

Scotland leads long-term study of hepatitis C virus (HCV) infection in the UK, creating one of the largest HCV clinical database and biobank resources in the world.

> HCV Research UK is a consortium of leading UK clinicians and researchers, backed by the Medical Research Foundation. It was set up to address critical gaps in understanding of hepatitis C virus particularly in relation to:

- the clinical course of HCV-related disease
- the optimal clinical management of the virus including the effectiveness and long-term impact of antiviral therapies
- the viral and host genetic factors influencing prognosis.

An infrastructure connecting 60 major UK adult and paediatric liver centres involved in the management of HCV-infected patients throughout Scotland, England and Wales.

In Scotland:

- HCV Research UK officially launched in 2013 at University of Glasgow
- 25% of cohort recruited at sites across Scotland
- Infrastructure supported by existing knowledge and expertise at national agencies (Public Health England and Health Protection Scotland) and the MRC
 – University of Glasgow Centre for Virus Research.

Grampian 2 centres N=255

Tayside 1 centre, N=377

Greater Glasgow & Clyde 5 centres, N=1089

> **Lanarkshire** 1 centre, N=13

Lothian 2 centres, N=362

Geographical distribution of specialist clinics in Scotland and the overall contribution of each region (N) to the cohort

"This project provides the research community with access to data and samples to tackle the problems we face with HCV infection in the UK. We are at an exciting time with new therapies that can cure infection more quickly than previous treatments and with fewer side-effects. HCV Research UK is playing a pivotal role in building a national picture of their effectiveness. This information is essential for healthcare providers and the NHS so that use of the drugs can be optimised for curing infection and the liver disease that is caused by HCV."

> Professor John McLauchlan, Associate Director of the MRC-University of Glasgow Centre for Virus Research and co-chair HCV Research UK





Chronic hepatitis C virus (HCV) is a global problem affecting in excess of 71 million individuals and causing half a million deaths every year from liver disease. In Scotland, approximately 37,000 individuals are chronically infected with Hepatitis C.

HCV Research UK has created a bespoke clinical research database linked to a biorepository of samples and treatment information.



A national cohort in excess of 10,000 HCV-infected patients, supported by **an integrated, standardised clinical database** with demographic, clinical and laboratory parameters



A **biobank of biological samples** from the cohort for studies of host and viral factors associated with disease outcome and treatment response



Significant viral and host sequence data demonstrating the value and potential of the cohort and biobank



A bioinformatics database from the viral and host sequence data, which can be linked to the clinical database



Epidemiological data and biological samples **are available to all researchers** in both academia and the biopharmaceutical industry upon successful application to the HCV Research UK TDAC



HCV Research UK now contains **bespoke cohorts** for particular groups of patients, for example those receiving new therapies and monitoring those who have been successfully treated for the development of disease for up to 5 years.

"While there has been considerable progress with understanding the biology of the hepatitis C virus and improvements in healthcare provision, many issues relevant to the characteristics of HCV infection in the UK remain unresolved. The patients taking part in this cohort study are providing clinical data and samples to provide researchers with vital information about the longer-term impact of the disease."

Professor John Dillon, NHS Research Scotland Hepatology Lead and Professor of Hepatology and Gastroenterology, in the School of Medicine, Ninewells Hospital, University of Dundee

"The use of clinical data and samples in research is crucial to accelerate treatments; and through the HCV-Research UK project, we have harnessed our leading hepatology expertise and national research infrastructure to help create one of the largest HCV clinical database and biobank resources in the world. This is a significant asset for future research into this devastating disease."

Dr Steven Burke, Industry Liaison Manager, NHS Research Scotland – Central Management Team





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