

Table 72: Test 2. Index tests (ALT, AST, GGT) versus Ultrasound definition† to detect CFLD

Number of studies (Reference)	Study design	N	Risk of bias	Inconsistency	Indirectness	Imprecision	Sensitivity % (95% CI)	Specificity % (95% CI)	Positive likelihood ratio (95% CI)	Negative Likelihood ratio (95% CI)	AUROC	Quality
Test 2. ALT using an unspecified cutoff in a population of children												
1 (Patriquin 1999)	Cohort study	195	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	63.2 (95% CI: 48.0-76.3)*	79.0 (95% CI: 75.3-82.2)*	3.0 (95% CI: 1.95-4.28)*	0.47 (95% CI: 0.29-0.69)*	Not reported	HIGH
Test 2. AST using an unspecified cutoff in a population of children												
1 (Patriquin 1999)	Cohort study	195	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	47.4 (95% CI: 33.4-60.6)*	87.9 (95% CI: 84.5-91.1)*	3.91 (95% CI: 2.16-6.80)*	0.60 (95% CI: 0.43-0.79)*	Not reported	HIGH
Test 2. GGT using an unspecified cutoff in a population of children												
1 (Patriquin 1999)	Cohort study	195	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	50.0 (95% CI: 36.2-62.4)*	90.4 (95% CI: 87.1-93.4)*	5.23 (95% CI: 2.80-9.53)*	0.55 (95% CI: 0.40-0.73)*	Not reported	HIGH

Abbreviations: AST: aminotransferase, ALT: alanine aminotransferase, AUROC: area under the ROC curve; CFLD: cystic fibrosis liver disease; CI: confidence interval; GGT: gamma glutamyltransferase

* Calculated by the NGA from data available in the study report

†Diagnosis of CFLD: Ultrasound signs were interpreted as follows: hypoechogenicity with prominent portal tracts as oedema, hyperechogenicity as steatosis, hyperechogenicity with increased attenuation and nodules within or at the edge of the liver as cirrhosis. Signs of portal hypertension also were sought and Doppler US used to assess presence and direction of blood flow and detection of oesophageal varices.