# April 2014 Hepatitis C eradication? Yes, it's possible... but at what cost?

# Author

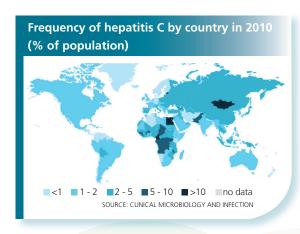
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185 million people are infected with the hepatitis C virus and 80% of them have a chronic form of the disease that can lead to cirrhosis and in some cases to

Fortunately, these outcomes are not inevitable but it is difficult to predict with any accuracy which carrier of the hepatitis C virus will be affected by cirrhosis and liver cancer.

liver cancer (hepatocellular carcinoma).



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# Globally, there are two management strategies for chronic hepatitis C:

- Regular monitoring with blood tests and liver ultrasound scans to pick up signs of active disease, cirrhosis or hepatocellular carcinoma.
- Treatment with a daily injection of interferon combined with ribavirin tablets, usually over a 6-month period. This is known as «bitherapy». There are side effects and it is only effective in 50 to 70% of cases depending on the genotype. In addition, the

treatment is expensive and, in the final analysis, few patients in the world actually benefit from it.

At the stages of cirrhosis or hepatocellular carcinoma, a liver transplant may be offered. In fact, in many transplant centres this is the most common indication.

The pharmaceutical industry has been actively seeking the ideal treatment for hepatitis C for years: a treatment whose features would be an eradication of the virus from the body in 100% of cases. This would consist of a single tablet containing several antiviral C molecules making it possible to treat hepatitis C with a minimum of side effects.



**In 2014, this ideal treatment is no longer an utopian dream**. More anti-hepatitis C viral drugs are coming into the market or are undergoing clinical trials; the preliminary results are astonishing and look likely to revolutionise the treatment of the disease. Used alone or in combination with each other (the ideal mixture is yet to be determined), prescribing these drugs means we can look forward to:

- The eradication of the virus in 90% to 100% of cases, regardless of genotype.
- The absence of resistance to treatment and good tolerance.
- A relatively short expected length of treatment: there is talk of 3 months.



# Hepatitis C eradication? Yes, it's possible... but at what cost?

# **Genotype**

The genome of the hepatitis C virus has a high ability to mutate; there are several «C virus species» with a total of 6 genotypes numbered from 1 to 6. The distribution of these genotypes varies according to the regions of the world.

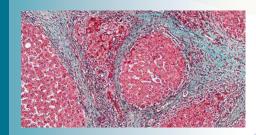
It is easy to conclude that the ideal strategy for eradicating the hepatitis C virus from the planet would be to treat all carriers. As there is no animal reservoir of the virus, «hepatitis C would gradually fade away...»

But let's not get carried away - currently one tablet of these new drugs can cost up to 1 000 US dollars!!

Multiply 185 million carriers of hepatitis C by 1 000 US dollars ... and it would swallow up the health care budgets of many countries around the world ... and for health insurers the bill would be just as expensive.

The hypothesis of eradicating the hepatitis C virus will only become a reality once the new drugs have confirmed their promises of efficacy and when the prices have fallen drastically ... Agreements and partnerships between sovereign states and pharmaceutical companies, the arrival of generic formulae will all play their part.

## **Cirrhosis**



Cirrhosis is the result of any chronic liver cell injury, in this case, due to hepatitis C virus. The liver produces diffuse fibrous tissue and simultaneously there is an excessive proliferation of liver cells causing nodular regeneration. Both the structure and function of the liver are affected and severe complications occur. In addition, cirrhosis is a powerful inducer of hepatocellular carcinoma.



# **Practical implications for the insurer:**

• For **medical expenses insurance**, the insurer must be aware of the high cost and of the fact that the treatment will probably be prescribed to a large proportion of hepatitis C carriers who, until now, were simply monitored.

So, be warned, the treatment of hepatitis C is likely to have a serious impact on medical expenses portfolios...

- For **death cover**, there is no need for insurers to change their analysis of the risk for the time being, but they should expect the overall prognosis to improve significantly. When it does, it will be time to review our rating tables.
- Finally, concerning **disability and waiver of premium covers**, the long and tiring bitherapies currently available make insurers take a conservative view but these new treatments could considerably improve our approach.

Keep an eye open for more news in this field ... it risks being revolutionary.

