Rifaximin to reduce infection in decompensated cirrhosis

Submission date	Recruitment status No longer recruiting	Prospectively registered		
20/02/2017		Protocol		
Registration date 08/03/2017	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited 30/08/2023	Condition category Digestive System	[] Individual participant data		

Plain English summary of protocol

Background and study aims

Cirrhosis is the result of long-term, continuous damage to the liver and may be due to many different causes. The damage leads to scarring, known as fibrosis. Irregular bumps (nodules) replace the smooth liver tissue and the liver becomes harder. Together, the scarring and the nodules are called cirrhosis. Cirrhosis can take many years to develop and can do so without any noticeable symptoms until the damage to the liver is very serious. The build-up of scar tissue can interfere with the flow of blood to the liver and stop it from functioning properly, eventually leading to liver failure. Patients with decompensated cirrhosis (when the liver is not working properly) are at risk of dying from life-threatening complications of liver disease, such as bleeding varices (internal bleeding); ascites (fluid in the belly); encephalopathy (confusion); and jaundice (yellowing of eyes and skin). Rifaximin is an antibiotic most often used to treat diarrhea caused by the common bacteria known as E. coli. The aim of this study is to find out whether use of rifaximin can reduce the risk of infection in patients admitted to hospital with cirrhosis.

Who can participate?

Patients aged between 18 and 80 who have been admitted to hospital with cirrhosis.

What does the study involve?

Participants are randomly allocated to one of two groups. Those in the first group take rifaximin 550 mg twice a day for 6 months. Those in the second group take a placebo (dummy drug) twice a day for 6 months. At the start of the study, during treatment, after treatement and after 9 and 12 months, participants have information collected about their use of antibiotics and whether they have had infections at routine clinic appointments.

What are the possible benefits and risks of participating?

There may not be any direct benefits for patients taking part in this study personally, but the care that participants receive as part of this study may reduce their risk of infection whilst they are being treated for their cirrhosis. The knowledge gained from the trial and looking at study samples in the laboratory during and after treatment may improve the treatment offered to patients with cirrhosis in the future. There aren't any significant risks in participating in this trial. The medicine being used in this study is already licenced and is used in clinical care and is very well tolerated with minimal side effects.

Where is the study run from? St Mary's Hospital (lead centre) and four other NHS hospitals in England (UK)

When is the study starting and how long is it expected to run for? April 2016 to January 2020

Who is funding the study?

- 1. Norgine Ltd (UK)
- 2. Alfa Wassermann S.P.A (Italy)

Who is the main contact? Dr Rooshi Nathwani rooshi.nathwani08@imperial.ac.uk

Contact information

Type(s)

Scientific

Contact name

Dr Rooshi Nathwani

Contact details

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Additional identifiers

EudraCT/CTIS number

2016-002628-96

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers 33490

Study information

Scientific Title

A multi-centre, double-blind, randomised, controlled clinical trial of rifaximin to reduce infection in patients admitted to hospital with decompensated cirrhosis

Acronym

R-RID

Study objectives

The aim of the study is to investigate whether the use of Rifaximin reduces the risk of infection in patients admitted to hospital with cirrhosis.

Ethics approval required

Old ethics approval format

Ethics approval(s)

South West – Central Bristol Research Ethics Committee, 20/09/2016, ref: 16/SW/0232

Study design

Randomised; Interventional; Design type: Treatment, Prevention, Drug

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

No participant information sheet available

Health condition(s) or problem(s) studied

Decompensated cirrhosis

Interventions

Patients will be randomised to one of two groups in a ratio of 1:1 using a blinded randomisation list drawn up by an Imperial statistician and InForm software.

Intervention group: Participants receive rifaximin 550 mg twice a day for 6 months Control group: Participants receive placebo 550 mg twice a day for 6 months

Participants in both groups are followed up for 6 months by their consultant during their routine clinic appointments.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Rifaximin

Primary outcome measure

Incidence of secondary or recurrent infections in patients with cirrhosis during hospitalisation or after hospital discharge is assessed using clinical evaluations at baseline, 3, 7, 14, 28 and 90 days, at 6 months (EoT) and at 9 and 12 months.

Secondary outcome measures

- 1. Extrahepatic organ failure (e.g. renal, neurological) rate is measured by reviewing patient notes at baseline, 3, 7, 14, 28 and 90 days, at 6 months (EoT) and at 9 and 12 months
- 2. Mortality rate is measured by reviewing patient notes at baseline, 3, 7, 14, 28 and 90 days, at 6 months (EoT) and at 9 and 12 months
- 3. Readmission with sepsis rates is measured by reviewing patient notes at baseline, 3, 7, 14, 28 and 90 days, at 6 months (EoT) and at 9 and 12 months
- 4. Length of hospital stay is measured by reviewing patient notes at baseline, 3, 7, 14, 28 and 90 days, at 6 months (EoT) and at 9 and 12 months

Overall study start date

15/04/2016

Completion date

30/01/2020

Eligibility

Key inclusion criteria

- 1. Clinical/biochemical/radiological +/- histological diagnosis of cirrhosis
- 2. Hospital admission with complication of cirrhosis (e.g. alcoholic hepatitis, sepsis, variceal bleeding)
- 3. Commencement on antimicrobial therapy
- 4. Aged 18 80 years

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Upper age limit

80 Years

Sex

Both

Target number of participants

Planned Sample Size: 268; UK Sample Size: 268

Total final enrolment

78

Key exclusion criteria

- 1. C.difficile infection
- 2. HIV antibody positive
- 3. Immunosuppression (excluding low dose steroids/steroid sparing agents for AIH < 20 mg or equivalent of prednisolone)
- 4. Advanced disseminated Hepatocellular Carcinoma or invasive carcinoma
- 5. eGFR < 30 on screening/randomisation
- 6. End-stage/severe cardiac, pulmonary or kidney disease
- 7. IDDM
- 8. Colitis or coeliac disease
- 9. Pregnancy
- 10. Already receiving rifamixin

Date of first enrolment

12/01/2017

Date of final enrolment

31/03/2019

Locations

Countries of recruitment

England

United Kingdom

Study participating centre

St Mary's Hospital

Imperial College London & Imperial College Healthcare NHS Trust South Wharf Road London **United Kingdom W2 1NY**

Study participating centre The Royal Liverpool University Hospital

Gastrointestinal and Liver Services **Prescot Street** Liverpool United Kingdom L78XP

Study participating centre Queen Elizabeth Hospital Birmingham

Mindelsohn Way Edgbaston Birmingham United Kingdom B15 2GW

Study participating centre Frimley Park Hospital

Portsmouth Road Frimley United Kingdom GU16 7UJ

Study participating centre Chelsea & Westminster Hospital

369 Fulham Palace Road London United Kingdom SW10 9NH

Sponsor information

Organisation

Imperial College London

Sponsor details

Joint Research Compliance Office 2nd Floor, Medical School Building St Mary's Hospital Norfolk Place London England United Kingdom W2 1NY +44 20 3311 0204 jrco.ctimp.team@imperial.ac.uk

Sponsor type

University/education

ROR

Funder(s)

Funder type

Industry

Funder Name

Norgine Ltd

Funder Name

Alfa Wassermann S.P.A

Results and Publications

Publication and dissemination plan

- 1. Interim analysis shared with study funders, interim results to be published in peer reviewed journals, and interim results to be presented at international conferences and meetings: April June 2018
- 2. Final analysis shared with study funders, final results to be published in peer reviewed journals, and final results to be presented at international conferences and meetings: January 2020

Intention to publish date

31/01/2020

Individual participant data (IPD) sharing plan

The current data sharing plans for the current study are 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 outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023	No	No
Thesis results		01/06/2021	30/08/2023	No	No