


Supplemental Information



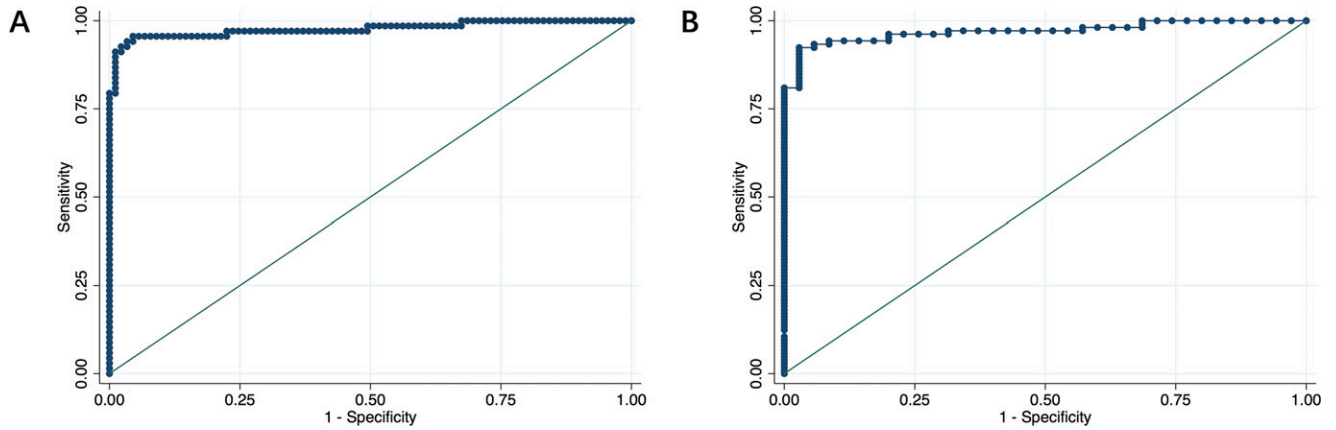
SUPPLEMENTAL FIGURE 3

Flowchart of the study patients and design.



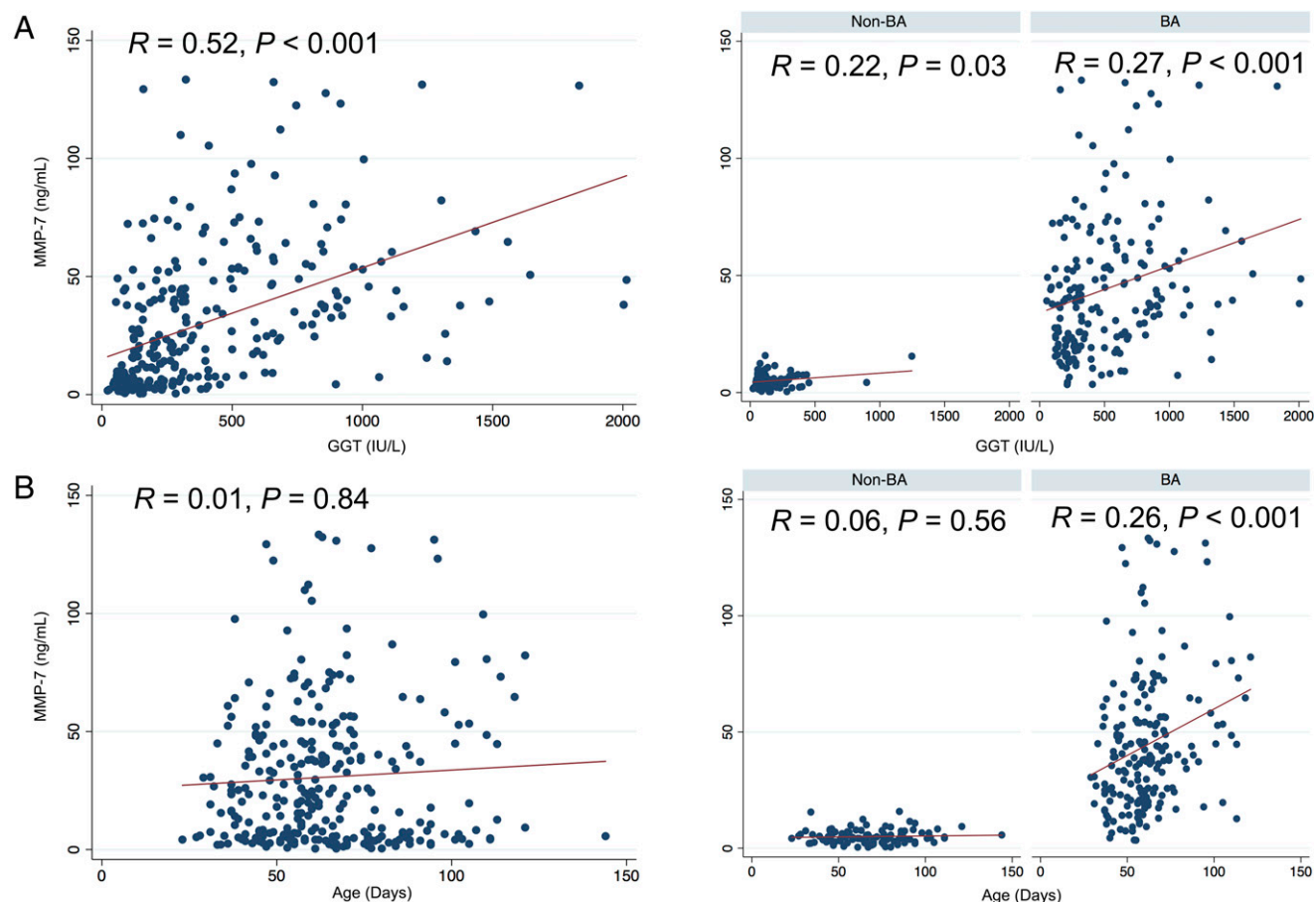
SUPPLEMENTAL FIGURE 4

Serum MMP-7 level for different diagnoses. Boxes and whiskers represent the median and IQR. Dysplasia includes intrahepatic bile duct dysplasia. BASM, biliary atresia splenic malformation syndrome or BA with other congenital malformations; NH, idiopathic cholestasis; NICCD, citrin deficiency; NSC, neonatal sclerosing cholangitis; PFIC, progressive familial intrahepatic cholestasis; TPN, parenteral nutrition-associated cholestasis.



SUPPLEMENTAL FIGURE 5

Diagnostic accuracy for MMP-7 in subgroups. A, ROC plots in the subgroup of patients with GGT <300 IU/L. The AUC value is 0.9767 ($N = 157$; AUC: 0.9767 [0.9515, 1.0000]; cutoff: 10.46 ng/mL; sensitivity: 95.59%; specificity: 95.51%). B, ROC plots in the subgroup of patients between 30 and 60 days of age. The AUC value is 0.9701 ($N = 140$; AUC: 0.9701 [0.9452, 0.9950]; cutoff: 10.37 ng/mL; sensitivity: 92.38%; specificity: 97.14%).

**SUPPLEMENTAL FIGURE 6**

Correlation of MMP-7 and other clinical and biochemical characteristics. A, MMP-7 was correlated to GGT in all groups. B, MMP-7 was correlated to age only in the BA group. The R and P values are shown.

[AQ14]

SUPPLEMENTAL TABLE 4 Diagnosis and MMP-7 Concentration of the Non-BA Group

	Non-BA ($N = 101$)	Non-BA With Surgery ($N = 38$)	Non-BA Without Surgery ($N = 63$)	Median MMP-7 Concentration (ng/mL)
CMV infection	26	7	19	4.73 (IQR: 2.70–6.39)
Alagille syndrome	8	7	1	5.65 (IQR: 3.19–9.55)
NICCD	2	0	2	6.23 (IQR: 4.81–7.65)
PFIC	6	2	4	4.68 (IQR: 2.52–6.97)
PN-associated cholestasis	3	0	3	4.80 (IQR: 0.48–7.12)
Intrahepatic bile duct dysplasia	1	1	0	5.69
No gallbladder	1	1	0	5.53
Gallbladder duplication	1	1	0	5.13
NSC	1	0	1	3.81
Idiopathic cholestasis	52	19	33	4.22 (IQR: 2.62–6.16)

NICCD, neonatal intrahepatic cholestasis caused by citrin deficiency; NSC, neonatal sclerosing cholangitis; PFIC, progressive familial intrahepatic cholestasis; PN, parenteral nutrition.

SUPPLEMENTAL TABLE 5 MMP-7 Concentration of the BA Group

	Median (ng/mL)	IQR
BASM or with other malformations ($n = 34$)	37.92	24.01–60.40
BA without other malformations ($n = 153$)	39.15	22.78–56.28
BA total ($n = 187$)	38.89	22.96–56.47

BASM, biliary atresia splenic malformation.