PROFILE - personalised medicine in Crohn's disease

Submission date 30/10/2017	Recruitment status No longer recruiting	[X] Prospectively registered [X] Protocol
Registration date 03/11/2017	Overall study status Completed	[X] Statistical analysis plan [X] Results
Last Edited 14/03/2024	Condition category Digestive System	Individual participant data

Plain English summary of protocol

Background and study aims

Crohn's disease is a type of inflammatory bowel disease (IBD) that can affect any part of the intestine. The severity of Crohn's disease varies a lot between different people, and this means that what might be the best treatment for one person may not be appropriate for someone else. This study will see whether a simple blood test ('biomarker') can improve Crohn's disease outcomes and reduce the number of flares experienced by enabling delivery of 'personalised therapy' (that is, treatment tailored to the individual person based on their predicted disease course and severity). All patients enrolled receive established treatments (there are no new drug therapies being trialed – rather, it is the new blood 'biomarker' that is being tested). The aim of this study is to see if the biomarker allows us to choose the right strategy for the right patient at diagnosis, and so improve short-term and long-term outcomes.

Who can participate?

Adults aged 16 to 80 who have been diagnosed with Crohn's disease diagnosed within three months.

What does the study involve?

All participants receive established treatments (there are no new drug therapies being trialed rather, it is the new blood 'biomarker' that is being tested). Participants are randomly allocated to one of two groups. Those in the first group are treated with a course of 8 infusions of Infliximab ("Top-Down") over the first year together with an additional tablet-based treatment (immunomodulator). This is currently the most effective treatment in Crohn's disease and is usually reserved for patients who have developed severe disease. Those in the second group follow the usual standard of care ("Step-Up"), which may include infliximab if the disease flares recurrently. Participants are assessed to see if the biomarker helps improve their symptoms.

What are the possible benefits and risks of participating?

It is expected that participants will experience relief in their symptoms or an improvement in their disease, as all participants will be receiving active treatment (there are no placebos / dummy drugs being used). There are no notable risks with participating.

Where is the study run from? This study is being run by the Cambridge Clinical Trials Unit and takes place in hospitals in the UK.

When is the study starting and how long is it expected to run for? June 2014 to February 2023

Who is funding the study? Wellcome Trust (UK)

Who is the main contact? Mr Francis Dowling francis.dowling@nhs.net

Study website http://www.crohnsprofiletrial.com

Contact information

Type(s) Scientific

Contact name Mr Francis Dowling

Contact details Cambridge Clinical Trials Unit Cambridge University Hospitals NHS Foundation Trust Addenbrooke's Hospital Coton House Level 6 Flat 61 Box 401 Hills Road Cambridge United Kingdom CB2 0QQ +44 (0)1223 254 666 francis.dowling@nhs.net

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers 35971

Study information

Scientific Title

PRedicting Outcomes For Crohn's disease using a moLecular biomarkEr (PROFILE) trial

Acronym PROFILE

Study objectives

This study aims to demonstrate that a new 'biomarker' test will allow patients with Crohn's disease to the receive the most appropriate treatment from the time of diagnosis.

Ethics approval required Old ethics approval format

Ethics approval(s) East of England – Cambridge South REC, 02/11/2017, ref: 17/EE/0382

Study design Randomised; Interventional; Design type: Prevention, Other

Primary study design Interventional

Secondary study design Randomised controlled trial

Study setting(s) Hospital

Study type(s) Treatment

Participant information sheet See additional files

Health condition(s) or problem(s) studied

Crohn's disease

Interventions

This trial aims to test the prognostic capabilities of a new biomarker. Participants with Crohn's disease are stratified using a biomarker, then randomised to receive either 'Top down' or 'Step up' treatment. All participants are given a course of steroids at their screening visit to ensure no participants is without suitable medication prior to being randomised.

Step up therapy is in line with current standard practice. If patients experience a disease flare following the course of steroids provided at screening, a second course will prescribed. If patients are still not suitably maintained participants continue on to Anti-TNF therapy (Infliximab infusions).

Top down therapy requires participants to start on Anti TNF therapy (Infliximab infusions) two weeks after their baseline/randomisation visit until week 48.

All patients are in the trial and followed up for 48 weeks.

Intervention Type

Other

Phase

Phase IV

Primary outcome measure

1. Sustained surgery free remission is measured using questionnaires from steroid induction treatment (screening) through weeks 4, 16, 32 and 48.

2. Steroid free remission is measured using questionnaires from steroid induction treatment (screening) through weeks 4, 16, 32 and 48.

The primary outcomes are measured using the sustained surgery and steroid free remission from completion of steroid induction treatment through to week 48 based upon information we collected at each trial time point.

Secondary outcome measures

1. Mucosal healing is measured using local and central reading of colonoscopy and MRE from baseline to week 48.

2. Quality of life is measured using the IBDQ questionnaire from screening through weeks 16, 32 and 48.

3. Quality of life is measured using the EuroQol questionnaire from screening through weeks 16, 32 and 48.

4. Quality of life is measured using the IBDQ questionnaire from screening through weeks 16, 32 and 48.

5. Health resource usage is measured using the resource usage questionnaire from screening through weeks 16, 32 and 48.

Secondary outcomes are measured using the local and central reading of colonoscopy/MRE over 1 year and the quality of life assessment (IBDQ) provided over the duration of the study and the patient rated resource usage / quality of life assessment (EuroQol) questionnaires provided over the duration of the study.

Overall study start date

01/06/2014

Completion date 01/02/2023

Eligibility

Key inclusion criteria

1. Crohn's disease diagnosed within 3 months* using standard endoscopic, histologic or radiological criteria

2. Clinical evidence of active Crohn's disease (corresponding to an HBI > 7)

3. Endoscopic evidence of at least moderately active Crohn's disease (corresponding to an SES-CD > 6 or > 4 if limited to terminal ileum)

4. CRP > upper limit of normal on local assay OR Calprotectin > 200 μg/g

5. Immunomodulator and anti-TNFa naïve

6. Aged 16-80 years old

* Patients that have glucocorticoids in this period need to have discontinued this medication prior to screening assessments and still have active disease.

Participant type(s)

Patient

Age group

Adult

Sex Both

Target number of participants

Planned Sample Size: 400; UK Sample Size: 400

Total final enrolment

390

Key exclusion criteria

1. Patients with ulcerative colitis or indeterminate colitis

2. Patients with fistulating peri-anal Crohn's disease or active perianal sepsis

3. Patients with obstructive symptoms AND evidence of a fixed stricture on radiology or colonoscopy, which suggest that the subject is at high risk of requiring surgery over the following year. N.B. patients with modest degrees of stricturing on imaging but no obstructive symptoms may be included according to clinician judgement

4. Patients with contra-indications to study medications including a history of hepatitis B or C, tuberculosis

5. Patients with a history of malignancy

6. Patients who are pregnant or breastfeeding at screening

7. Other serious medical or psychiatric illness currently on going, or experienced in the last 3 months, that could compromise the study

8. Patients unable to comply with protocol requirements (for reasons including alcohol and/or recreational drug abuse)

Date of first enrolment

01/12/2017

Date of final enrolment

15/12/2021

Locations

Countries of recruitment England

Scotland

United Kingdom

Wales

Study participating centre Addenbrookes Hospital Hills Road Cambridge United Kingdom CB2 0QQ

Study participating centre Barts and Royal London Hospital The Royal London Hospital Whitechapel Road Whitechapel London United Kingdom E1 1BB

Study participating centre Bedford Hospital Kempston Road Bedford United Kingdom MK42 9DJ

Study participating centre Darlington Memorial Hospital Hollyhurst Road Darlington United Kingdom DL3 6HX

Study participating centre Derriford Hospital, Plymouth Derriford Road Crownhill Plymouth United Kingdom PL6 8DH

Study participating centre Epsom General Hospital Dorking Road Epsom United Kingdom KT18 7EG

Study participating centre Glasgow Royal Infirmary 84 Castle Street Glasgow United Kingdom

G4 0SF

Study participating centre New Victoria Hospital, Glasgow 52 Grange Road Glasgow United Kingdom G42 9LF

Study participating centre Gloucestershire Royal Hospital Great Western Road Gloucestershire Gloucester United Kingdom GL1 3NN

Study participating centre Guy's and St Thomas' Hospital Westminster Bridge Road Lambeth London United Kingdom SE1 7EH

Study participating centre

Hull Royal Infirmary

Hull and East Yorkshire Hospitals NHS Trust Anlaby Road Hull United Kingdom HU3 2JZ

Study participating centre James Paget Hospital, Great Yarmouth

Lowestoft Road Gorleston-on-Sea Great Yarmouth United Kingdom NR31 6LA

Study participating centre John Radcliffe Hospital

Headley Way Headington Oxford United Kingdom OX3 9DU

Study participating centre Lincoln County Hospital Greetwell Road Lincoln United Kingdom LN2 5QY

Study participating centre Luton & Dunstable University Hospital Lewsey Road Luton United Kingdom LU4 0DZ

Study participating centre Musgrove Park Hospital, Taunton Parkfield Drive Taunton United Kingdom TA1 5DA

Study participating centre New Queen Elizabeth Hospital Birmingham Mindelsohn Way Edgbaston Birmingham United Kingdom B15 2GW

Study participating centre Ninewells Hospital Dundee United Kingdom DD1 9SY

Study participating centre Norfolk and Norwich Hospital Colney Lane Norwich United Kingdom NR4 7UY

Study participating centre Nottingham City Hospital Hucknall Road Nottingham United Kingdom NG5 1PB

Study participating centre Royal Blackburn Hospital Haslingden Road Blackburn United Kingdom BB2 3HH

Study participating centre

Royal Bournemouth Hospital

Castle Lane E Bournemouth United Kingdom BH7 7DW

Study participating centre Royal Devon and Exeter Hospital, Wonford Barrack Road Exeter United Kingdom EX2 5DW

Study participating centre Royal Hampshire County Hospital Romsey Road Winchester United Kingdom SO22 5DG

Study participating centre Royal Liverpool Hospital Prescot Street Liverpool United Kingdom L7 8XP

Study participating centre Royal Sussex County Hospital Barry Building Eastern Road Brighton United Kingdom BN2 5BE

Study participating centre Royal Victoria Infirmary, Newcastle Queen Victoria Road Newcastle upon Tyne United Kingdom NE1 4LP

Study participating centre Royal Wolverhampton NHS Trust West Midlands United Kingdom WV10 0QP

Study participating centre Russells Hall Hospital Pesnett Road Dudley

United Kingdom DY1 2HQ

Study participating centre Southampton General Hospital Tremona Road Southampton United Kingdom SO16 6YD

Study participating centre St George's Hospital Blackshaw Road London United Kingdom SW17 0QT

Study participating centre St Mark's Hospital Watford Road Middlesex Harrow United Kingdom

HA1 3UJ

Study participating centre St Mary's Hospital, London Praed Street London United Kingdom W2 1NY

Study participating centre The Cumberland Infirmary Newtown Road Carlisle United Kingdom CA2 7HY

Study participating centre Torbay Hospital Newton Road Torquay United Kingdom

TQ2 7AA

Study participating centre University College Hospital 235 Euston Road Bloomsbury London United Kingdom NW1 2BU

Study participating centre University Hospital of Wales, Cardiff Heath Park Way Cardiff United Kingdom CF14 4XW

Study participating centre Watford General Hospital Vicarage Road Watford United Kingdom WD18 0HB **Study participating centre Western General Hospital** Crewe Rd S Edinburgh United Kingdom EH4 2XU

Study participating centre Wythenshawe Hospital Southmoor Road Wythenshawe Manchester United Kingdom M23 9LT

Sponsor information

Organisation Cambridge University Hospitals NHS Foundation Trust

Sponsor details Addenbrookes Hospital Hills Road Cambridge England United Kingdom

Sponsor type Hospital/treatment centre

ROR https://ror.org/04v54gj93

Funder(s)

Funder type Charity

CB2 0QQ

Funder Name Wellcome Trust

Alternative Name(s)

Funding Body Type Private sector organisation

Funding Body Subtype International organizations

Location United Kingdom

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer reviewed journal in 2020.

Intention to publish date

15/06/2023

Individual participant data (IPD) sharing plan

The data sharing plans for the trial are currently unknown and will be made available at a later date.

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study o	outputs
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Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	version V2	20/10/2017	03/11/2017	No	Yes
Protocol article	protocol	05/12/2018	04/11/2019	Yes	No
HRA research summary			28/06/2023	No	No
Results article		21/02/2024	26/02/2024	Yes	No
Statistical Analysis Plan	version 3	17/08/2023	14/03/2024	No	No