

## Supplementary material S1

### Summary of selection criteria for first adult liver transplantation in the UK and Ontario, Canada

Indication	UK Criteria	Ontario, Canada Criteria
ALF	<ul style="list-style-type: none"> <li>• Paracetamol poisoning               <ul style="list-style-type: none"> <li>- pH &lt;7.25 24 hours after overdose and after fluid resuscitation</li> <li>- PT &gt;100s (INR &gt;6.5) and creatinine &gt;300 µmol/L or anuria and grade 3–4 encephalopathy</li> <li>- arterial lactate &gt;5 mmol/L on admission and &gt;4 mmol/L 24 hours after and clinical encephalopathy</li> <li>- deterioration (e.g. ↑ICP, FiO<sub>2</sub> &gt;50%, ↑inotrope requirements) and 2 of the following 3: PT &gt;100s (INR &gt;6.5), serum creatinine &gt;300 µmol/L or anuria, or grade 3–4 encephalopathy</li> </ul> </li> <li>• Non-paracetamol aetiologies: clinical encephalopathy and               <ul style="list-style-type: none"> <li>- PT &gt;100 (INR &gt;6.5) or</li> <li>- three of the following: age &gt;40 years, PT &gt;50s (INR &gt;3.5), jaundice to encephalopathy time &gt;7 days or bilirubin &gt;300µmol/L</li> </ul> </li> <li>• Wilson’s disease: coagulopathy and encephalopathy</li> <li>• Budd-Chiari syndrome: coagulopathy and encephalopathy</li> </ul>	<ul style="list-style-type: none"> <li>• King’s College Criteria or other validated criteria</li> </ul>
Decompensated Cirrhosis	Any aetiology with a UKELD score ≥49	Any aetiology with a Na-MELD score ≥15
HCC	<ul style="list-style-type: none"> <li>• Single tumour ≤5cm</li> <li>• Up to 5 tumours all ≤3cm</li> <li>• Single tumour &gt;5cm and ≤7cm with no evidence of tumour progression over a 6-month period with or without locoregional therapy (AFP ≤1,000IU/ml, tumour rupture, extra-hepatic spread and macroscopic vascular invasion are absolute contraindications)</li> </ul>	<ul style="list-style-type: none"> <li>• TTV ≤145cm<sup>3</sup> and AFP ≤1,000 IU/mL (extra-hepatic spread, vascular invasion and HCC mixed with predominance of cholangiocarcinoma are absolute contraindications)</li> </ul>
Other	<ul style="list-style-type: none"> <li>• Variant syndrome with a UKELD score &lt;49               <ul style="list-style-type: none"> <li>- diuretic resistant ascites</li> <li>- chronic hepatic encephalopathy</li> <li>- intractable pruritus</li> <li>- hepatopulmonary syndrome</li> <li>- recurrent cholangitis</li> <li>- polycystic liver disease</li> <li>- familial amyloid polyneuropathy</li> <li>- familial hypercholesterolaemia</li> <li>- hepatic epithelioid haemangioendothelioma</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Na-MELD score 11 – 14 and deemed to have poor prognosis that is not captured by the MELD score (e.g. recurrent cholangitis, refractory ascites)</li> <li>• Complications of end-stage liver disease or portal hypertension (e.g. hepatopulmonary syndrome)</li> <li>• Metabolic disorders (e.g. Hereditary Transthyretin Amyloidosis, Maple Syrup Urine Disease and Hyperoxaluria type I)</li> <li>• Selected cholangiocarcinoma (within the Mayo Clinic protocol)</li> <li>• Selected neuroendocrine liver tumours</li> <li>• Selected hepatoblastomas</li> </ul>

AFP = α-fetoprotein; ALF = acute liver failure; FiO<sub>2</sub> = fraction of inspired oxygen; HCC = hepatocellular carcinoma; ICP = intracranial pressure; INR = international normalised ratio; Na-MELD = sodium model for end-stage liver disease score; PT = prothrombin time; TTV = total tumour volume; UKELD = United Kingdom end-stage liver disease score.