ISRCTN74815110 https://doi.org/10.1186/ISRCTN74815110

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

Submission date 06/08/2009	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol [_] Statistical analysis plan [X] Results [_] Individual participant data
Registration date 11/11/2009	**Overall study status** Completed	
Last Edited 29/12/2020	**Condition category** Digestive System	

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
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

Study type(s)
Diagnostic

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(s)

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.

Key secondary outcome(s))
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.

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], asparate 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-nucleur antibodies [ANA], liver-kidney-microsome antibodies [LKMA] 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 HDCY or HHYY 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

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
All

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
United Kingdom

England

Study participating centre
Windeyer Institute of Medical Sciences
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Sponsor information

Organisation
University of Leeds (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

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?
Results article	results	01/06/2018	29/12/2020	Yes	No