



# ARCTIC HEALTH

*An information portal to issues affecting the health and well-being  
of our planet's northernmost inhabitants*

## Cost-effectiveness of peginterferon alfa-2b in combination with ribavirin as initial treatment for chronic hepatitis C in Sweden.

<https://arctichealth.org/en/permalink/ahliterature81717>

Author: Bernfort Lars  
Sennfält Karin  
Reichard Olle

Author Affiliation: Centre for Medical Technology Assessment, University of Linköping, Stockholm, Sweden.  
lars.benfort@ihs.liu.se

Source: Scand J Infect Dis. 2006;38(6-7):497-505

Date: 2006

Language: English

Publication Type: Article

Keywords: Adult  
Antiviral Agents - administration & dosage - economics  
Cost-Benefit Analysis  
Drug Therapy, Combination  
Health Care Costs  
Hepatitis C, Chronic - drug therapy - economics  
Humans  
Interferon Alfa-2b - administration & dosage - economics  
Markov Chains  
Monte Carlo Method  
Quality of Life  
Ribavirin - administration & dosage - economics  
Sweden

Abstract: The aim of the study was to assess the cost-effectiveness of peginterferon alfa-2b (pegIFN) compared to interferon alfa-2b (IFN), both in combination with ribavirin, as initial therapy for chronic hepatitis C in Sweden. A computer based Markov model describing the natural course of chronic hepatitis C was used to assess costs and quality-adjusted life-y (QALY) for the treatment strategies. Study population was a cohort of hepatitis C patients from the age of 43 y until death. Natural history and response data were obtained from the literature and from Swedish clinical experts. Costs were obtained from different health care providers in Sweden and based on Swedish clinical practice. In our base case analysis for genotype 1 patients, pegIFN plus ribavirin therapy generated 0.29 incremental QALYs and was cost saving (dominant strategy). Corresponding results for genotype 2/3 patients were 0.09 QALYs at an incremental cost of 941 euros (10,500 euros/QALY). A probabilistic sensitivity analysis was performed to study the stability of our results. From the results we conclude that for genotype 1 patients treatment with pegIFN and ribavirin increased quality-adjusted life expectancy and was cost-effective as initial therapy for hepatitis C. The cost-effectiveness for patients infected with genotype 2/3 was less obvious.

PubMed ID: 16798701 [View in PubMed](#) 