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Peginterferon alfa-2b or alfa-2a with ribavirin for treatment of hepatitis C infection.

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- J Hepatol. 2009 Dec;51(6):1097-9.
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Abstract

BACKGROUND: Treatment guidelines recommend the use of peginterferon alfa-2b or peginterferon alfa-2a in combination with ribavirin for chronic hepatitis C virus (HCV) infection. However, these regimens have not been adequately compared. METHODS: At 118 sites, patients who had HCV genotype 1 infection and who had not previously been treated were randomly assigned to undergo 48 weeks of treatment with one of three regimens: peginterferon alfa-2b at a standard dose of 1.5 microg per kilogram of body weight per week or a low dose of 1.0 microg per kilogram per week, plus ribavirin at a dose of 800 to 1400 mg per day, or peginterferon alfa-2a at a dose of 180 microg per week plus ribavirin at a dose of 1000 to 1200 mg per day. We compared the rate of sustained virologic response and the safety and adverse-event profiles between the peginterferon alfa-2b regimens and between the standard-dose peginterferon alfa-2b regimen and the peginterferon alfa-2a regimen. RESULTS: Among 3070 patients, rates of sustained virologic response were similar among the regimens: 39.8% with standard-dose peginterferon alfa-2b, 38.0% with low-dose peginterferon alfa-2b, and 40.9% with peginterferon alfa-2a (P=0.20 for standard-dose vs. low-dose peginterferon alfa-2b; P=0.57 for standard-dose peginterferon alfa-2b vs. peginterferon alfa-2a). Estimated differences in response rates were 1.8% (95% confidence interval [CI], -2.3 to 6.0) between standard-dose and low-dose peginterferon alfa-2b and -1.1% (95% CI, -5.3 to 3.0) between standard-dose peginterferon alfa-2b and peginterferon alfa-2a. Relapse rates were 23.5% (95% CI, 19.9 to 27.2) for standard-dose peginterferon alfa-2b, 20.0% (95% CI, 16.4 to 23.6) for low-dose peginterferon alfa-2b, and 31.5% (95% CI, 27.9 to 35.2) for peginterferon alfa-2a. The safety profile was similar among the three groups; serious adverse events were observed in 8.6 to 11.7% of patients. Among the patients with undetectable HCV RNA levels at treatment weeks 4 and 12, a sustained virologic response was achieved in 86.2% and 78.7%, respectively. CONCLUSIONS: In patients infected with HCV genotype 1, the rates of sustained virologic response and tolerability did not differ significantly

between the two available peginterferon-ribavirin regimens or between the two doses of peginterferon alfa-2b. (ClinicalTrials.gov number, NCT00081770.)