

# Enhanced Liver fibrosis (ELF) test to Uncover Cirrhosis as an Indication for Diagnosis and Action for Treatable Events

<b>Submission date</b> 06/08/2009	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 11/11/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 29/12/2020	<b>Condition category</b> Digestive System	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
RP-PG-0707-10101

# Study information

## Scientific Title

Evaluating the benefits for patients and the UK National Health Service (NHS) of new and existing biological fluid markers in liver and renal disease: a prospective multicentre randomised trial

## Acronym

ELUCIDATE

## Study objectives

The primary aim of the study is to evaluate the benefits to patients and the NHS of new and existing biological fluid markers in liver and renal disease, which aims to develop a stringent approach to protein biomarker evaluation. This trial will determine whether the use of the enhanced liver fibrosis (ELF) test will significantly alter the diagnostic timing and subsequent management of cirrhosis of the liver in order to reduce serious complications and improve outcomes for patients and service provision.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Not provided at time of registration

## Study design

Prospective multicentre randomised controlled trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Hospital

## Study type(s)

Diagnostic

## Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

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

Chronic liver disease

## Interventions

Patients will be randomised to either:

1. ELF arm: patients in the ELF arm will undergo follow-up screening for cirrhosis with the ELF

test

2. Standard care arm: patients in the standard care arm will undergo standard follow-up screening for cirrhosis

Patients will be followed up at 6 monthly intervals until 30 months after randomisation.

### **Intervention Type**

Other

### **Phase**

Not Applicable

### **Primary outcome measure**

Time from clinical diagnosis of cirrhosis to incidence of any of the following severe complications:

1. Variceal haemorrhage
2. Mortality due to variceal haemorrhage
3. Spontaneous bacterial peritonitis
4. Mortality due to hepatocellular cancer (HCC)

Patients will undergo follow-up visits at 6-monthly intervals, increasing to 3-monthly intervals after diagnosis of cirrhosis, for 30 months post-randomisation. Outcome data will be collected at each visit.

### **Secondary outcome measures**

1. Time from randomisation to clinical diagnosis of cirrhosis (to allow instigation of prophylaxis and screening)
2. Detection and timing of complications following cirrhosis, including:
  - 2.1. Detection of small varices
  - 2.2. Detection of large varices
  - 2.3. Incidence of treatable hepatocellular cancer (HCC)
  - 2.4. Incidence of inoperable HCC
3. All causes of mortality
4. Economic evaluation of the ELF test in the early detection of cirrhosis and as such in the initiation of measures to reduce the incidence of severe complications following cirrhosis

Patients will undergo follow-up visits at 6-monthly intervals, increasing to 3-monthly intervals after diagnosis of cirrhosis, for 30 months post-randomisation. Outcome data will be collected at each visit.

### **Overall study start date**

01/09/2009

### **Completion date**

01/09/2014

## **Eligibility**

### **Key inclusion criteria**

Registration:

1. Patients with chronic liver disease and pre-cirrhotic moderate to severe fibrosis as classified

by clinical, laboratory, or histological evidence, due to viral hepatitis B or C, non-alcoholic fatty liver disease, alcoholic liver disease, primary biliary cirrhosis (PBC), primary sclerosing cholangitis (PSC), autoimmune hepatitis (AIH), haemochromatosis, or combinations of these diseases

2. Clinical evidence of chronic liver disease as evidenced by documented abnormalities of liver function for more than six months including:

2.1. Elevated liver enzymes (alanine aminotransferase [ALT], aspartate aminotransferase [AST], gamma glutamyl-transferase [GGT])

2.2. Elevated bilirubin with raised liver enzymes

2.3. Symptoms or signs of chronic liver disease (including jaundice, clubbing, palmar erythema, spider naevae)

3. Chronic liver disease due to:

3.1. Virus-serological and nucleic acid evidence of chronic Hepatitis C, chronic Hepatitis B

3.2. Fat: ultrasound evidence of fatty liver disease

3.3. Alcohol: history of excessive alcohol consumption

3.4. Autoimmune hepatitis (smooth muscle antibodies [SMA], anti-nuclear antibodies [ANA], liver-kidney-microsome antibodies [LKM] and raised immunoglobins)

3.5. Primary biliary cirrhosis (anti-mitochondrial antibodies [AMA], M2 antibodies)

3.6. Primary sclerosing cholangitis (endoscopic retrograde cholangiopancreatography [ERCP] or magnetic resonance cholangiopancreatography [MRCP] evidence of beading of biliary tree)

3.7. Haemochromatosis-HFE genotype H63C or H63D with liver biopsy evidence of iron overload

4. Aged greater than or equal to 18 years old and less than 75 years of age, either sex

5. Give their written, informed consent to participate

6. Likelihood of ability to comply with the follow-up schedule

7. Life expectancy greater than 6 months

Randomisation:

8. An ELF score of greater than or equal to 10.5

### **Participant type(s)**

Patient

### **Age group**

Adult

### **Lower age limit**

18 Years

### **Sex**

Both

### **Target number of participants**

1000

### **Total final enrolment**

878

### **Key exclusion criteria**

Registration:

1. Unable to provide consent

2. Clinical, histological or laboratory diagnosis of cirrhosis (other than ELF) such as hepatic impairment as evidenced by any one of the following:

- 2.1. Platelets less than the lower limit of normal (LLN)
  - 2.2. Albumin less than LLN
  - 2.3. Ultrasound of other imaging evidence of cirrhosis (coarse echo texture, irregular outline to liver, splenomegally)
- OR
- 3. Any episode of hepatic decompensation compatible with cirrhosis including:
    - 3.1. Encephalopathy, variceal bleeding, ascites
    - 3.2. Established diagnosis of hepatocellular cancer
    - 3.3. Elevated alpha feto-protein without investigation to exclude HCC
  - 4. Previously screened and found ineligible for the ELUCIDATE Trial

Note that human immunodeficiency virus (HIV) co-infection is NOT an exclusion criterion.

Randomisation:

- 5. An ELF score of less than 10.5

**Date of first enrolment**

01/09/2009

**Date of final enrolment**

01/09/2014

## **Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

**Windeyer Institute of Medical Sciences**

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**Organisation**

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**Sponsor type**

University/education

**Website**

<http://www.leeds.ac.uk/>

**ROR**

<https://ror.org/024mrxd33>

## Funder(s)

**Funder type**

Government

**Funder Name**

National Institute for Health Research (NIHR) (UK) - Programme Grant for Applied Research (PGfAR) (ref: RP-PG-0707-10101)

## Results and Publications

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/06/2018	29/12/2020	Yes	No