ISRCTN20716052 https://doi.org/10.1186/ISRCTN20716052

Dietary food supplement Helinorm containing L. reuteri DSM 17648 in eradication treatment in H.pylori-positive patients with functional dyspepsia

Submission date
17/12/2019

Recruitment status
No longer recruiting

Registration date
20/01/2020

Overall study status
Completed

Last Edited
19/07/2024

Condition category
Digestive System

[X] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Current English summary as of 04/02/2020:
Background and study aims
Indigestion is pain or discomfort in the upper abdomen (dyspepsia). Helicobacter pylori (H. pylori) bacteria can break down the stomach's defense against the acid produced to digest food, allowing the stomach lining to become damaged and may induce an ulcer to form. Helinorm is a new food supplement that may improve recovery from dyspepsia due to H. pylori infection. This study aims to test the new treatment against placebo.

Who can participate?
Patients aged 18 – 65 years who are suffering from dyspepsia and confirmed H. pylori infection.

What does the study involve?
Participants will be randomly allocated to receive either the dietary food supplement (DFS) 'HELINORM' or placebo for 28 days as well as usual treatment. Participants will be asked to fill out questionnaires at the start and end of the therapy as well as provide blood samples for testing.

What are the possible benefits and risks of participating?
Main possible benefits of including investigational product in the eradication treatment scheme are increasing of eradication treatment efficacy and tolerance.
There are no any additional risks (except idiosyncrasy reactions) awaited as the investigational product will be used only as an additional aid in complex eradication treatment during the first stage of study and as the investigational product is a dietary food supplement itself related to probiotic remedies. Only adverse events related to antibiotic treatment can be possible in this study - gastrointestinal reactions, allergic reactions etc.

Where is the study run from?
1. First Moscow State Medical University named after I.M. Sechenov (Sechenov University), Russia

2. Moscow State University of Medicine and Dentistry named after A.I. Evdokimov (Moscow), Russia
3. Research Center ECO-safety LLC, Russia

When is the study starting and how long is it expected to run for?
September 2019 to January 2022

Who is funding the study?
Novozymes (Denmark)

Who is the main contact?
Kirill Bessonov
info@mcrbm.com

Previous English summary:
Background and study aims
Indigestion is pain or discomfort in the upper abdomen (dyspepsia). Helicobacter pylori (H. pylori) bacteria can break down the stomach's defence against the acid it produces to digest food, allowing the stomach lining to become damaged and an ulcer to form. Hellinorm is a new food supplement that may improve recovery from dyspepsia due to H. pylori infection.
This study aims to test the new treatment against placebo.

Who can participate?
Patients aged 18 – 65 years who are suffering from dyspepsia and confirmed H. pylori infection.

What does the study involve?
Participants will be randomly allocated to receive either the dietary food supplement (DFS) ‘HELINORM’ or placebo for 28 days as well as usual treatment. Participants will be asked to fill out questionnaires at the start and end of the therapy as well as provide blood samples for testing.

What are the possible benefits and risks of participating?
Main possible benefits of including investigational product in the eradication treatment scheme are increasing of eradication treatment efficacy and tolerance.
There are no any additional risks (except idiosyncrasy reactions) awaited as the investigational product will be used only as an additional aid in complex eradication treatment during the first stage of study and as the investigational product is a dietary food supplement itself related to probiotic remedies. Only adverse events related to antibiotic treatment can be possible in this study - gastrointestinal reactions, allergic reactions etc.

Where is the study run from?
1. First Moscow State Medical University named after I.M. Sechenov (Sechenov University), Russia
2. Moscow State University of Medicine and Dentistry named after A.I. Evdokimov (Moscow), Russia
3. Research Center ECO-safety LLC, Russia

When is the study starting and how long is it expected to run for?
September 2019 to January 2021

Who is funding the study?
Novozymes, Japan

Who is the main contact?
Kirill Bessonov
info@mcrbm.com

Contact information

Type(s)
Public

Contact name
Mr Kirill Bessonov

Contact details
136-3-236 Profsoyuznaya Str.
Moscow
Russian Federation
117321
+7 (0)9165959823
info@mcrbm.com

Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
BAD 01/2019

Study information

Scientific Title
This multicenter, double-blind, randomized, placebo-controlled clinical evaluation is planned to determine the efficacy and safety of the use of dietary food supplements HELINORM against the background of the standard first-line eradication therapy regimen (ESO + AMO + CLA) on for 14 days followed by the use for 14 days in H. pylori-positive adult patients with functional dyspepsia

Study objectives
The null hypothesis in this clinical evaluation is that the efficacy of the investigational DSF (dietary food supplement) regarding the primary endpoint will not differ from placebo. An alternative hypothesis is that the efficacy of the investigational DSF regarding the primary endpoint will differ from the placebo group (the minimum detectable differences taking into account the sample size rationale will be 10 %).

Study rationale: The efficacy and safety of the use of dietary food supplements HELINORM including the addition to H. pylori eradication therapy regimen have been demonstrated in a number of clinical trials. However, large Russian trials studying the increase in the efficacy and

tolerability of first-line eradication therapy for 14 days with the use of HELINORM among patients with functional dyspepsia and H. pylori infection have not been previously conducted.

Ethics approval required
Old ethics approval format

Ethics approval(s)
1. Approved 17/07/2019, Local Committee on Ethics at First Moscow State Medical University n. a. Sechenov (8 Trubetskaya Str., 119991 Moscow, Russia; +7 495 622 9706; iec@1msmu.ru and iec@sechenov.ru), ref: n/a
2. Approved 13/06/2019, Local Committee on Ethics at Moscow State Medical and Dentistry University n.a. Evdokimov (37 building 2 Gagarinskiy lane, 119002 Moscow, Russia; +7 916 260 7664; ethicano@yahoo.com), ref n/a
3. Approved 19/09/2019, Committee on Ethics Questions at LLC Scientific and Research Center ECO-Safety (65 Yuriy Gagarin avenue, 196143 Saint-Petersburg, Russia; +7 812 500 5203; nic@ecosafety.ru), ref: n/a

Study design
Multicenter double-blind randomized placebo-controlled clinical evaluation

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Confirmed diagnosis of functional dyspepsia according to Rome IV criteria and presence of H. pylori infection according to 13C-UBT

Interventions
Investigational products: Investigational dietary food supplement (DFS): HELINORM 324 mg capsules for oral administration. Dosage regimen: for adults: 1 capsule BID with meals. Duration of administration is 28 days.
Placebo: capsules for oral administration, completely identical to the investigational DFS HELINORM in appearance, taste and odor. Pure corn maltodextrin (without L. reuteri cells) will be used instead of Pylopass™. Dosage regimen: 1 capsule BID with meals for 28 days.
Concomitant therapy: standard 3-component eradication scheme: Esomeprazole 20 mg film-coated tablets, dosage regimen: 1 tablet BID before meals for 14 days.
Amoxicillin 1000 mg tablets, dosage regimen: 1 tablet BID after meals for 14 days.
Clarithromycin 500 mg tablets, dosage regimen: 1 tablet BID after meals for 14 days.
All subjects are randomized through IWRS.

Subjects examination: Before starting a clinical evaluation, 13C-labeled urea breath test (13C-UBT) will be performed for all patients (visit 1, screening). After inclusion in the study (Visit 2, Day 0) before taking the investigational DFS or placebo and medicinal products for eradication therapy (Stage I), all patients will fill out questionnaires (Questionnaire for dynamic assessment of symptoms of functional gastrointestinal disorders 7 × 7, Gastrointestinal Symptom Rating Scale, Quality of life questionnaire SF-36 (The Short Form-36)).

After the first stage of the clinical study is completed, patients will again be asked to fill out questionnaires (Visit 3, day 14 ± 2). Then the second stage of the clinical study will start (Stage II) when the patients will only take the investigational DFS or placebo for 14 days. It will be followed by a follow-up period of 4 weeks. At the end of the follow-up period (Visit 4, day 56 ± 3), 13C-UBT will be performed for all patients, and patients will fill out questionnaires (Questionnaire for dynamic assessment of symptoms of functional gastrointestinal disorders 7 × 7, Gastrointestinal Symptom Rating Scale, Quality of life questionnaire SF-36 (The Short Form-36)). All patients will fill out a diary throughout the clinical evaluation where they will indicate the date and frequency of administration of the investigational DFS or placebo and medicinal products for eradication therapy. 13C-UBT results, data from questionnaires and diary will be transferred in eCRF. Efficacy evaluation will be carried out after the completion of the follow-up period for all patients who completed the clinical evaluation per protocol.

At Visits 1 and 3 CBC and Blood chemistry will be performed for all subjects. Also for all subjects during the screening period (Visit 1) before randomization Esophagogastroduodenoscopy will be performed.

Intervention Type
Supplement

Primary outcome(s)
Presence and Absence of H. pylori will be confirmed by 13C-UBT test at Visit 1 (Screening) and Visit 4 (End of study)

Key secondary outcome(s))
Current secondary outcome measures as of 11/02/2020:
1. Subjective evaluation of main disease (functional dyspepsia) will be performed using 7×7 and GSRS scores questionnaires at Visits 2 (Day 0, Start of Treatment), 3 (Day 14, End of Eradication treatment) and 4 (End of study)
2. Quality of life will be assessed using SF-36 questionnaire at Visits 2, 3 and 4
3. Adherence assessed using participant diary during each study visit (Visit 2, Visit 3 and Visit 4)
4. Adverse events (AEs) and serious adverse events (SAEs) assessed by asking the participants and recording them in the AE/SAE log during each study visit (Visit 2, Visit 3 and Visit 4)

Previous secondary outcome measures:
The following parameters were selected as secondary efficacy parameters in the clinical evaluation:
1. Subjective evaluation of main disease (functional dispepsia) will be performed using 7×7 and GSRS scores questionnaires at Visits 2 (Day 0, Start of Treatment), 3 (Day 14, End of Eradication treatment) and 4 (End of study)
2. Subjects Quality of Life will be assessed using SF-36 questionnaire at Visits 2, 3 and 4

Completion date
01/01/2022

Eligibility

Key inclusion criteria
1. Male or female aged 18 to 65
2. For women of childbearing potential: mandatory use of contraceptive methods
3. Confirmed diagnosis of functional dyspepsia according to Rome IV criteria

4. Presence of H. pylori infection according to 13C-UBT
5. Able to understand and willing to complete all protocol details
6. No history of previous eradication therapy at least a year before the screening
7. Signed informed consent

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Upper age limit
65 years

Sex
All

Key exclusion criteria
1. Erosive and ulcerative changes of the gastric and/or duodenal mucosa
2. Cicatricial changes of the gastric and/or duodenal mucosa
3. History of eradication therapy less than 1 year before screening
4. Use of antibiotics and/or bismuth tripotassium dicitrate and/or H2-blockers and/or proton pump inhibitors 30 days before and during the trial (except for treatment according to the protocol)
5. Use of macrolide antibiotics less than 1 year before screening
6. Any severe, decompensated or unstable somatic disease that may affect the clinical evaluation of the investigational product or put the patient at risk
7. Alcohol or drug use
8. Pregnancy, lactation
9. Known sensitivity to any components of the investigational product and to any of the medicinal products prescribed in this trial
10. History of stomach surgery, small intestine resection or pancreas surgery
11. Positive blood test for HIV and/or syphilis and/or HbsAg and/or HCVAb
12. Chronic diarrhea of various etiologies, except for functional diarrhea or IBS with diarrhea
13. Participation in another clinical trial 30 days before and during the trial
14. Use of probiotics, symbiotics, prebiotics for treatment of H. pylori infections and for other reasons 30 days before the start of trial

Date of first enrolment
13/10/2021

Date of final enrolment
01/01/2022

Locations

Countries of recruitment
Russian Federation

Study participating centre
First Moscow State Medical University named after I.M. Sechenov (Sechenov University)
Trubetskaya str. 8, bld. 2
Moscow
Russian Federation
119991

Study participating centre
Moscow State University of Medicine and Dentistry named after A.I. Evdokimov (Moscow)
Delegatskaya str. 20, bld. 1
Moscow
Russian Federation
127473

Study participating centre
Research Center ECO-safety LLC
Yu. Gagarin Ave. 65
Saint-Petersburg
Russian Federation
196143

Sponsor information

Organisation
Nizhny Novgorod Chemical and Pharmaceutical Plant Joint Stock Company (Nizhpharm JSC)

Funder(s)

Funder type
Industry

Funder Name
Novozymes

Alternative Name(s)

Funding Body Type
Private sector organisation

Funding Body Subtype
For-profit companies (industry)

Location
Japan

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		18/07/2024	19/07/2024	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes