# The possible influences of the gastrointestinal microbiome on fatigue and the disease course of inflammatory bowel disease: a prospective follow-up study

Published: 08-11-2019 Last updated: 10-04-2024

To study the influence of longitudinal changes in the intestinal microbiome on fatigue, and disease course of Crohn\*s disease patients.

Ethical review	Approved WMO
Status	Pending
Health condition type	Gastrointestinal inflammatory conditions
Study type	Observational invasive

# Summary

### ID

NL-OMON47957

**Source** ToetsingOnline

Brief title MICROBE

### Condition

• Gastrointestinal inflammatory conditions

**Synonym** Crohn's disease, Inflammatory bowel disease

**Research involving** Human

### **Sponsors and support**

**Primary sponsor:** Erasmus MC, Universitair Medisch Centrum Rotterdam **Source(s) of monetary or material Support:** Ministerie van OC&W

#### Intervention

Keyword: Crohn's disease, Disease course, Fatigue, Microbiome

#### **Outcome measures**

#### **Primary outcome**

The main study parameter is the composition of the patients\* intestinal

microbiome defined by the proportion and diversity of fecal bacteria species

and phyla, and its effect on fatigue measured by different questionnaires. This

will be measured every three months over the course of two years to account for

changes in the composition of the microbiome over time.

#### Secondary outcome

What is the influence of alterations in the intestinal microbiome composition

on the course of disease in patients with Crohn's disease?

Anxiety and depression

Quality of life

Disability

**Blood** parameters

# **Study description**

#### **Background summary**

The composition of the intestinal microbiome is believed to be involved in the pathogenesis of chronic diseases, including inflammatory bowel disease (IBD). IBD patients report high rates of moderate to severe fatigue. Evidence suggests

that the intestinal microbiota act as mediator in the bidirectional communication between nervous system and the gut. However, little is known about the changes in the composition of the intestinal microbiome and their influence on fatigue and the course of disease over time.

#### **Study objective**

To study the influence of longitudinal changes in the intestinal microbiome on fatigue, and disease course of Crohn\*s disease patients.

#### Study design

This study consists of a longitudinal prospective non-interventional design where a cohort of IBD patients will be followed for a period of two years and variables will be measured every three months.

#### Study burden and risks

Patients who agree to participate in the study will come to their habitual check-up at the outpatient clinic of the department of Gastroenterology at Erasmus MC every six months. As additional burden, they will be asked to provide a fecal sample and fill out a series of questionnaires during that visit and again three months later. This pattern will be repeated over a period of two years. In addition, patients with an exacerbation of disease will be asked to provide an extra fecal sample and fill out questionnaires at the time of disease onset. The risks associated with this study are low, as no investigational medicinal product will be used.

# Contacts

#### Public

Erasmus MC, Universitair Medisch Centrum Rotterdam

Doctor Molewaterplein 40 Rotterdam 3015 GD NL **Scientific** Erasmus MC, Universitair Medisch Centrum Rotterdam

Doctor Molewaterplein 40 Rotterdam 3015 GD NL

# **Trial sites**

# **Listed location countries**

Netherlands

# **Eligibility criteria**

Age Adults (18-64 years) Elderly (65 years and older)

#### **Inclusion criteria**

Aged 18 or older Confirmed Crohn's disease based on diagnostic criteria using clinical symptoms, endoscopic, biochemical and or histological results

### **Exclusion criteria**

-Use of pre-, pro- and/or antibiotics within 8 weeks prior to start of the study

- Presence of active malignancy or dysplasia
- Pregnant and/or breastfeeding women
- Presence of active rotavirus or clostridium infection at start of study
- Patients with a pouch or stoma

# Study design

### Design

Study type: Observational invasive		
Masking:	Open (masking not used)	
Control:	Uncontrolled	
Primary purpose:	Basic science	

### Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-07-2019
Enrollment:	80
Туре:	Anticipated

# **Ethics review**

Approved WMO	
Date:	08-11-2019
Application type:	First submission
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

### In other registers

Register CCMO **ID** NL70469.078.19