

Genotype 3: An Unmet Need for Some

An examination of options for hepatitis C patients with genotype 3, especially for those who failed prior treatment. This article originally appeared in the [HCV Advocate](#)

July 14, 2015 By [Alan Franciscus](#)

✘ While conducting a workshop in New England, I was asked a question about genotype 3 treatment for people who are treatment experienced and had cirrhosis—a question I am frequently asked. At this time, we do not have an interferon-free treatment with high cure rates for this particular group of people with hepatitis C. This is an unmet medical need for a large group of people in the United States and Worldwide. I am asked this question at almost every workshop, which surprises me.

There are many drugs in development that hold the promise to solve this problem. In the meantime, there is a solution—the combination of Sovaldi, pegylated interferon and ribavirin. When I bring up interferon, I get the cringe reaction. It is a very understandable reaction. However, there are a couple of serious points to consider:

- Cirrhosis can be a life-threatening event. You do not want to wait—If you have genotype 3 and cirrhosis you should consider taking action now
- Genotype 3 leads to the formation of steatosis (fatty liver)—successful treatment reduces or eliminates steatosis
- Steatosis can accelerate HCV disease progression—by itself steatosis can lead to cirrhosis
- People with genotype 3 are at increased the risk for liver disease progression and liver cancer
- Pegylated interferon and ribavirin can be difficult to tolerate, but the majority of side effects occur after 12 weeks
- The side effects of pegylated interferon and ribavirin can be managed successfully especially if the medical provider and patient are proactive

Interferon-Free Therapy

The current standard of care for genotype 3 is the combination of Sovaldi (sofosbuvir) plus ribavirin for 24 weeks. The cure rates for treatment experienced patients without cirrhosis are 85%, but for treatment experienced patients with cirrhosis the cure rates are 60%. Clearly, genotype 3 patients who are

treatment experienced with cirrhosis are in need of better treatment options. I have listed below two studies that include treatment of Sovaldi, pegylated interferon plus ribavirin. **Note:** I only included the information about the cure rates of the genotype 3 treatment experience patients with cirrhosis treated for 12 weeks.

Sovaldi/Peg/RBV

A recently published study in Hepatology "Sofosbuvir with Peginterferon-Ribavirin for 12 Weeks in Previously Treated Patients with Hepatitis C Genotype 2 or 3 and Cirrhosis," -E Lawitz et al. showed very high cure rates.

Note: There were 47 genotype 2 and 3 patients included in the study. Only genotype 3 results are listed below.

There were a total of 24 genotype 3 patients with and without cirrhosis. All were treated for 12 weeks with Sovaldi (sofosbuvir), pegylated interferon plus ribavirin.

The cure rates were the same for those with cirrhosis 83% (10 of 12 pts) and without 83% (10 of 12 pts) in the genotype 3 patients.

The second study was presented at EASL 2015 "Sofosbuvir Plus Peg-IFN/RBV for 12 Weeks vs Sofosbuvir/RBV for 16 or 24 Week in Genotype 3 HCV Infected Patients and Treatment-Experienced Cirrhotic Patients with Genotype 2 HCV: The BOSON Study," -R Graham et al.

Note: This study was a large study of 592 genotype 3 treatment naïve/experienced patients without and without cirrhosis. I will only list the treatment experienced patients with cirrhosis who were treated for 12 weeks with Sovaldi (sofosbuvir), pegylated interferon plus ribavirin and the comparator arm of the treatment experienced patients with cirrhosis who received Sovaldi plus ribavirin without pegylated interferon.

After 12 weeks of treatment the group of patients who were treated with Sovaldi, pegylated interferon plus ribavirin achieved a cure rate of 86% (30 of 35 pts) compared to a cure rate of 47% (17 of 36 pts) for those who received Sovaldi plus ribavirin but without pegylated interferon.

The most common side effects were flu-like symptoms, fatigue, and anemia.

Comments: The addition of pegylated interferon to Sovaldi and ribavirin almost doubled the cure rates for people with genotype 3 in both studies who had cirrhosis and who were treatment experience. The best strategy is to talk with your medical provider and come up with a plan to get treated as soon as possible, seek a possible cure and stop hepatitis C in its tracks.

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