Comparison of two PEG-interferon alpha-2b doses (1.0 or 1.5 microg/kg) combined with ribavirin in interferon-naïve patients with chronic hepatitis C and up to moderate fibrosis

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Health regulatory approval of the 1.5 microg/kg body weight dose of pegylated interferon (PEG-I) alpha-2b in combination with ribavirin for the treatment of chronic hepatitis C was based on a study using PEG-I alpha-2b at doses of only 0.5 and 1.5 microg/kg body weight (BW), in spite of the previously shown flat dose-response curve at doses of > or = 1.0 microg/kg. Our aim was to compare PEG-I alpha-2b 1.0 microg/kg with 1.5 microg/kg, both in combination with ribavirin. Open-label, randomized study in 227 patients with biopsy-proven chronic hepatitis C (Metavir < or = F2), receiving oral ribavirin (400 mg, twice daily) in combination with subcutaneous PEG-I alpha-2b (1.0 or 1.5 microg/kg, once weekly) for 24 weeks (genotype 2 or 3), or 48 weeks (other genotypes), followed by a 24-week drug-free period. Virologic response rates did not differ between the two doses of PEG-I alpha-2b: in patients infected with hepatitis C virus (HCV) genotype 1 or 4 treated with PEG-I 1.0 microg/kg BW, 38% (22/58) had a sustained virologic response compared with 39% (27/70) in the PEG-I 1.5 microg/kg BW dose group (P = ns). The corresponding values in patients infected with HCV genotype 2 or 3 were 71% (39/55) and 81% (29/36) respectively (P = ns). Adverse events led to transient or permanent dose reductions in fewer patients in the 1.0 microg/kg BW dose group (48/113 patients; 42%) than in the 1.5 microg/kg BW dose group (63/106 patients; 59%, P = 0.015). Furthermore, 89% of patients treated for 24 weeks but only 58% of patients treated for 48 weeks (P < 0.001) tolerated the treatment without relevant dose reduction or premature termination. In combination with ribavirin, PEG-I alpha-2b 1.0 microg/kg was as effective as 1.5 microg/kg but was better tolerated in patients with chronic hepatitis C and up to moderate fibrosis.