**Checklist for pre-treatment assessment for people with HCV infection**

**HCV virology:**
- Anti-HCV (serology)
- HCV RNA level (quantitative)
- HCV genotype
  - Indicates HCV exposure
  - Confirms HCV infection
  - Determines treatment regimen

**HCV treatment history — previous regimen and response**
- Determines treatment regimen and duration

**Potential for non-adherence?**
- Consider medical and social issues that may be barriers to medication adherence

**Alcohol intake history**
- Cofactor for cirrhosis

**Check for drug–drug interactions**
- www.hep-druginteractions.org
  - Includes prescribed, over-the-counter, herbal, illicit drugs

**Pregnancy discussion**

**Weight and body mass index**
- Non-alcoholic fatty liver disease is a cofactor for cirrhosis

**Signs of chronic liver disease**
- FBE
  - Baseline haemoglobin level
  - Low platelets — suspect portal hypertension
- LFTs and INR
  - Low albumin, raised bilirubin, raised INR suggest advanced cirrhosis
- U&Es and eGFR
  - Sofosbuvir is not recommended if eGFR < 30 mL/min/1.73 m²
  - Ribavirin is renally cleared and needs dose reduction if eGFR < 50 mL/min/1.73 m²

**HBV (HBsAg, anti-HBc, anti-HBs), HIV, HAV serology**
- Specialist referral is recommended for people with HBV or HIV coinfection
  - If seronegative, vaccinate against HAV, HBV

**Cirrhosis assessment**
- FibroScan
- APRI
  - Thresholds consistent with no cirrhosis:
    - Liver stiffness < 12.5 kPa
    - APRI < 1.0
  - Specialist referral is recommended for people with cirrhosis

**Electrocardiogram if ribavirin therapy planned and patient is aged > 50 years OR has cardiac risk factors**
- Screen for ischaemic heart disease

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**On-treatment and post-treatment monitoring for virological response**

**Routine monitoring for a 12-week treatment regimen:**
- Week 0
  - FBE, U&Es, LFTs, HCV RNA level (quantitative)
- Week 4*
  - LFTs
  - At each on-treatment visit, assess for:
    - Medication adherence
    - Treatment adverse effects
    - Drug–drug interactions
- Week 12 (EOT)
  - LFTs
- Week 12 after EOT (SVR)
  - LFTs, HCV PCR (qualitative)

* People treated with elbasvir plus grazoprevir should have LFTs at Week 8 to screen for hepatotoxicity. The Week 8 LFTs may be done as an alternative to Week 4 LFTs.
- Patients taking ribavirin may require FBE at Week 2 and Week 4 and then every 4 weeks.
- Patients with cirrhosis require HCC screening with liver ultrasound every 6 months.
- EOT = end of treatment. SVR = sustained virological response at least 12 weeks after treatment (cure).
- FBE = full blood examination. U&E = urea and electrolyte. LFT = liver function test. INR = international normalised ratio. HCV = hepatitis C virus. PCR = polymerase chain reaction.

**Ongoing monitoring of people after successful hepatitis C treatment outcome (SVR)**

**SVR, no cirrhosis and normal LFT results (males, ALT < 30 U/L; females, ALT < 19 U/L):**
- People who are cured do not require clinical follow-up for hepatitis C

**SVR and abnormal LFT results (males, ALT ≥ 30 U/L; females, ALT ≥ 19 U/L):**
- Patients with persistently abnormal LFT results require evaluation for other liver diseases and should be referred for gastroenterology review.
- Investigations to consider include: fasting glucose level, fasting lipid levels, iron studies, ANA, ASMA, anti-LKM antibodies, total IgG and IgM, AMA, coeliac serology, copper level, caeruloplasmin level and α1-antitrypsin level

**SVR and cirrhosis:**
- Patients with cirrhosis require long-term monitoring and should be enrolled in screening programs for:
  - Hepatocellular carcinoma
  - Oesophageal varices
  - Osteoporosis

**SVR = sustained virological response at least 12 weeks after treatment (cure). LFT = liver function test. ALT = alanine aminotransferase. ANA = anti-nuclear antibodies. ASMA = anti-smooth muscle antibodies. LKM = liver-kidney microsome. AMA = anti-mitochondrial antibody.**

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**People who do not respond to hepatitis C treatment**
- Specialist referral recommended
### Treatment protocols for people with hepatitis C virus (HCV) infection and compensated liver disease, including people with HCV–HIV coinfection

<table>
<thead>
<tr>
<th>Regimen</th>
<th>HCV genotype</th>
<th>No cirrhosis</th>
<th>Treatment-naive</th>
<th>Treatment-experienced*</th>
<th>Cirrhosis</th>
<th>Treatment-naive</th>
<th>Treatment-experienced*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofosbuvir 400 mg, orally, daily  + Ledipasvir 90 mg, orally, daily</td>
<td>1a/b</td>
<td>8 or 12 weeks†</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>24 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sofosbuvir 400 mg, orally, daily  + Daclatasvir 60 mg, orally, daily†</td>
<td>1a/b</td>
<td>12 weeks</td>
<td>12 weeks or 24 weeks†</td>
<td>12 weeks + ribavirin or 24 weeks</td>
<td>12 weeks + ribavirin or 24 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Ribavirin 1000/1200 mg, orally, daily‡</td>
<td>1b</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ombitasvir 25 mg, orally, daily  + Dasabuvir 250 mg, orally, twice daily†</td>
<td>1a</td>
<td>12 weeks + ribavirin</td>
<td>12 weeks + ribavirin</td>
<td>12 weeks + ribavirin</td>
<td>12 weeks + ribavirin**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Ribavirin 1000/1200 mg, orally, daily‡</td>
<td>1b</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elbasvir 50 mg, orally, daily  + Grazoprevir 100 mg, orally, daily†</td>
<td>1a</td>
<td>12 weeks</td>
<td>12 weeks or 16 weeks + ribavirin (on-treatment virological failure)</td>
<td>12 weeks</td>
<td>12 weeks (relapser) or 16 weeks + ribavirin (on-treatment virological failure)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Ribavirin 1000/1200 mg, orally, daily‡</td>
<td>1b</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sofosbuvir 400 mg, orally, daily  + Ribavirin 1000/1200 mg, orally, daily‡</td>
<td>2</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sofosbuvir 400 mg, orally, daily  + Daclatasvir, 60 mg, orally, daily†</td>
<td>3</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks + ribavirin or 24 weeks</td>
<td>12 weeks + ribavirin or 24 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Ribavirin 1000/1200 mg, orally, daily‡</td>
<td>3</td>
<td>24 weeks</td>
<td>24 weeks</td>
<td>24 weeks</td>
<td>24 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elbasvir 50 mg, orally, daily  + Grazoprevir 100 mg, orally, daily†</td>
<td>4</td>
<td>12 weeks</td>
<td>12 weeks (relapser) or 16 weeks + ribavirin (on-treatment virological failure)</td>
<td>12 weeks</td>
<td>12 weeks (relapser) or 16 weeks + ribavirin (on-treatment virological failure)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Ribavirin 1000/1200 mg, orally, daily‡</td>
<td>4</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sofosbuvir 400 mg, orally, daily  + Peginterferon-alfa, subcutaneously, weekly  + Ribavirin 1000/1200 mg, orally, daily‡</td>
<td>3, 4, 5, 6</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
<td>12 weeks</td>
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</tr>
</tbody>
</table>

* Treatment experience generally refers to peginterferon-alfa plus ribavirin ± first-generation protease inhibitors (relapser = patient who failed to achieve SVR despite achieving an end-of-treatment response; on-treatment virological failure = patient who has had a null response, partial response, virological breakthrough or rebound, or intolerance to prior treatment). † 8 weeks may be considered if HCV RNA < 6 × 10^6 IU/mL in people with no cirrhosis who are treatment-naive. ‡ Daclatasvir dose modification is required when used in combination with specific antiretroviral therapies for HIV (see full consensus statement). § Ribavirin dosing is weight-based; recommended dose is 1000 mg for people weighing < 75 kg and 1200 mg for people weighing ≥ 75 kg. ¶ Recommended treatment duration for sofosbuvir plus daclatasvir (no ribavirin) for people who have failed treatment with a protease inhibitor + peginterferon-alfa + ribavirin is 24 weeks, including people with cirrhosis and people with no cirrhosis; recommended treatment duration for people with no cirrhosis who have previously failed peginterferon-alfa + ribavirin is 12 weeks. ** Recommended treatment duration for paritaprevir–ritonavir, ombitasvir, dasabuvir (PrOD) plus ribavirin in people with genotype 1a HCV and cirrhosis who have had a previous null response to peginterferon-alfa and ribavirin therapy is 24 weeks. PrOD therapy is not recommended for people who did not respond to previous therapy that included an HCV protease inhibitor or an NSSA inhibitor. Notes: Sofosbuvir is not recommended for patients with an estimated glomerular filtration rate < 30 mL/min/1.73 m². Dose reduction or dose interruption of direct-acting antiviral therapy is not recommended. Dose reduction of ribavirin for the management of symptomatic anaemia according to the product information is appropriate and will not reduce the likelihood of SVR. The recommended treatment regimens differ in the setting of decompensated liver disease (Child-Pugh score ≥ B7) (see full consensus statement).