Cirrhosis

Cirrhosis is an advanced form of liver disease that has many causes, not just chronic hepatitis C infection. Alcoholism, autoimmune diseases, hepatitis B, and other conditions can result in cirrhosis. In the case of hepatitis C, the virus attacks the liver and may gradually lead to the formation of scar tissue. Early damage is called fibrosis; severe damage is cirrhosis. About 5 to 20 percent of people infected with hepatitis C, will develop cirrhosis over a 20-to-30-year period of the infection.

Although cirrhosis is usually irreversible, reversal was observed in nearly half of all hepatitis C-infected people with cirrhosis who were cured. Otherwise, liver transplantation is the only treatment for cirrhosis.

Cirrhosis has two phases, compensated and decompensated. Compensated cirrhosis means that the liver is still functioning relatively well. At this stage, the early symptoms may still be vague and some people may be unaware that they have cirrhosis. The symptoms of compensated cirrhosis include:

- Appetite loss
- Confusion or difficulty thinking
- Dark, cola-colored urine
- Easy bruising and abnormal bleeding
- Edema in the feet and legs (swelling from fluid build-up)
- Fatigue (feeling tired)
- Impotence, shrinking of the testicles, and breast swelling in men
- Itchy skin (pruritus)
- Jaundice (yellowing in the skin, mucous membranes, or eyes)
- Muscle cramping
- Nausea
- Pale or clay-colored stools
- Redness on the palms of the hands
- Spider veins (small red, blue, or purple spidery veins on the skin)
- Weight loss

For information about hepatitis C treatment options for people with compensated cirrhosis, visit: [Hepatitis C Treatment-Naive Recommendations](#) or [Hepatitis C Re-Treatment Recommendations](#). Click on [HCV Treatment Post-Transplantation](#) for information about HCV recurrence following liver transplantation.

 Decompensated cirrhosis means that the liver is not functioning well. Some serious complications that occur with decompensated cirrhosis are:

- Ascites, which is bloating from fluid build-up in the abdomen.
- Hepatic encephalopathy (HE) is a brain disorder that develops when the liver is unable to remove ammonia and other toxins from the body. HE may cause impaired concentration, sleep disturbances, confusion, or coma.
- Spontaneous bacterial peritonitis (SBP) is associated with ascites, an infection of the membrane that covers the abdominal organs.
- Variceal hemorrhage is severe bleeding from enlarged veins in the esophagus and upper stomach.

The level of cirrhosis is sometimes measured with a tool known as the Child-Pugh or Child-Turcotte-Pugh (CTP) score. CTP Class A is the least amount of damage from cirrhosis and is considered compensated. CTP Class B and C are decompensated cirrhosis, with Class C being the most severe. People with decompensated cirrhosis should be referred to a medical provider with expertise in treating this advanced liver disease, ideally in a liver transplant center. Here are recommended hepatitis C treatments for those with decompensated cirrhosis:

AASLD HCV Treatment Recommendations for People with Decompensated Cirrhosis (CTP Class B or C) (Medications are listed first by evidence level according to the [HCVGuidelines.org](#), then listed alphabetically.)
<table>
<thead>
<tr>
<th>Genotype 1</th>
<th>treatment-naive and -experienced</th>
<th>Recommended</th>
<th>Alternative</th>
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|            |                                 | • Epclusa* + ribavirin for 12 weeks  
 |            |                                 | • Harvoni* + low initial dose of ribavirin for 12 weeks  
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 |            |                                 | • Daklinza + Sovaldi for 24 weeks  
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|            | who failed prior Sovaldi- or NS5A-based regimen | • Epclusa* + ribavirin for 24 weeks  
| Genotype 3 | treatment-naive and -experienced | • Daklinza + Sovaldi + low initial dose ribavirin for 12 weeks  
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|            |                                 | • Epclusa* for 24 weeks  
 |            |                                 | • Daklinza + Sovaldi for 24 weeks  
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 |            |                                 | • Harvoni* + low initial dose of ribavirin for 12 weeks  
 |            |                                 | • Daklinza + Sovaldi + low initial dose ribavirin for 12 weeks  
| Genotype 4 | treatment-experienced who failed prior Sovaldi-based regimen | • Epclusa* + ribavirin for 24 weeks  
 |            |                                 | • Harvoni* + low initial dose of ribavirin for 24 weeks  
|            | For those who are ineligible to take ribavirin:  
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 |            |                                 | • Harvoni* for 24 weeks  
 |            |                                 | • Daklinza + Sovaldi for 24 weeks  

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who failed prior Sovaldi- or NS5A-based regimen
Recommended
• Epclusa* + ribavirin for 24 weeks
Alternative

Genotype 3
treatment-naive and -experienced
Recommended
• Daklinza + Sovaldi + low initial dose ribavirin for 12 weeks
• Epclusa* + ribavirin for 12 weeks
Alternative
For those who are ineligible to take ribavirin:
• Epclusa* for 24 weeks
• Daklinza + Sovaldi for 24 weeks

Genotype 3
who failed prior Sovaldi- or NS5A-based regimen
Recommended
• Epclusa* for 24 weeks
Alternative

Genotype 4
treatment-naive and -experienced
Recommended
• Epclusa* + ribavirin for 12 weeks
• Harvoni* + low initial dose of ribavirin for 12 weeks
• Daklinza + Sovaldi + low initial dose ribavirin for 12 weeks
Alternative
For those ineligible to take ribavirin:
• Epclusa* for 24 weeks
• Harvoni* for 24 weeks
• Daklinza + Sovaldi for 24 weeks

Genotype 4
treatment-experienced who failed prior Sovaldi-based regimen
Recommended
• Epclusa* + ribavirin for 24 weeks
• Harvoni* + low initial dose of ribavirin for 24 weeks
Alternative

Genotype 5
Recommended
• Epclusa* + ribavirin for 12 weeks
• Harvoni* + low initial dose of ribavirin for 12 weeks
• Daklinza + Sovaldi + low initial dose ribavirin for 12 weeks
Alternative
For those ineligible to take ribavirin:
• Epclusa* for 24 weeks
• Harvoni* for 24 weeks
• Daklinza + Sovaldi for 24 weeks

Genotype 5
treatment-experienced who failed prior Sovaldi-based regimen
Recommended
• Epclusa* + ribavirin for 24 weeks
• Harvoni* + low initial dose of ribavirin for 24 weeks
Alternative
n/a
Genotype 6

Recommended

• Epclusa* + ribavirin for 12 weeks
• Harvoni* + low initial dose of ribavirin for 12 weeks
• Daklinza + Sovaldi + low initial dose ribavirin for 12 weeks

For those ineligible to take ribavirin:

• Epclusa* for 24 weeks
• Harvoni* for 24 weeks
• Daklinza + Sovaldi for 24 weeks

Alternative

Genotype 6 treatment-experienced who failed prior Sovaldi-based regimen

Recommended

• Epclusa* + ribavirin for 24 weeks
• Harvoni* + low initial dose of ribavirin for 24 weeks

Alternative

*Generic version is available in the United States.

Medications that are NOT recommended for people with decompensated cirrhosis:

• Regimens containing peginterferon
• Monotherapy with peginterferon, ribavirin or a direct-acting antiviral
• Regimens using Incivek, Mavyret, Olysio, Technivie, Victrelis, Viekira, or Zepatier

Last Reviewed: March 11, 2019