Head-to-head studies identify best treatment regimen for hep C

January 4 2010

In patients with chronic hepatitis C, treatment with peginterferon alpha-2a (PegIFNα2a) plus ribavirin (RBV) better suppresses the virus to undetectable levels in the blood than treatment with peginterferon alpha-2b (PegIFNα2b) plus RBV, according to two new head-to-head studies in *Gastroenterology,* the official journal of the American Gastroenterological Association (AGA) Institute.

Patients with chronic hepatitis C virus (HCV) infection are frequently treated with a combination of peginterferon, either PegIFNα2a or PegIFNα2b, and RBV. In fact, this combination, which is the treatment of choice, has increased sustained virological response (SVR) rates from less than 20 percent to more than 60 percent. Obtaining complete SVR is the goal of treatment for HCV; patients who experience SVR for more than six months often do not experience disease relapse.

While previous trials have demonstrated that both pegylated interferons are effective and safe when administered with RBV, only two randomized clinical studies have compared the efficacy of the peginterferon formulations, neither of which was sufficiently powered to detect a statistically significant difference in SVR rates.

"Head-to-head trials comparing the efficacy and safety of PegIFNα2a or PegIFNα2b in combination with RBV in the treatment of patients with chronic hepatitis C are needed," said Massimo Colombo, MD, of the University of Milan and author of one of the head-to-head studies published in *Gastroenterology*. "There is insufficient evidence to support

conclusions that one therapeutic regimen is superior to the other one."

In the first study, previously untreated patients with chronic hepatitis C were randomly assigned after stratification for HCV genotype to either RBV combined with PegIFNα2a or PegIFNα2b for 24 or 48 weeks, according to virus genotype. Researchers found that overall, the SVR rate was significantly higher in PegIFNα2a than in PegIFNα2b (66 percent versus 54 percent).

"Whether our strategy of RBV dosing, which is at variance with the standard of care for PegIFNα2a treatment, is indeed cost-effective, needs to be prospectively assessed through a pharmaco-economy study," added Dr. Colombo.

Similar results were reported in a second study published in *Gastroenterology*. In this single-center, randomized, head-to-head study, 320 consecutive, treatment-naďve, HCV-RNA-positive patients with chronic hepatitis were randomly assigned to groups given once-weekly subcutaneous PegIFNα2a or PegIFNα2b plus RBV 1,000 mg/day or 1,200 mg/day for 48 weeks or 24 weeks. More patients in the PegIFNα2a group than the PegIFNα2b group achieved SVR (68.8 percent versus 54.4 percent).

In fact, study authors found that in patients with chronic HCV infection, treatment with PegIFNα2a plus RBV produced a significantly higher SVR rate than treatment with PegIFNα2b plus RBV; the safety profile of the two regimens were similar.

"The fact that both of these studies yielded similar and significant results confirms the potential advantages of PegIFNα2a plus RBV versus PegIFNα2b plus RBV," said Antonio Ascione, MD, of Fatebenefratelli Hospital in Naples and lead author of this study. "These advantages may translate to the development of promising new direct anti-viral drugs

against HCV."

More information: i Rumi M et al. Randomized Study of Peginterferon-α2a Plus Ribavarin vs Peginterferon-α2b Plus Ribavarin in Chronic Hepatitis C. Gastroenterol 2010;138:108-115.

ii Ascione A et al. Peginterferon Alpha-2a Plus Ribavirin Is More Effective Than Peginterferon Alpha-2b Plus Ribavarin for Treating Chronic Hepatitis C Virus Infection. Gastroentrol 2010;138:116-122.

Provided by American Gastroenterological Association