# **Cost-Effectiveness of a diagnostic Decision rule for patients with lower Abdominal complaints in primary caRe.**

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The aim of the study is to quantify the accuracy and cost-effectiveness of a diagnostic decision rule for OBD, in patients with persisting lower gastro-intestinal complaints in primary care.

| Ethical review        | Approved WMO           |
|-----------------------|------------------------|
| Status                | Recruitment stopped    |
| Health condition type | Other condition        |
| Study type            | Observational invasive |

# Summary

### ID

NL-OMON37021

**Source** ToetsingOnline

**Brief title** The CEDAR-study.

### Condition

- Other condition
- Gastrointestinal inflammatory conditions

#### Synonym

organic diseases of the lower gut, spastic colon (for functional bowel disease)

#### **Health condition**

alle organische ziekten van het onderste maagdarmstelsel

#### **Research involving**

Human

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### **Sponsors and support**

Primary sponsor: Zorgonderzoek Nederland (ZON) Source(s) of monetary or material Support: ZonMw;Doelmatigheid

#### Intervention

**Keyword:** clinical decision rule, functional bowel disease, lower gastro-intestinal complaints, organic bowel disease

#### **Outcome measures**

#### **Primary outcome**

The primary outcome is the presence of OBD at endoscopy. The diagnostic

accuracy of symptoms and signs and the added value of the different tests -

notably the calprotectine test- for OBD are quantified. The most cost-effective

strategy to discriminate the patients at high risk (requiring a fast track

diagnostic workup) from those at low risk (not requiring endoscopy) will be

identified.

#### Secondary outcome

See primary study parameters.

# **Study description**

#### **Background summary**

Lower gastro-intestinal (GI) tract complaints are frequently presented in primary care. About 7% of these patients has organic bowel disease (OBD), such as Inflammatory Bowel Disease or Colorectal Cancer. Most have functional disease (FBD), such as Irritable Bowel Syndrome. Adequate discrimination is important, as both unnecessary endoscopy as well as delayed detection of OBD is burdening and costly. Presently up to 20% of patients with persisting GI complaints is referred for endoscopy, but only in one-third OBD is found. The diagnostic process in primary care needs improvement. Symptoms alone cannot identify OBD accurately, but new point-of-care faecal biomarker tests for inflammation are promising. This study aims to identify the most cost-effective diagnostic strategy to estimate the absence or presence of OBD in patients with lower intestinal complaints, combining history, physical examination, blood tests, an immunochemical fecal occult blood test and a faecal calprotectine test.

#### **Study objective**

The aim of the study is to quantify the accuracy and cost-effectiveness of a diagnostic decision rule for OBD, in patients with persisting lower gastro-intestinal complaints in primary care.

#### Study design

This diagnostic cohort study in primary care includes all patients with lower GI tract complaints longer than 2 weeks, in whom referral for endoscopy is indicated because of increased risk of OBD. All patients undergo history taking and physical examination. In addition biochemical parameters (ESR, CRP, Hb, leucocytes and anti-tTG antibodies), an immunochemical fecal occult blood test and a point-of-care calprotectine test are determined. Patients will be referred for endoscopy. After the endoscopy, subjects will be asked to fill out the three questionnaires once more for follow-up and the results of the endoscopy will be obtained.

Participation of 110 practices is required to include 990 patients referred for lower intestinal endoscopy, of whom 300 patients will have OBD. The project will require 36 months (3 months for preparation and recruitment of practices, 30 months for inclusion and follow-up and 3 months for data-analysis and reporting results).

#### Study burden and risks

Beside the usual care -conform existing guidelines- of history taking and physical examination, the burden of patients for participation notably exists in answering additional questions about their complaints and quality of life (twice), a blood sample and collecting a fecal sample prior to the endoscopy. The study has no influence on the diagnostic or therapeutic strategy of the practising physician.

# Contacts

#### Public

Zorgonderzoek Nederland (ZON)

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NL Scientific Zorgonderzoek Nederland (ZON)

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# **Trial sites**

### **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age

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

### **Inclusion criteria**

Patients with non-acute (> 2 weeks) abdominal complaints originating from the lower GI tract and with at least one of the following criteria (high risk patients):

- unexplained rectal blood loss
- unexplained weight loss
- unexplained abdominal pain
- persistant diarrhoea
- altered defecation pattern
- unexplained fever
- sudden onset in elderly patients
- abnormal results at physical examination

### **Exclusion criteria**

Being unable to give informed consent Age under 18 years A history of OBD Contra-indications for endoscopy Patients with a positive Triple Faeces Test (TFT-test), a test for detection of intestinal parasites.

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# Study design

# Design

| Study type: Observational invasive |                         |
|------------------------------------|-------------------------|
| Masking:                           | Open (masking not used) |
| Control:                           | Uncontrolled            |
| Primary purpose:                   | Diagnostic              |

### Recruitment

| NL                        |                     |
|---------------------------|---------------------|
| Recruitment status:       | Recruitment stopped |
| Start date (anticipated): | 17-07-2009          |
| Enrollment:               | 990                 |
| Туре:                     | Actual              |

# **Ethics review**

| Approved WMO       |   |
|--------------------|---|
| Date:              | 28-04-2009  |
| Application type:  | First submission                                    |
| Review commission: | METC Universitair Medisch Centrum Utrecht (Utrecht) |
| Approved WMO       |   |
| Date:              | 14-07-2009  |
| Application type:  | Amendment   |
| Review commission: | METC Universitair Medisch Centrum Utrecht (Utrecht) |
| Approved WMO       |   |
| Date:              | 27-04-2010  |
| Application type:  | Amendment   |
| Review commission: | METC Universitair Medisch Centrum Utrecht (Utrecht) |
| Approved WMO       |   |
| Date:              | 04-06-2010  |
| Application type:  | Amendment   |
| Review commission: | METC Universitair Medisch Centrum Utrecht (Utrecht) |
| Approved WMO       |   |

| Date:              | 30-03-2011  |
|--------------------|---|
| Application type:  | Amendment   |
| Review commission: | METC Universitair Medisch Centrum Utrecht (Utrecht) |

# **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** NL25319.041.08