

Meeting the Challenge

Roche in Viral Diseases

Roche has a rich history of innovation in tackling viral diseases which threaten the health of large numbers of people in the UK and represent a crucial challenge in the future of healthcare.

Today Roche is at the forefront of researching, developing and providing products for the diagnosis, treatment and monitoring of viruses including HIV, hepatitis C and influenza.

Early and accurate diagnosis is crucial. Our Amplicor and Cobas Taqman diagnostic tests for HIV, hepatitis C and hepatitis B harness the polymerase chain reaction (PCR) technology that Roche pioneered. They can, for example, amplify and identify genetic material to detect and measure small amounts of the hepatitis C virus (HCV) in blood just five days after infection, compared with the average 90 days it takes the immune system to develop antibodies that can be picked up by conventional tests. Our technology helps protect the UK's blood supply – the highly sensitive AmpliScreen HCV test is used by the National Blood Service to screen blood donations.

We are also innovators in treating viral diseases. Roche scientists in the UK discovered the first protease inhibitor, a class of drugs that drastically improved the outlook for people with HIV and earned numerous awards including the pharmaceutical industry's Prix Galien. We now provide a range of other drugs for the treatment of HIV or HIV-related conditions, including cytomegalovirus (CMV) which can cause blindness in people with HIV and AIDS.

Our teams in the UK played a crucial role in the development of our latest innovation - the first fusion inhibitor and the most complex HIV treatment ever made. The first new class of anti-HIV treatments in seven years, fusion inhibitors block the virus from entering the human immune cell and help fight the problem of growing resistance to drugs in the developed world.

The bulk of HIV infection affects the developing world where access to healthcare and therapy is the biggest obstacle. Internationally, Roche is actively providing two anti-HIV drugs at no-profit prices to sub-Saharan Africa and the Least Developed Countries and is actively involved in programmes

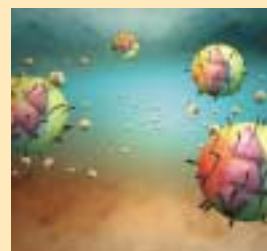
run by the WHO, UNAIDS and other international organisations to provide access to treatment.

We are also driving improvements in the treatment and management of hepatitis C, a potentially life-threatening viral infection that can lead to liver cancer or failure. Hepatitis C is known as the "silent epidemic" because infected people may remain symptom free and undiagnosed for more than 20 years. Our teams in the UK played a significant role in developing Roche's innovative interferon therapy which interferes with reproduction of the hepatitis C virus. And they continue to investigate further developments in treatments for hepatitis C and hepatitis B.

The success of HIV and hepatitis C treatments can be monitored using our Amplicor technology which can detect extremely low levels of virus in blood, enabling physicians to tailor treatment accordingly. It can also help clinicians predict more quickly if a patient is going to respond to our hepatitis C treatment.

An even more contagious viral disease is influenza. Epidemics can be especially dangerous for vulnerable groups such as the elderly and chronically ill and place a heavy, annual burden on health services. Roche has met this need with a neuraminidase inhibitor, one of the latest class of treatments that specifically attack the influenza A and B viruses. Developed by Roche teams in the UK, this innovative oral medicine is an additional option for those individuals who do not take up vaccination or who, despite vaccination, go on to catch influenza. It is designed to treat influenza in adults and children who are one-year-old or over, as well as preventing it in adults and adolescents.

For the future, Roche will continue to search for innovative solutions so we can make an even greater difference to those living with and managing viral diseases.



www.rocheuk.com

Produced August 2003 by Corporate Affairs for Roche in the UK. welwyn.corporate_affairs@roche.com
Roche Products Ltd., 40 Broadwater Road, Welwyn Garden City, Herts AL7 3AY
Roche Diagnostics Ltd., Bell Lane, Lewes, East Sussex BN7 1LG