

The economics of treating chronic hepatitis C patients with peginterferon  $\alpha$ -2a (40 kDa) plus ribavirin presenting with persistently normal aminotransferase

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## Abstract

Peginterferon  $\alpha$ -2a (40 kDa) plus ribavirin is effective at achieving sustained viral response compared with no treatment in patients with chronic hepatitis C (CHC) and persistently normal aminotransferase levels (PNALT). The cost-effectiveness of treating CHC in the setting of PNALT has not been assessed. Disease progression in patients with PNALT was simulated in a Markov model. The rate of fibrosis progression, quality of life and costs for each health state were based on literature estimates. The perspective of the Italian National Health Service was adopted and costs (€2003) and benefits were discounted at 3%. Sensitivity analyses were performed on important parameters. The primary analysis compared combination therapy with peginterferon  $\alpha$ -2a (40 kDa) plus ribavirin to no treatment in a cohort of patients with mean age 45 years, and was based on findings from a multinational, randomized trial in patients with PNALT. In genotype 1 patients, the risk of cirrhosis at 30 years is forecast to fall from 32% with no treatment to 19% with combination therapy, increasing quality-adjusted life years (QALYs) by 0.74 years at an incremental cost per QALY gained of €16 831. The 30-year risk of cirrhosis in genotype 2 or 3 is projected to fall to 9% with combination therapy, an increase in QALYs of 1.34 years, at an incremental cost per QALY gained of €3000. Thus treatment of PNALT with peginterferon  $\alpha$ -2a (40 kDa) plus ribavirin is projected to reduce the incidence of cirrhosis, increase life expectancy and have an acceptable cost-effectiveness ratio from a societal perspective. © 2006 Blackwell Publishing Ltd.

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*Medline is the source for the MeSH terms of this document.*

## Chemicals and CAS Registry Numbers

aminotransferase, 9031-66-7; peginterferon alpha2a, 198153-51-4; ribavirin, 36791-04-5; Alanine Transaminase, EC 2.6.1.2; Antiviral Agents; Interferon Alfa-2a, 76543-88-9; peginterferon alfa-2a;

References (56) [View in table layout](#)