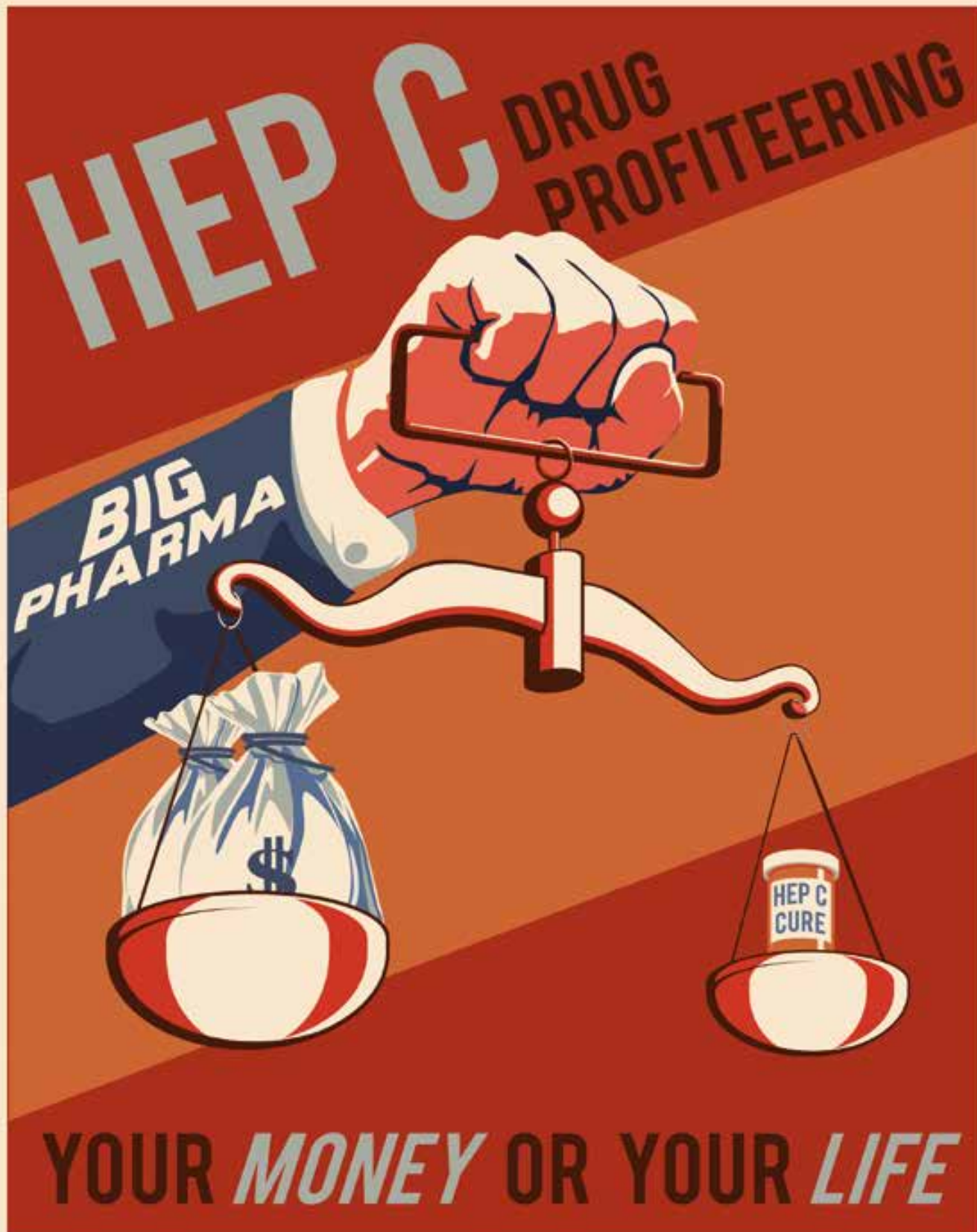




**DOCTORS OF THE WORLD
OPPOSES THE PATENT
ON SOFOSBUVIR**

HEPATITIS C:
SCOURGE, REMEDY AND SCANDAL





WHAT IS HEPATITIS C?

Hepatitis C is a liver infection caused by the hepatitis C virus (HCV) and primarily blood-borne transmitted. Around 20% of people infected with HCV recover spontaneously, while the remaining 80% develop a chronic infection which gradually damages their liver. This damage causes potentially life-threatening cirrhosis and cancer. The progression of hepatitis C varies from one person to the next and can take several decades. This specific progression to the disease makes screening complicated as a patient may not have any symptoms for several years.

There is currently no vaccine against hepatitis C but treatments allowing a complete cure are available.



02

(R)EVOLUTION IN HEPATITIS C TREATMENTS

For the past fifteen years, the leading treatment regimen combined the injection of pegylated interferon - an agent used to strengthen immune action - and ribavirin - an oral antiviral. This long and arduous treatment (with serious side effects) achieves cure rates ranging from 50% to 70%.

2011 marks a milestone in HCV treatment with the introduction of a new generation of drugs: direct-acting antivirals (DAAs). These medicines lead to a huge improvement in the treatment and care of hepatitis C patients. Combined, these DAAs allow patients to be treated more quickly and easily: for example, the drugs do not require injection and can be administered orally. These drugs are better tolerated by patients and the cure rate exceeds 90%. Therefore, they represent a great hope for people suffering from hepatitis C and provide an opportunity to eradicate the virus.

03

WHAT IS SOFOSBUVIR AND WHO CAN BENEFIT FROM IT?

Sofosbuvir is the DAA that is currently the most commonly recommended for the treatment of hepatitis C, in combination with other drugs. It has been marketed under the name Sovaldi® since last year by the American pharmaceutical company Gilead. In France, sofosbuvir is 100% reimbursed by the national insurance system, but only for those most seriously ill. The government's selection criteria for eligible patients is more restrictive than the ones issued by the Ministry of Health's expert committee. Rationing has resulted due to the exorbitant price of sofosbuvir.

1. Prise en charge des personnes infectées par les virus de l'hépatite B ou de l'hépatite C, RAPPORT DE RECOMMANDATIONS 2014, Sous la direction du Pr Daniel Dhumeaux et sous l'égide de l'ANRS et de l'AFEF. http://www.sante.gouv.fr/IMG/pdf/Rapport_Prise_en_charge_Hepatitis_2014.pdf

WHY IS SOFOSBUVIR SOLD AT SUCH A HIGH PRICE?

The price of sofosbuvir, as marketed by the pharmaceutical company Gilead, has been set in France at €13,667 per box of 28 tablets. The minimum duration of treatment is 12 weeks. The overall price of treatment is therefore set at €41,000. This price was decided by the Economic Committee for Healthcare Products (CEPS), the French public body responsible for setting drug prices. This price setting arrangement in France depends on a bargain between CEPS and pharmaceutical companies based on several criteria including the prices charged overseas. Beyond theory this last criterion fits with pharmaceutical companies practices that tend to register their products initially in countries where price-setting is free - such as in the United States. The reference prices used as a basis for negotiation in France were €74,000 in the United States, €49,000 in Germany and €44,000 in the United Kingdom for a 12-week treatment course.

As with HIV antiretrovirals, DAAs can be manufactured in generic form at a considerably lower price than that currently charged (\$20 to 101\$ per DAA for a 12 week treatment course²). But Gilead's patents* entitle the company to a market monopoly on sofosbuvir: as long as this monopoly lasts, more affordable generic versions will not be available.



2. Hill A, van de Ven N, Simmons B, et al. Minimum target prices for production of treatment and associated diagnostics for Hepatitis C in developing countries. [Poster presented at: 20th International AIDS Conference, 2014 July 20–25, Melbourne, Australia.](#)

*A patent is a legal title granted by a State for its specific territory, ensuring a monopoly for a limited period (at least 20 years) for the production, sale and import of an invention across a national territory.

HOW DOES THE PHARMACEUTICAL INDUSTRY JUSTIFY THE HIGH PRICES OF MEDICATION?

The pharmaceutical industry has always used research and development (R&D) costs to justify very high drug prices. This argument has long been refuted. Most pharmaceutical companies overestimate R&D costs and are working more on improving existing products than on real novelties [1]. The innovation strategies of the large pharmaceutical firms are increasingly aimed towards the buyout of promising start-ups.

In addition, a large proportion of medical research is financed using public funds, and this is particularly the case of hepatitis C research.

Sofosbuvir was developed by the American start-up Pharmasset, primarily thanks to the discoveries of the public University of Cardiff. Once the effect of sofosbuvir on the hepatitis C virus was discovered, Pharmasset was acquired in 2011 by the pharmaceutical giant Gilead for \$11 billion – far more than Pharmasset's real value. This purchase price has been defined according to expected benefits from sofosbuvir [2].

In order to justify the exorbitant price of sofosbuvir, Gilead compares it to the cost of treating seriously ill hepatitis C patients, arguing that sofosbuvir costs less than a liver transplant. It is not acceptable that a pharmaceutical company set up the price of its product on the cost of the damage it could prevent.

[1] Read: "Coût de recherche et développement du médicament: la grande illusion". (Cost of drug research and development: the great illusion) *Prescrire* journal, November 2003, p. 782-787 and "Demythologizing the high costs of pharmaceutical research", Donald W. Light and Rebecca Warburton, The London School of Economics and Political Science, 2011.

[2] Sofosbuvir sales were worth close to \$11 billion in 2014 alone.

WHO PAYS THE PRICE?

For the first time in France, the price of a drug is leading to rationing: indeed, sofosbuvir is only reimbursed by social security for the most seriously ill patients. This excludes people who are living with chronic hepatitis C but at a less advanced stage, contrary to expert recommendations. Moreover, a cured person no longer transmits the virus, which points to the need for treatment as an important prevention strategy. For this reason, the expert report recommended treating populations particularly vulnerable to hepatitis C (such as drug users or prison inmates), whatever their stage of the disease, in order to limit the number of new infections. Again, this recommendation has not been followed.

Furthermore, the exorbitant price of sofosbuvir is putting hospital doctors under pressure that is incompatible with their role as healthcare providers. This pressure is leading some of these doctors to stop prescribing this very costly treatment to patients they consider “fragile” or with a precarious administrative status. This is a form of discrimination in terms of access to treatment for the most vulnerable populations.

The price of sofosbuvir is therefore putting the very existence of our public health model – based on solidarity and equity – in jeopardy. Its sustainability is threatened by the costs that will have to be borne by the community – it is worth remembering that the solvency of the drugs market is only assured by social contributions deducted from employment income. Indeed, although prices as high as this have already been approved in France, it has usually been for drugs intended for a restricted number of patients. In the case of sofosbuvir, the number of patients to be treated is significant and the budgetary impact is therefore more dramatic: at the current price, treating patients in whom treatment should be initiated will cost more than €5 billion for sofosbuvir alone, i.e. 20% of the drugs budget in France, with it alone representing the equivalent of a third of the social security deficit in 2014.

3. *Prise en charge des personnes infectées par les virus de l'hépatite B ou de l'hépatite C, RAPPORT DE RECOMMANDATIONS 2014*, Sous la direction du Pr Daniel Dhumeaux et sous l'égide de l'ANRS et de l'AFEF, http://www.sante.gouv.fr/IMG/pdf/Rapport_Prise_en_charge_Hepatitis_2014.pdf

4. Evaluation based on data from the expert report: in 2013, 49% of people with chronic HCV were believed to be at stage F2-F4, and 8% at the complications stage (decompensated cirrhosis or hepatocellular carcinoma)



DOCTORS OF THE WORLD IS COMMITTED TO SAFEGUARDING A PUBLIC HEALTH SYSTEM BASED ON SOLIDARITY AND EQUITY

Doctors of the World - Médecins du Monde is a medical organisation committed to fighting against inequalities in access to healthcare, both in France and internationally. We campaign for the safeguarding of our public health system which is based on solidarity and equity, by acting on all factors that impact access to healthcare. For several months, along with other French associations, we have been alerting the public and authorities to the risks facing our health system by the exorbitant price of sofosbuvir.

We have observed how difficult it is to have national debate on the way drug prices are set in France. Despite the situation justified the use of compulsory licence* – a legal instrument which would have allowed the approval for the production of cheaper generic versions and thereby avoided rationing – the government refused to use it. Instead the Ministry of Health compensated for social security's inability to absorb the costs of sofosbuvir by proposing a specific tax on HCV treatment revenue in the social security funding bill. However this mechanism does not tackle the challenge of limited treatment access nor respond to the broader issue of drug prices and its impact on health systems. Yet the question of financial accessibility also applies to other types of therapeutic innovation, particularly the new generations of cancer drugs which are also extremely costly with a high number of potential beneficiaries.

Faced with the authorities' refusal to grasp these crucial challenges, and anxious that all patients be able to access the most effective treatments, Doctors of the World decided to take this fight on, by filing a legal challenge to the sofosbuvir patent at the European patent office*.⁵

*Compulsory licence is a mechanism by which the State may allow generic manufacturers to produce a patented drug in return for royalties paid to the patent holder. States are free to grant compulsory licences and to determine the grounds for doing so (Doha Declaration on the TRIPS Agreement and Public Health, WTO, 2001)

*European Patent Office issues European patents which have the same effects as a national patents in the Member States of the European Patent Organisation (article 2.2 of the European Patent Convention signed in 1973)

5. Legal and technical advice: Initiative for Medicines, Access, & Knowledge (www.imak.org) and Lionel Vial, French and European patent attorney.

THE PATENT OPPOSITION

A patent opposition is a recourse by which any interested party may contest the validity of a patent at the office that issued it. It has already been used by civil society in other countries (India, Brazil, United States) to get abusive patents removed and to authorise the production of more affordable generic medicine.

This is the first time in Europe that a medical NGO uses this juridical tool to improve patients access to treatment. The rationing in France and Europe led Doctors of the World to review the technical content of Gilead's patent on sofosbuvir. While using sofosbuvir to treat hepatitis C is a major therapeutic advance, the molecule itself does not merit a patent because it relies on existing and commonly practised techniques in the pharmaceutical field.

In India – where an opposition has been filed by our partner the Initiative for Medicines, Access, & Knowledge (I-MAK) together with the Delhi Network of Positive People (DNP+) – the patent office recently rejected one of the key patent applications on sofosbuvir, but which has since been contested by Gilead and is now being reviewed again before a final decision is issued. Egypt also decided to reject the same patent that is being opposed in Europe.



IF DOCTORS OF THE WORLD WINS THIS OPPOSITION, WILL GENERICS BE AVAILABLE IN EUROPE?

Gilead claims multiple patent applications pending in Europe that relate to sofosbuvir. So far only the sofosbuvir patent has been granted by the European Patent Office. Even if this legal battle is won, it is not certain that generic versions of sofosbuvir will be able in Europe because of these other patents.

Through this action Doctors of the World is furthermore warning public opinion that with such price European countries have no longer enough resources to guarantee access to sofosbuvir for all the patients in need.

Doctors of the World uses this opportunity to go on with a national debate on drug pricing mechanism and its impact on health system. It is one of the challenges of the Health Bill to be debated in French Parliament next spring.

IS DOCTORS OF THE WORLD OPPOSED TO MEDICAL INNOVATION?

No. Doctors of the World is a medical humanitarian organization concerned with medical innovation and acknowledges the use of sofosbuvir as a major therapeutic achievement against hepatitis C. Doctors of the World is not fighting against the pharmaceutical industry but rather its abuse of the patent system.

The social contract of the patent system is designed to reward investments that bring new inventions. Pharmasset/Gilead perverted the genuine patent system through patenting thousands of molecules with the prospect of a potential therapeutic efficiency based on science common practice. Those assumptions avoid other researchers to develop complementary and potentially more innovative drugs.

Abusive patents kill innovation whereas patent system has been devised to promote innovation.

INFOGRAPHIC

France

Among the **367,055** HCV-positive people,

232,196 people live with chronic hepatitis C,

Including at least **128,000** people in need of treatment.

PREVALENCE OF ANTI-HCV ANTIBODIES

0,84% among the general population

44% among people who use drugs

4,8% among prisoners

1,69% among people who use drugs born in a moderate endemic region (North Africa, Sub-Saharan Africa, Asia, Indian Pacific and Sub-Continent according to the WHO classification),

10,17% among people who use drugs born in the Middle East, a high endemic region

3,618

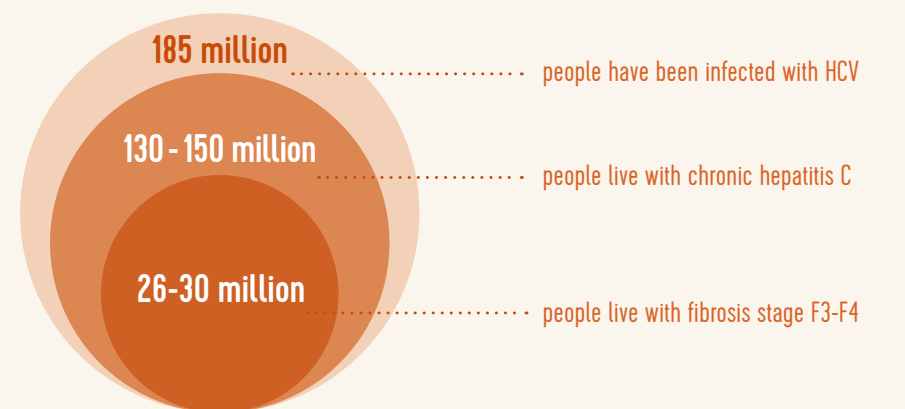


DEATHS
associated
with hepatitis C
each year

Source: Prise en charge des personnes infectées par les virus de l'hépatite B ou de l'hépatite C. RAPPORT DE RECOMMANDATIONS 2014. Sous la direction du Pr Daniel Dhumeaux et sous l'égide de l'ANRS et de l'AFEF. http://www.sante.gouv.fr/IMG/pdf/Rapport_Prise_en_charge_Hepatitis_2014.pdf

Worldwide

The World Health Organisation estimates that
700,000 people die from hepatitis C each year.



Until 2014, only 2.2% people living with hepatitis C access to treatment every year

Source: Global Hepatitis C Guidelines 2014: recommendations for a public health approach - Gottfried Hirnschall - HIV Department World Health Organization, 20th International AIDS conference, Melbourne, Australia, July 20-25 2014.

Europe

It is estimated that between
7.3 and 8.8 million persons are living with HCV in the European Union.

Source: EASL Clinical Practice Guidelines: Management of hepatitis C virus infection http://www.easl.eu/assets/application/files/bdb06ff135c7ccb_file.pdf

RECOMMENDATIONS

DOCTORS OF THE WORLD IS DEMANDING:

- The dramatic reduction of the price of sofosbuvir so that it can be prescribed to all people living with chronic hepatitis C.
- The initiation of a public debate on drug price setting methods and alternative financing mechanisms for the research and development of new drugs.
- The representation of patient associations and organisations fighting against health inequalities within the CEPS and the Transparency Committee of the HAS (French Health Authority).
- Transparency in the research and development costs of pharmaceutical companies and the traceability of public funding for research.



For more information:

On Doctors of the World's patent opposition: www.patentopposition.medecinsdumonde.org

On universal access to HCV treatment advocacy: www.hepCoalition.org

Contacts:

Harm Reduction, HCV and HIV advocacy:

• Céline Grillon, Harm Reduction, HCV and HIV advocacy officer:
celine.grillon@medecinsdumonde.net_+33 (0)1 44 92 13 02

• Marie-Dominique Pauti, HIV and Hepatitis medical advisor:
marie-dominique.pauti@medecinsdumonde.net_+33 (0)1 44 92 13 79

Press:

• Aurélie Defretin
aurelie.defretin@medecinsdumonde.net_01 44 92 13 81

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Doctors of the World-Médecins du Monde: 62 rue Marcadet 75018 Paris_01 44 92 15 15

www.medecinsdumonde.org

