A pilot study to determine if the Glyco Liver Profile is a suitable blood test for measuring liver inflammation in non-alcoholic steatohepatitis (NASH) patients

Submission date 08/07/2019	Recruitment status No longer recruiting	Prospectively registered
		[X] Protocol
Registration date	Overall study status	Statistical analysis plan
19/08/2019	Completed	Results
Last Edited	5 ,	Individual participant data
19/07/2022		Record updated in last year

Plain English summary of protocol

Background and study aims

Non-alcoholic fatty liver disease (NAFLD) is a common liver disease present in about 25% of the adult population of the UK. 80% of people with NAFLD will not develop significant liver disease. However, in 20% of people, liver disease may progress to liver inflammation (NASH), cirrhosis and/or liver cancer. Doctors are currently unable to diagnose active liver inflammation (NASH) in NAFLD without a liver biopsy, an invasive procedure that carries a significant risk of pain and bleeding. Glyco Liver Profile is a blood test designed to measure liver inflammation without the need for a liver biopsy. It is due to be fully licensed for use in the NHS in the UK in January 2019. It is envisaged that the test would be used to aid the identification of active NASH in the NAFLD patient group. Clinical drug trials for NASH are currently recruiting participants and methods to identify people who may benefit from new drug treatments without the need for liver biopsy are urgently required. The Glyco Liver Profile blood test could avoid unnecessary invasive testing and help identify a cohort of patients who could be considered for recruitment into NASH clinical trials and may be eligible for NASH medicines once licensed. The aim of this study is to find out whether the Glyco Liver Profile is a suitable blood test for measuring liver inflammation in non-alcoholic steatohepatitis (NASH) patients.

Who can participate?

Patients with NAFLD who are having or not having a liver biopsy, and patients who don't have NAFLD

What does the study involve?

Participants are asked to provide one blood sample at the same time as their routine clinical blood samples. Only 5 ml (one teaspoon of blood) is taken for study purposes. Participants are asked some questions (not a questionnaire but data collection form only) about their medical history and medications which does not take longer than 30 minutes. There is no further follow up.

What are the possible benefits and risks of participating?

There will be no direct benefit to participation. However, it is hoped that this study will help to improve care for patients with non-alcoholic fatty liver disease. The result of the Glyco Liver Profile blood test will be entered into the patients' medical records and this may be of interest to the patient and add to the test results available to the liver doctor. No significant risks are expected. Only 5 ml (one teaspoon of blood) will be taken for study purposes. This blood sample will be destroyed after analysis. The patient will be asked some questions about medical history and medications which will not take longer than 30 minutes. There will be no further trial-specific intervention or follow up.

Where is the study run from?
Hull and East Yorkshire Hospitals NHS Trust (UK)

When is the study starting and how long is it expected to run for? April 2019 to April 2020

Who is funding the study? Helena Biosciences Europe Limited

Who is the main contact? Dr Lynsey Corless lynsey.corless@nhs.net

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

CPMS: 41256

Study information

Scientific Title

A pilot study to determine if the Glyco Liver Profile is a suitable candidate assay for measuring liver inflammation in non-alcoholic steatohepatitis (NASH) patients

Study objectives

NAFLD is a common liver disease present in about 25% of the adult population of the UK. 80% of people with NAFLD will not develop significant liver disease. However, in 20% of people, liver disease may progress to liver inflammation (NASH), cirrhosis and/or liver cancer. We are currently unable to diagnose active liver inflammation (NASH) in NAFLD without a liver biopsy, an invasive procedure that carries a significant risk of pain and bleeding.

Glyco Liver Profile is a blood test designed to measure liver inflammation without the need for a liver biopsy. It is due to be fully licensed for use in the NHS in the UK in January 2019. It is envisaged that the test would be used to aid the identification of active NASH in the NAFLD patient group. Clinical drug trials for NASH are currently recruiting participants and methods to identify people who may benefit from new drug treatments without the need for liver biopsy are urgently required.

The Glyco Liver Profile blood test could avoid unnecessary invasive testing and help identify a cohort of patients who could be a) considered for recruitment into NASH clinical trials and b) may be eligible for NASH medicines once licensed.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 05/04/2019, Yorkshire & The Humber - Bradford Leeds Research Ethics Committee (NHSBT Newcastle Blood Donor Centre, Holland Drive, Newcastle upon Tyne, NE2 4NQ, UK; Tel: +44 (0)207 1048 088; Email: nrescommittee.yorkandhumber-bradfordleeds@nhs.net), ref: 19/YH/0037

Study design

Non-randomised; Observational; Design type: Cohort study

Primary study design

Observational

Study type(s)

Diagnostic

Health condition(s) or problem(s) studied

Nonalcoholic steatohepatitis (NASH)

Interventions

Patients with a diagnosis of NAFLD prospectively attending the liver clinic will be approached and asked if they would like to participate. If in agreement, they will be asked to sign a consent form. The researchers will also approach people without NAFLD who are attending a general gastroenterology clinic, to act as the normal sample group. Participation will involve an additional blood sample (5 ml) being taken at the time of routine clinical care sample collection. Participants will be asked some questions (not a questionnaire but data collection form only) about their medical history and medications which will not take longer than 30 minutes. There will be no further follow up. No other involvement or activity will be required from participants. The sample will be processed in the laboratory with routine clinical samples. The test result will return to the study team, who will store the result alongside demographic and biochemical information on an anonymised, password-protected database. The test result will also be documented in the medical records.

Intervention Type

Other

Primary outcome(s)

- 1. Journey mapping of the sample from clinic to lab to final result, to demonstrate logistical feasibility
- 2. Patient acceptability of having the test, assessed by direct questioning

Key secondary outcome(s))

Analysis of participants' Glyco and liver biopsy results, alongside other clinical data, to determine if there is preliminary evidence of correlation (not statistically powered)

Completion date

11/12/2020

Eligibility

Key inclusion criteria

- 1. 18 years or older on day of consent
- 2. Must be diagnosed with NAFLD with no liver biopsy planned (group 1)

or
Must be diagnosed with NAFLD with a planned liver biopsy (group 2)

Or

Must not have a diagnosis of NAFLD (group 3)

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Total final enrolment

36

Key exclusion criteria

- 1. Must be less than 80 years old on day of consent
- 2. Unable to provide informed consent
- 3. Must not have a confirmed diagnosis of any liver disease other than NAFLD (group 1 and 2)
- 4. Must not have a diagnosis of any liver disease (group 3)

Date of first enrolment

11/06/2019

Date of final enrolment

01/04/2020

Locations

Countries of recruitment

United Kingdom

England

Study participating centre Hull and East Yorkshire Hospitals NHS Trust

Hull Royal Infirmary Anlaby Road Hull United Kingdom HU3 2JZ

Sponsor information

Organisation

Hull University Teaching Hospitals NHS Trust

ROR

https://ror.org/01b11x021

Funder(s)

Funder type

Industry

Funder Name

Helena Biosciences Europe Limited

Results and Publications

Individual participant data (IPD) sharing plan

Data collected will be anonymised using a unique study number and will be the only identifier on the data collection form. Only the research team will know who the data belongs to. The data collected will be securely stored at the study office at Hull University Teaching Hospital. All information collected about the patient for this study will be subject to the General Data Protection Regulation and Data Protection Act 2018 for health and care research and will be kept strictly confidential. The researchers will be using information from the patient and/or medical records in order to undertake this study and will act as the data controller for this study. Hull University Teaching Hospital will keep identifiable information about the patient for 5 years after the study has finished. Hull University Teaching Hospital will keep the patient's name, NHS number and contact details confidential and will not pass this information to any other organisation. Hull University Teaching Hospital will use this information as needed, to contact participants about the research study, and make sure that relevant information about the study is recorded for care, and to oversee the quality of the study. Certain individuals from Hull University Teaching Hospital and regulatory organisations may look at participants' medical and research records to check the accuracy of the research study. These people will only receive information without any identifying information. The people who analyse the information will not be able to identify participants and will not be able to find out their names, NHS numbers or contact details. No individual participant will be identified in any publication.

IPD sharing plan summary

Other

Study outputs

Output typeDetailsDate createdDate addedPeer reviewed?Patient-facing?HRA research summary28/06/2023NoNoParticipant information sheetParticipant information sheet11/11/202511/11/2025NoYes