



- Title** Pegylated Interferon Combined With Ribavirin for Chronic Hepatitis C Virus Infection: An Economic Evaluation
- Agency** CADTH, Canadian Agency for Drugs and Technologies in Health  
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## Aim

To assess the cost effectiveness of treating Canadian adults who have chronic hepatitis C (CHC) with Peg-IFN+RBV (Pegetron™ and Pegasys RBV®) compared to standard (non-Peg) IFN plus RBV, and no antiviral therapy (AVT).

## Conclusions and results

No detectable difference was found between PegIFN+RBV and IFN+RBV in all-cause mortality or withdrawals due to adverse effects. However, treatment with PegIFN+RBV was associated with a significantly higher rate of non-fatal serious adverse events during 48 weeks of therapy and 24 weeks of followup and had a higher overall sustained virological response rate than IFN+RBV. Based on our economic analyses, initial treatment with PegIFN+RBV, for patients with CHC and elevated ALT levels, could improve health outcomes and is associated with a lower incremental cost-effectiveness ratio (ICER) compared with IFN+RBV.

## Recommendations

Not applicable.

## Methods

Clinical data on beneficial and adverse outcomes of antiviral therapy were extracted from randomized controlled trials and a previous CADTH systematic review. The net health impact was estimated using a decision-analytic model in terms of quality-adjusted life-years (QALYs) and life-years (LYs) saved, from the perspective of Canadian ministries of health. The analysis compared PegIFN+RBV to IFN+RBV, and to no antiviral therapy. The simulated population (base case) had an average age of 43 years, with a mix of liver disease states, hepatitis C virus genotypes, and sex, consistent with the Canadian CHC population.