

# Multicentre Cohort Study in Alcoholic Hepatitis

<b>Submission date</b> 10/04/2019	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 11/07/2019	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 16/02/2023	<b>Condition category</b> Digestive System	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Alcoholic hepatitis is a form of alcohol-related liver disease characterised by liver failure in the context of recent and heavy alcohol consumption. Currently, liver biopsy is used to diagnose alcoholic hepatitis and remains difficult to predict the course of the disease and how to select the best treatment.

The purpose of this study is to investigate how we can reduce mortality in patients with alcoholic hepatitis. Samples and data collected from patients will be used to investigate whether a blood test can diagnose alcoholic hepatitis and so avoid the need for liver biopsy. It will also study tests to predict disease outcome, infection and kidney damage.

### Who can participate?

Adults aged 18 years and over with clinical diagnosis of either Alcoholic Hepatitis (AH) or Acute Decompensation of Cirrhosis (AD).

### What does the study involve?

After consent to take part the study involves a brief interview and medical examination to ensure eligibility. Blood (about 60ml - just over four tablespoons worth) and urine samples will be collected for infection screening, standard laboratory testing and study testing. In case of ascites (fluid that has accumulated in the abdomen) the study doctor will perform an ascitic tap (collection of this fluid). Tests will also be done for viral hepatitis infections and for HIV (AIDS) (unless already available). Pre-menopausal female will be tested for pregnancy. All of these tests are standard clinical care. If agreed, we will be using samples if liver biopsy is performed as standard clinical care. Each visit should take about one hour.

- AD patients will only be required to attend the initial screening – day 0 and baseline – day 1 assessments as these samples are comparison for a diagnostic test for AH.

- For patients with AH, the study will last for 90 days (3 months). AH patients will be seen for a study/research visit at 7, 14, 21, 28, and 90 days after standard of care treatment. The condition will be monitored and we will collect the data/samples at these time points while the patient is in the hospital. After discharge from hospital, the routine weekly assessments will cease and there will only be day 28 and day 90 assessments.

- The last visit at 90 days, AH patients will have further blood, urine, and stool samples taken.

### What are the possible benefits and risks of participating?

The knowledge we gain from the study and looking at samples in the laboratory should help us

improve the treatment offered to patients with alcohol-related liver disease in the future. There may be discomfort associated with the taking of blood samples via a needle. There may be the inconvenience of donating urine and stool samples.

Where is the study run from?  
Imperial College London, UK

When is the study starting and how long is it expected to run for?  
June 2019 to December 2023

Who is funding the study?  
Medical Research Council

Who is the main contact?  
Dr. Karolina Bogdanowicz, micah@imperial.ac.uk

## Contact information

### Type(s)

Public

### Contact name

Dr Karolina Bogdanowicz

### Contact details

Imperial Clinical Trials Unit  
London  
United Kingdom  
W12 7RH  
020 7594 0995  
micah@imperial.ac.uk

### Type(s)

Scientific

### Contact name

Dr Karolina Bogdanowicz

### Contact details

Imperial Clinical Trials Unit  
London  
United Kingdom  
W12 7RH  
020 7594 0995  
micah@imperial.ac.uk

## Additional identifiers

### Clinical Trials Information System (CTIS)

Nil known

**ClinicalTrials.gov (NCT)**

Nil known

**Protocol serial number**

19SM5048

## **Study information**

**Scientific Title**

Multicentre Cohort Study in Alcoholic Hepatitis

**Acronym**

MICAH

**Study objectives**

The aim of the study is to recruit patients with Alcoholic Hepatitis (AH), irrespective of severity, to evaluate performance of the prognostic scoring systems and diagnostic and prognostic biomarkers. In order to evaluate diagnostic biomarkers, we will also recruit control patients with acute decompensation of cirrhosis (AD).

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Not provided at time of registration

**Study design**

Prospective multi-centre cohort study

**Primary study design**

Observational

**Study type(s)**

Diagnostic

**Health condition(s) or problem(s) studied**

Alcoholic hepatitis or acute decompensation of cirrhosis (control group)

**Interventions**

Patients will continue to receive standard of care treatment throughout. Study participants will attend several test sessions where routine samples and other data will be collected.

After consent to take part the study involves a brief interview and medical examination to ensure eligibility. Blood and urine samples will be collected for infection screening, standard laboratory testing and study testing. In case of ascites, the study doctor will perform an ascitic tap. Tests will also be done for viral hepatitis infections and for HIV (AIDS) (unless already available). Pre-menopausal female will be tested for pregnancy. All of these tests are standard clinical care. If agreed, we will be using samples if liver biopsy is performed as standard clinical care. Each visit should take about 1 hour.

- AD patients will only be required to attend the initial screening – day 0 and baseline – day 1

assessments as these samples are comparison for a diagnostic test for AH.

- For patients with AH, the study will last for 90 days (3 months). AH patients will be seen for a study/research visit at 7, 14, 21, 28, and 90 days after standard of care treatment. The condition will be monitored and we will collect the data/samples at these time points while the patient is in the hospital. After discharge from hospital, the routine weekly assessments will cease and there will only be day 28 and day 90 assessments.

- The last visit at 90 days, AH patients will have further blood, urine, and stool samples taken.

## **Intervention Type**

Other

## **Primary outcome(s)**

Validation of diagnostic and prognostic performance parameters for (Baseline, D28, D90):

1. Taurocholic acid diagnostic test to distinguish AH from AD
2. Transferrin, ELF and PNPLA3 genotype adjusted prognostic scores
3. Bacterial DNA, monocyte HLADR expression and oxidative burst for prediction of infection
4. Bacterial DNA for risk stratification before immunosuppressive therapy
5. Micro RNAs for prediction of AKI
6. BLISS assay for prediction of response to prednisolone

## **Key secondary outcome(s)**

1. Outcome at 28 and 90 days:
  - 1.1 Mortality (rate)
  - 1.2 Incidence of infection (rate)
  - 1.3 Incidence of AKI (rate)
  - 1.4 Incidence of recidivism (rate)
2. Outcome at 1, 5 and 10 years:
  - 2.1 All-cause mortality (rate)
  - 2.2 Liver-related mortality (rate)
  - 2.3 Use of healthcare services (HES data)

## **Completion date**

31/12/2023

# **Eligibility**

## **Key inclusion criteria**

1. Alcoholic Hepatitis group:
  - 1.1 Aged 18 years or older
  - 1.2 Clinical diagnosis of alcoholic hepatitis:
    - 1.2.1 Serum bilirubin  $\geq 50\mu\text{mol/L}$
    - 1.2.2 History of excess alcohol ( $> 80\text{g/day}$  male,  $> 60\text{g/day}$  female) to within 2 months of recruitment
  - 1.3 Less than 4 weeks since admission to hospital
  - 1.4 Informed consent

The alcoholic hepatitis cohort will be subdivided into patients with Maddrey's discriminant function  $\geq 32$ , referred to as severe alcoholic hepatitis (SAH) and those with Maddrey's discriminant function  $< 32$ , referred to as non-severe alcoholic hepatitis (NSAH).

2. Acute Decompensation of Cirrhosis group:

- 2.1 Aged 18 years or older

- 2.2 Clinical or radiological diagnosis of liver cirrhosis
- 2.3 Acute development of one or more of the following complications:
  - 2.3.1 Ascites
  - 2.3.2 Encephalopathy
  - 2.3.3 Gastrointestinal haemorrhage
  - 2.3.4 Infection
- 2.4 Less than 4 weeks since admission to hospital
- 2.5 Informed consent
- 2.6 History of excess alcohol (> 80g/day male, > 60g/day female) for more than 5 years

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

- 1. Acute Decompensation of Cirrhosis group:
  - 1.1 Abstinence of >2 months prior to randomisation
  - 1.2 Duration of clinically apparent jaundice > 3 months
  - 1.3 Other causes of liver disease including:
    - 1.3.1 Evidence of active chronic viral hepatitis (Hepatitis B or C)
    - 1.3.2 Biliary obstruction
    - 1.3.3 Hepatocellular carcinoma
  - 1.4 Evidence of current malignancy (except non-melanotic skin cancer)
  - 1.5 HIV infection
  - 1.6 Aspartate Aminotransferase (AST) >500 U/L or Alanine Aminotransferase (ALT) >300 U/L (not compatible with alcoholic hepatitis)
  - 1.7 Patients with a serum creatinine >500 µmol/L or requiring renal support (see below)
  - 1.8 Patients dependent upon inotropic support (adrenaline or noradrenaline). Terlipressin is allowed
  - 1.9 Active gastrointestinal bleeding
  - 1.10 Untreated infection
  - 1.11 Pregnant or lactating women
  - 1.12 Patients who cannot understand English
- 2. Acute Decompensation of Cirrhosis group:
  - 2.1 Alcoholic Hepatitis (clinically or on histology)
  - 2.2 Other causes of liver disease including:
    - 2.2.1 Evidence of active chronic viral hepatitis (Hepatitis B or C)
    - 2.2.2 Biliary obstruction
    - 2.2.3 Hepatocellular carcinoma

- 2.3 Pregnant or lactating women
- 2.4 HIV infection
- 2.5 Patients who cannot understand English

**Date of first enrolment**

01/06/2019

**Date of final enrolment**

31/05/2023

## **Locations**

**Countries of recruitment**

United Kingdom

England

Scotland

Wales

**Study participating centre**

**Imperial College Healthcare NHS Foundation Trust**

St Marys Hospital

Praed Street

London

United Kingdom

W2 1NY

**Study participating centre**

**Plymouth Hospitals NHS Trust**

Derriford Hospital

Plymouth

United Kingdom

PL6 8DH

**Study participating centre**

**University Hospital Southampton NHS Foundation Trust**

Southampton General Hospital

Southampton

United Kingdom

SO16 6YD

**Study participating centre**  
**Sheffield Teaching Hospitals NHS Foundation Trust**  
Northern General Hospital  
Southampton  
United Kingdom  
S5 7AU

**Study participating centre**  
**Royal Devon and Exeter NHS Foundation Trust**  
Royal Devon and Exeter Hospital  
Exeter  
United Kingdom  
Ex2 5DW

**Study participating centre**  
**Royal Liverpool and Broadgreen University Hospitals NHS Trust**  
Royal Liverpool University Hospital  
Liverpool  
United Kingdom  
L7 8XP

**Study participating centre**  
**Cambridge University Hospitals NHS Foundation Trust**  
Addenbrookes Hospital  
Cambridge  
United Kingdom  
CB2 0QQ

**Study participating centre**  
**Nottinghamshire Healthcare NHS Foundation Trust**  
The Resource, Trust HQ  
Nottingham  
United Kingdom  
NG3 6AA

**Study participating centre**  
**Royal Free London NHS Foundation trust**  
Royal Free Hospital  
London  
United Kingdom  
NW3 2QG

**Study participating centre**

**The Newcastle Upon Tyne Hospitals NHS Foundation Trust**

Freeman Hospital

Newcastle

United Kingdom

NE7 7DN

**Study participating centre**

**University Hospitals Bristol NHS Foundation Trust**

Marlborough Street; Bristol Avon

Bristol

United Kingdom

BS1 3NU

**Study participating centre**

**Derby Teaching Hospitals NHS Foundation Trust**

Royal Derby Hospital

Derby

United Kingdom

DE22 3NE

**Study participating centre**

**NHS Greater Glasgow and Clyde**

Glasgow Royal Infirmary; Queen Elizabeth University Hospital

Glasgow

United Kingdom

G12 0XH

**Study participating centre**

**Oxford University Hospitals NHS Foundation Trust**

John Radcliffe Hospital

Oxford

United Kingdom

OX3 9DU

**Study participating centre**

**Aintree University Hospital NHS Foundation Trust**

University Hospital Aintree



Liverpool  
United Kingdom  
L9 7AL

**Study participating centre**  
**Blackpool Teaching Hospitals NHS Foundation trust**  
Victoria Hospital  
Blackpool  
United Kingdom  
FY3 8NR

**Study participating centre**  
**Chelsea and Westminster Hospital NHS Foundation trust**  
Chelsea and Westminster Hospital  
London  
United Kingdom  
SW10 9NH

**Study participating centre**  
**Torbay and South Devon NHS Foundation Trust**  
Hengrave House, Torbay Hospital  
Devon  
United Kingdom  
TQ2 7AA

**Study participating centre**  
**Nottingham University Hospitals NHS Trust**  
Queens Medical Centre  
Nottingham  
United Kingdom  
NG7 2UH

**Study participating centre**  
**Kings College Hospital NHS Foundation Trust**  
Kings College Hospital  
London  
United Kingdom  
SE5 9RS

**Study participating centre**

**Gloucestershire Hospitals NHS Foundation Trust**

Alexandra House  
Cheltenham  
United Kingdom  
GL53 7AN

**Study participating centre**

**Royal Cornwall Hospitals NHS Trust**

Royal Cornwall Hospital  
Cornwall  
United Kingdom  
TR1 3LJ

**Study participating centre**

**The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust**

Royal Bournemouth General Hospital  
Bournemouth  
United Kingdom  
BH7 7DW

**Study participating centre**

**Hull and East Yorkshire Hospitals NHS Trust**

Hull Royal Infirmary  
Hull  
United Kingdom  
Hu3 2JZ

**Study participating centre**

**Bradford Teaching Hospitals NHS Foundation Trust**

Bradford Royal Infirmary  
Bradford  
United Kingdom  
BD9 6RJ

**Study participating centre**

**Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust**

Doncaster Royal Infirmary  
Doncaster  
United Kingdom  
DN2 5LT

**Study participating centre**  
**ST Georges University Hospitals NHS Foundation Trust**  
St Georges Hospital  
London  
United Kingdom  
SW17 0QT

**Study participating centre**  
**Portsmouth Hospitals NHS Trust**  
Queen Alexandra Hospital  
Portsmouth  
United Kingdom  
PO6 3LY

**Study participating centre**  
**Poole Hospital NHS Foundation Trust**  
Poole Hospital  
Poole  
United Kingdom  
BH15 2JB

**Study participating centre**  
**Luton and Dunstable University Hospital NHS Foundation Trust**  
Luton and Dunstable University Hospital  
Luton  
United Kingdom  
LU4 0DZ

**Study participating centre**  
**Chesterfield Royal Hospital NHS Foundation Trust**  
Chesterfield Royal Hospital  
Chesterfield  
United Kingdom  
S44 5BL

**Study participating centre**  
**County Durham and Barlington NHS Foundation Trust**  
Darlington Hospital

Durham  
United Kingdom  
DL3 6HX

**Study participating centre**

**NHS Tayside**

Kings Croos  
Dundee  
United Kingdom  
DD3 8EA

**Study participating centre**

**Abertawe Bro Morgannwg University LHB**

One Talbot Gateway  
West Glamorgan  
United Kingdom  
SA12 7BR

**Study participating centre**

**South Tyneside NHS Foundation Trust**

South Tyneside District Hospital  
Southshields Tyne and Wear  
United Kingdom  
NE34 0PL

**Study participating centre**

**University Hospitals Birmingham NHS Foundation Trust**

Queen Elizabeth Medical Centre  
West Midlands  
United Kingdom  
B15 2TH

**Study participating centre**

**City Hospitals Sunderland NHS Foundation Trust**

Sunderland Royal Hospital  
Sunderland Tyne and Wear  
United Kingdom  
SR4 7TP

**Study participating centre**  
**Countess of Chester Hospital NHS Foundation Trust**  
Countess of Chester Hospital  
Chester  
United Kingdom  
CH2 1UL

**Study participating centre**  
**University Hospitals of Leicester NHS Trust**  
Leicester Royal Infirmary  
Leicester  
United Kingdom  
LE1 5WW

**Study participating centre**  
**Northumbria Healthcare NHS Foundation Trust**  
Rake Lane  
North Shields Tyne and wear  
United Kingdom  
NW29 8NH

**Study participating centre**  
**NHS Lothian**  
Waverley Gate  
Edinburgh  
United Kingdom  
EH1 3EG

**Study participating centre**  
**South Tees Hospitals NHS Foundation Trust**  
James Cook University Hospital  
Middlesbrough  
United Kingdom  
TS4 3BW

**Study participating centre**  
**Taunton and Somerset NHS Foundation Trust**  
Musgrove Park Hospital  
Taunton Somerset  
United Kingdom  
TA1 5DA

**Study participating centre**  
**Firmley Health NHS Foundation Trust**  
Portsmouth Road  
Surrey  
United Kingdom  
GU16 7UJ

**Study participating centre**  
**Sandwell and West Birmingham Hospitals NHS Trust**  
City Hospital  
Birmingham  
United Kingdom  
B18 7QH

**Study participating centre**  
**Sherwood Forest Hospitals NHS Foundation Trust**  
Mansfield Road  
Sutton In Ashfield  
United Kingdom  
NG17 4JL

**Study participating centre**  
**North Staffordshire Combined Healthcare NHS Trust**  
Bellringer Road  
Stoke on Trent  
United Kingdom  
St4 8HH

**Study participating centre**  
**Warrington and Halton Hospitals NHS Foundation Trust**  
Warrington Hospital  
Cheshire  
United Kingdom  
Wa5 1qg

**Study participating centre**  
**Leeds Teaching Hospitals NHS Trust**  
St James's University Hospital

Leeds  
United Kingdom  
LS9 7TF

**Study participating centre**

**NHS Forth Valley**

33 Spittal Street  
Stirling  
United Kingdom  
FK8 1DX

**Study participating centre**

**Western Sussex Hospitals NHS Foundation Trust**

Worthing Hospital  
Worthing  
United Kingdom  
BN11 2DH

**Study participating centre**

**NHS Grampian**

Summerfield House  
Aberdeen  
United Kingdom  
AB15 6RE

## **Sponsor information**

**Organisation**

Imperial College London

**ROR**

<https://ror.org/041kmwe10>

## **Funder(s)**

**Funder type**

Government

**Funder Name**

Medical Research Council

**Alternative Name(s)**

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

United Kingdom

## Results and Publications

**Individual participant data (IPD) sharing plan**

The datasets generated during and/or analysed during the current study will be stored in a non-publicly available repository.

No identifiable personal data will be included in any publications resulting from research. Data generated by the study will be held on the InForm eCRF online database. The database will not be used to store any raw data. NHS identifiable patient data will only be stored on secure computers which may only be accessed by the clinicians involved in the patients' clinical care. Paper records (consent forms etc) will be stored securely on NHS premises. Information gleaned from access will remain entirely confidential, and will only be recorded anonymously in study. Under the General Data Protection Regulation (GDPR) the study database will assign a unique identifying numerical code which is distinct from the NHS number of the hospital record number. The unique identifier will be used for all NHS or Imperial College research data stored on investigators computers accessible only to members of the research/healthcare team. This pseudoanonymised data will be kept on NHS and University computers. Such data will be encrypted to the local ICT requirements. Only fully anonymised data will be kept on University computers and laptops.

**IPD sharing plan summary**

Stored in non-publicly available repository

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes