

PSC Genetics Study

UK collaborative study to determine the genetic basis of Primary Sclerosing Cholangitis

Summer Term/Q2 2011

MREC:08/HO305/45

UKCRN:6388



Study Overview

The aim of this UK collaborative study is to collect DNA and clinical details from 1000-2000 patients with primary sclerosing cholangitis (PSC) to perform clinical, epidemiological and genetic studies.

The UK PSC Consortium (UK PSC) comprises lead project investigators and multiple local collaborators who are active in recruiting PSC cases and was established in 2009. The Project is funded by charitable donations managed by Dr Roger Chapman (Oxford) and by The Norwegian PSC Research Center (Dr Tom Hemming-Karlsen). Patient recruitment is co-ordinated from the Department of Medical Genetics, University of Cambridge by a project co-ordinator, Matt Brown and a clinical research fellow, Dr Brijesh Srivastava.

The study has full ethical approval (MREC number 08/H0305/45) and R&D approval has been gained in most participating UK centres.

Patients with PSC are being identified from outpatient clinics in participating UK centres; from the UK and Ireland Transplant and Audit Commission and from the PSC Trust and PSC Support group. Recruitment figures are given on page 2.

Research Activity

The main focus of our activity has been to establish a large clinical database and DNA bioresource to support epidemiological and genetic research into the aetiology of PSC. We have concentrated on producing a well-characterised cohort of patients suitable for genetic association studies. The number of patients that have agreed to enter the study exceeds 1500 and full clinical data with matched DNA are already available for more than 1200 cases.

Replication studies of known PSC associated genetic loci are currently underway. The DNA samples will be analysed using high throughput genotyping platforms in two centres, The Sanger Centre here in the UK and The University of Kiel in Germany. A Genome wide association study will be undertaken at the Sanger Centre to identify regions of the genome that contain PSC susceptibility genes. This type of study has already been used to successfully identify genetic regions associated with PSC and our study hopes to find additional risk loci and replicate the known findings. In Kiel the ImmunoChip™ is being used to identify genetic regions associated with other autoimmune conditions that may also be associated with PSC. These studies will produce comprehensive data defining the genetic susceptibility to PSC. Results from both these studies are expected during 2011.

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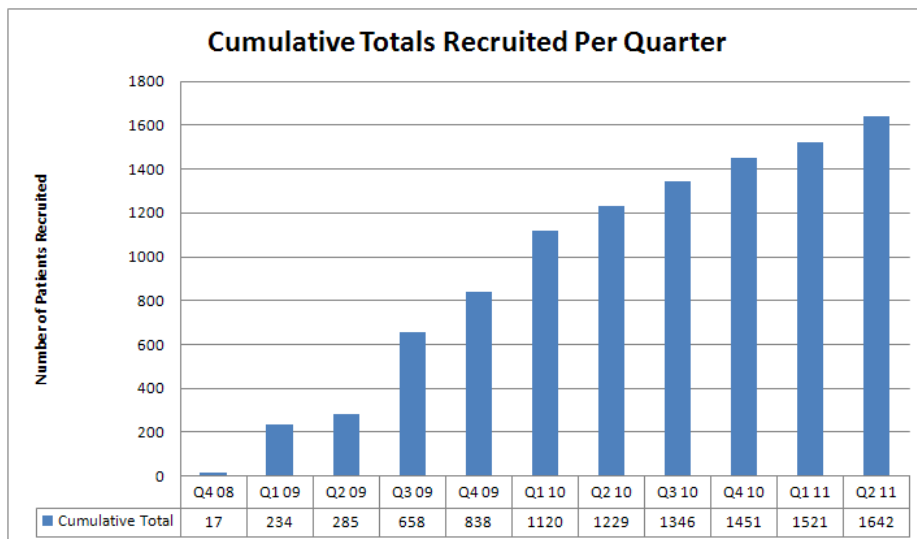


Recruitment Summary

We have recruited a total of 1650 participants of from 191 centres across England, Wales and Scotland, from which we have received a total of 1274 DNA samples.

There are a number of centres for which we have R&D approval but have not received any patients. We have been targeting these sites and trying to get in contact to determine the reason for the lack of recruitment. Often it is the case that smaller centres will refer their patients with PSC to one of the larger transplant hospitals.

We would like to emphasise that we are still actively recruiting and greatly appreciate any new participants.



Where next?

We are planning to describe the phenotypic characteristics of the first 1200 recruited patients. Further functional studies and/or sub-group analysis will be planned once we have the data available from GWAS and ImmunoChip™ study.

We are looking to create a study website as a go-to point for everything to do with the PSC study and will be notifying all contributors when this goes live.

Thanks!

We would like to thank PSC support, The Norwegian PSC Research Center and the British Association for the Study of the Liver.

Relevant links:

PSC Support Group:

www.psc-support.demon.co.uk

Norwegian PSC Research Center:

ous-research.no/nopsc

British Association for the Study of the Liver:

www.basl.org.uk

Contact us:

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