The World Health Organisation defines cirrhosis as a diffuse process characterised by fibrosis and the conversion of normal liver architecture into structurally abnormal nodules. The following guidelines concern uncomplicated cirrhosis only, i.e. the stage of the disease when patients have few or no symptoms.

**MAIN CAUSES OF LIVER DISEASE**

- Excessive consumption of alcohol over a long period
- Chronic hepatitis C virus (HCV) infection
- Metabolic syndrome
- Chronic hepatitis B virus (HBV) infection
- Genetic haemochromatosis
- Autoimmune diseases (particularly primary biliary cirrhosis)

**TYPES OF ABNORMALITIES SUGGESTING CIRRHOSIS**

- Clinical (hard liver, spider angioma, splenomegaly)
- Biological (thrombopenia, reduction in prothrombin time)
- Endoscopic (oesophageal varices)
- Imaging (irregular liver surface, liver atrophy or hypertrophy, signs of portal hypertension)

**BIOLOGICAL TESTS BEFORE REFERRING THE PATIENT TO A SPECIALIST**

- Haemogram
- Bilirubin (total), serum ASAT, ALAT, γGT and alkaline phosphatase
- Protein electrophoresis
- Prothrombin time
- Glucose, triglycerides, cholesterol
- Ferritin and transferrin saturation coefficient
- HBs antigen, anti-HBs and anti-HBc antibodies
- Anti-HCV antibodies
Chronic untreated hepatitis C patients with no comorbidities:

- 1st line test: a non-invasive procedure (Fibroscan® or Fibrotest®)
- 2nd line test: a second non-invasive procedure and/or a liver biopsy
- Other patients: a liver biopsy

**INITIAL STATEMENT OF CIRRHOSIS**

**Biological tests**
- Bilirubin (total), serum ASAT, ALAT, γGT and alkaline phosphatase
- Prothrombin time, albumin
- Haemogram
- α−foetoprotein

**Morphological examinations**
- Abdominal Doppler ultrasound by an experienced operator
- Oesophageal, gastric and duodenal endoscopy

**DIAGNOSTIC TOOLS TO CONFIRM THE DIAGNOSIS**

<table>
<thead>
<tr>
<th>Tool</th>
<th>Principle</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Fibrotest® | Composite score: age, gender and 5 biomarkers (α2-macroglobulin, haptoglobin, apolipoprotein A1, bilirubin (total), γGT) | • Use appropriate assay techniques; ensure proper quality control and specimen storage  
• Interpret results with caution: no intercurrent illness, in particular no acute inflammation, haemolysis, Gilbert’s syndrome, no taking of medicines causing elevated bilirubin levels |
| Transient elastography (Fibroscan®) | Ultrasound technique measuring the speed of propagation of a shear wave in the liver (“liver stiffness”) | • Equipment installed in only a few centres in France  
• Does not provide a reliable result in obese patients or in patients, such as children, with a narrow intercostal space |
| Liver biopsy | Histological examination | • Sampling errors may give rise to false negatives (specimen too small); inter-observer and intra-observer variations  
• Constraints due to stay in hospital and to precautions to be taken before performing the procedure  
• Risk of complications (especially bleeding) |
# SEVERITY OF CIRRHOSIS

## Child-Pugh score

<table>
<thead>
<tr>
<th></th>
<th>1 point</th>
<th>2 points</th>
<th>3 points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hepatic encephalopathy</strong></td>
<td>None</td>
<td>Grade I and II</td>
<td>Grade III and IV</td>
</tr>
<tr>
<td><strong>Ascites</strong></td>
<td>None</td>
<td>Slight</td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Bilirubin (total) (μmol/l)</strong></td>
<td>&lt; 35</td>
<td>35 -50</td>
<td>&gt; 50</td>
</tr>
<tr>
<td><strong>Serum Albumin (g/l)</strong></td>
<td>&gt; 35</td>
<td>28 - 35</td>
<td>&lt; 28</td>
</tr>
<tr>
<td><strong>Prothrombin ratio (%)</strong></td>
<td>&gt; 50</td>
<td>40 - 50</td>
<td>&lt; 40</td>
</tr>
</tbody>
</table>


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The higher the score, the more severe the disease (class A: 5-6 points; class B: 7-9 points; class C: 10-15 points).

This Quick Reference Guide is an English summary of the main points of the French guidelines: “Critères diagnostiques et bilan initial de la cirrhose non compliquée”. October 2006. The full guidelines and supporting document (in French) can be found at [www.has-sante.fr](http://www.has-sante.fr).