A phase 1, double-blind, randomised, placebo-controlled multiple dose study investigating the immunopharmacology of EDP1066 with multiple formulations

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON27726

Source
Nationaal Trial Register

Brief title
CHDR1825

Health condition

Auto immune diseases

Sponsors and support

Primary sponsor: Evelo Biosciences Inc.
Source(s) of monetary or material Support: Evelo Biosciences Inc.

Intervention

Outcome measures

Primary outcome

• KLH challenge

o DTH after intradermal KLH re-challenge. Response characterization by Laser Speckle Contrast Imaging (LSCI) and erythema by multispectral imaging
o Serology: anti-KLH IgM and IgG
o Ex vivo lymphocyte activation upon KLH re-challenge. Response characterization by ELISPOT.
• (Changes in) regulatory T cells
• Blood chemokine and cytokine levels

Secondary outcome

• Serious adverse event (SAE) and adverse event (AE) incidents
• Clinical safety laboratory measurements
• Electrocardiogram (ECG) measurements
• Vital sign measurements
• Chemistry and hematology panels
• Physical examination
• Bristol Stool Scale and stool questionnaire
• Persistent EDP1066 prevalence in stool samples
o Strain-specific PCR
• Gut microbiota composition and RNA sequencing in stool samples
• Specific markers of GI integrity
o Faecal calprotectin
• Immune biomarkers, Cytokines, Immunoglobulins and Leukocyte subsets

Study description

Background summary

Alteration in the composition of the gut microbiome has been associated with the presence of several (auto)inflammatory diseases. Evelo Biosciences has identified and selected individual microbial strains of human commensal bacteria based on their properties to modulate the systemic immune system to use as therapeutics for auto-immune diseases.
Although the monoclonal microbes are delivered orally and exposure is restricted to the gastrointestinal (GI) tract, in-vivo studies have shown that measurable effects on the immune system occur beyond the GI tract, which suggests that host-microbe interactions in the gut can affect the immune response in peripheral tissues. The effects of chronic EDP1066 oral administration will be investigated in a range of immunoinflammatory disorders, e.g. psoriasis and atopic dermatitis, to understand its value in treating these conditions.
Furthermore, EDP1066-001 is the first in human (FIH) study that has been conducted by an independent clinical research organization (CRO) in the United Kingdom (UK)
The present study will test whether EDP1066 in capsules and powder formulation induces a systemic immunomodulatory effect.
This study will evaluate the effect of EDP1066 on the Keyhole Limpet Haemocyanin (KLH) challenge that was previously developed by CHDR. Furthermore, safety and tolerability of

multiple oral doses of the monoclonal microbial EDP1066 will be assessed in healthy volunteers.

Study objective

- EDP1066 in capsules induces a systemic immunomodulatory effect;
- EDP1066 in powder formulation induces a systemic immunomodulatory effect.

Study design

Day -1 - day 40

Intervention

EDP1066 and KLH

Contacts

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Eligibility criteria

Inclusion criteria

Participants are eligible to be included in the study only if all of the following criteria apply:
- Capable of giving signed informed consent which includes compliance with the requirements and restrictions listed in the informed consent form (ICF) and in this protocol. Obtained prior to any screening procedures and in accordance with national, local, institutional guidelines.
- Age ≥ 18 years to 60 years, inclusive.
- Participant has a body mass index of ≥ 18 kg/m2 to ≤ 35 kg/m2 at Screening.
- Effective contraception for males and females:

- Participant has clinical laboratory evaluations (including clinical chemistry, haematology, and complete urinalysis) within the reference range for the testing laboratory, unless the results are deemed not to be clinically significant by the investigator (1 repeat test is permitted).
- Participants who are overtly healthy as determined by medical evaluation including medical history, physical examination, laboratory tests, and cardiac monitoring at Screening and on Day 1.
- Participant has the ability to communicate well with the Investigator in the Dutch language and willing to comply with the study restrictions.

Exclusion criteria

- Participant has received live attenuated vaccination within 42 days prior to Screening or intends to have vaccinations during the course of the study.
- Participant has received any investigational drug or experimental procedure within 90 days or 5 half-lives, whichever is longer, prior to study intervention administration or participant was enrolled in an investigational drug or device study within 90 days prior to first EDP1066 dosing.

- Participant has an active infection (e.g. sepsis, pneumonia, abscess) or recurrent infection, or has had an infection requiring antibiotic treatment within 42 days prior to Investigational Medicinal Product (IMP) administration.
- Participant is diagnosed with tuberculosis (TB, as per positive skin test (Mantoux) or IFN-γ release assay), or history of TB, or latent TB, or recent contact with TB (patient);
- Participant has renal or liver impairment
- Participant has active neoplastic disease or history of neoplastic disease within 5 years of Screening (except for basal or squamous cell carcinoma of the skin or carcinoma in situ that has been definitively treated with standard of care).
- Impaired cardiac function or clinically significant cardiac diseases
- Participant with a positive screening result for hepatitis B surface antigen, anti-hepatitis B core, hepatitis C, or HIV.
- Participants with gastrointestinal tract disease (e.g. short bowel syndrome, diarrhoea predominant irritable bowel syndrome [IBS], celiac disease) that could interfere with the subject’s safety or pharmacodynamic effect of the monoclonal microbial.
- Serious psychiatric or medical conditions that, in the opinion of the investigator, could interfere with treatment, compliance, or the ability to give consent.
- Participant has a history of hypersensitivity or allergies to Lactococcus (or Lactococcus containing probiotics) including any associated excipients,
- Participant used probiotic capsules within 14 days prior to screening.
- Participant has a significant history of drug abuse or regular use of illicit drugs or a history of alcohol abuse within 1 year prior to Screening.
- Participant uses more than 10 cigarettes per day and/or is unable to refrain from cigarettes or tobacco use or other nicotine-containing products (e.g., patches) during 4 consecutive days.
- Participant has had an acute, clinically significant illness or major surgery within 30 days

prior to screening.

Study design

Design

Study type:	Interventional
Intervention model:	Other
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	13-02-2019
Enrollment:	48
Type:	Anticipated

IPD sharing statement

Plan to share IPD: No

Ethics review

Positive opinion

Date:	12-02-2019
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 48298
Bron: ToetsingOnline

Titel:

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL7519
CCMO	NL68765.056.19
OMON	NL-OMON48298

Study results