

## BACKGROUND MEDIA INFORMATION

### Viral hepatitis: A significant threat to health in Europe

Viral hepatitis is inflammation of the liver caused by a viral infection. There are five main types of hepatitis virus, known as hepatitis A, B, C, D and E. While hepatitis A and E are usually contracted by consuming food or water contaminated with the virus, hepatitis B, C and D are transmitted through contact with infected blood or other bodily fluids. Hepatitis B and C can also be transmitted through sexual contact or passed from mother to child.

Although the five hepatitis viruses and their impact on the human body differ, all can pose a threat to the health of the liver. Viral hepatitis kills 1.5 million people worldwide each year.<sup>1</sup>

#### Focus on hepatitis C

The hepatitis C virus was first isolated and discovered in 1989. By the 25<sup>th</sup> anniversary of its discovery the joint research efforts of hepatologists around the world had led to the identification of a breakthrough cure. These advances in hepatitis C, from discovery to cure, represent some of the most exciting discoveries in both liver disease and medicine.

The hepatitis C virus is blood-borne. There is no vaccine for hepatitis C and prevention is only possible through avoiding contact with contaminated blood.

The hepatitis C virus can cause two types of infection: acute and chronic. In acute infection, a person's immune system clears the virus from his or her body, without any treatment, within six months of acquiring the infection and rarely develops into a life-threatening condition.<sup>2</sup> Between 15% and 45% of people who contract hepatitis C will spontaneously clear the infection in this way.<sup>2</sup>

Chronic hepatitis C infection occurs when the body does not spontaneously clear the virus. This is the case for 55% to 85% of people who contract hepatitis C.<sup>1</sup> Around 30% of people with chronic hepatitis C will go on to develop liver cirrhosis and a proportion of these progress to liver cancer.<sup>2</sup> Hepatitis C causes about 86,000 deaths per year in World Health Organization (WHO) European Member States.<sup>3</sup>

Between 130-150 million people globally have chronic hepatitis C infection.<sup>2</sup> It is estimated that 15 million people in the WHO's European Region are living with hepatitis C, representing 2% of adults.<sup>4</sup> However, the prevalence amongst people who inject drugs may be as high as 98%.<sup>3</sup>

Chronic hepatitis C can be treated with antiviral therapy to stop the virus from multiplying inside the body, thereby preventing liver damage. In some cases new, breakthrough antiviral treatments can cure hepatitis C by eradicating the virus completely. These exciting treatments, many of which are still being investigated, are called directly acting antiviral agents (DAAs). They directly and specifically target the hepatitis C virus in the every stage of its lifecycle.

There are different strains (genotypes) of the virus and some respond better to treatment than others. This means that patient management can still pose complex challenges alongside wider patient concerns such as response to previous treatments and the stage of liver disease, which need to be considered. Screening and early diagnosis can increase the chance of successful treatment.<sup>4</sup>

#### Focus on hepatitis B

Hepatitis B is transmitted through contact with the blood, or other body fluids, of a person infected with the hepatitis B virus. Within the WHO European Region, approximately 14 million people are chronically infected with hepatitis B.<sup>5</sup>

Chronic hepatitis B is a leading cause of cirrhosis of the liver and liver cancer worldwide. Children infected with the virus before the age of six are most likely to develop the chronic form of the infection.<sup>6</sup>

Although less than 1% of the population in Western Europe and North America is chronically infected with hepatitis B, chronic infection is common in some regions of the world. Between 5 and 10% of the adult population in sub-Saharan Africa and East Asia is thought to be chronically infected.

Current treatments for chronic hepatitis B are safe and effective but at the moment can only suppress the virus, they cannot eradicate the virus or cure the patient. Hepatitis B, however, can be prevented by vaccination and the WHO recommends that all infants receive the hepatitis B vaccine as soon as possible after birth.

## References

- <sup>1</sup> Horton R. Global Burden of Disease 2010: Understanding disease, injury, and risk. The Lancet 2012 (380) 2053-2054. Available at: [http://www.thelancet.com/journals/lancet/issue/vol380no9859/PIIS0140-6736\(12\)X6053-7](http://www.thelancet.com/journals/lancet/issue/vol380no9859/PIIS0140-6736(12)X6053-7) Last accessed: April 2015.
- <sup>2</sup> World Health Organization. Hepatitis C Fact Sheet N°164. Available at: <http://www.who.int/mediacentre/factsheets/fs164/en/> Last accessed: April 2015.
- <sup>3</sup> World Health Organization. Hepatitis data and Statistics. Available at: <http://www.euro.who.int/en/health-topics/communicable-diseases/hepatitis/data-and-statistics> Last accessed: April 2015.
- <sup>4</sup> World Health Organization. Global Alert and Response – Hepatitis C. Available at: <http://www.who.int/csr/disease/hepatitis/whocdcsrlyo2003/en/index3.html> Last accessed: April 2015.
- <sup>5</sup> Hatzakis A et al. The state of hepatitis B and C in Europe: report from the hepatitis B and C summit conference. J Viral Hepat. 2011 Sep;18 Suppl 1:1-16. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/21824223> Last accessed: April 2015.
- <sup>6</sup> World Health Organization. Hepatitis B Fact sheet N°204. Available at: <http://www.who.int/mediacentre/factsheets/fs204/en/> Last accessed: April 2015.