Deficiency	Mutated gene	Typical clinical characteristics	Characteristic histology at diagnosis	Typical clinical outcomes
FIC1	ATP8B1	Multisystem disease Normal γGT Only modest elevation of transaminases	Bland canalicular cholestasis Coarsely granular canalicular bile	Moderate rate of progression Post-transplant hepatic steatosis and diarrhea
BSEP	ABCB11	Normal γGT High risk of HCC High incidence of gallstones	Giant cell transformation	Moderate to rapid progression Allo-antibody formation after transplant in some
MDR3	ABCB4	Progressive cholangiopathy Elevated γGT	Cholangiolytic changes	Highly variable rate of progression
TJP2	TJP2	Some extra hepatic features Near normal γGT	Bland cholestasis	Rapid progression
FXR	NR1H4	Early onset coagulopathy Normal γGT Markedly elevated AFP	Intralobular cholestasis Ductular reaction Giant cell transformation	Very rapid progression Post-transplant hepatic steatosis
МҮО5В	МҮО5В	Normal γGT Variable degree of intestinal involvement	Giant cell change Hepatocellular and canalicular cholestasis	Slow progression

Table 1. Summary of the typical features of progressive familial intrahepatic cholestasis associated with different genetic etiologies.

 γ -glutamyltranspeptidase (γ GT); hepatocellular carcinoma (HCC); α -fetoprotein (AFP)