# Third generation autofluorescence endoscopy compared with conventional autofluorescence endoscopy for the detection of early neoplasia in Barrett's oesophagus.

No registrations found.

**Ethical review** Positive opinion **Status** Recruiting

**Health condition type** -

Study type Interventional

## **Summary**

#### ID

NL-OMON21252

Source

NTR

**Brief title** 

TRAFI study

#### **Health condition**

Barrett's oesophagus early neoplasia

Barrett slokdarm vroege neoplasie

## **Sponsors and support**

**Primary sponsor:** AMC Amsterdam

Source(s) of monetary or material Support: -

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

- 1. Overall histological yield of AFI II and AFI III;
- 2. Targeted histological yield of AFI II and AFI III;
- 3. Number of patients diagnosed with HGIN/EC by AFI II and AFI III.

#### **Secondary outcome**

- 1. Number of abnormalities detected by AFI II and AFI III;
- 2. The value of re-inspection of AFI-positive areas with WLE;
- 3. The value of re-inspection of AFI-positive areas with NBI.

# **Study description**

#### **Background summary**

In Barrett's oesophagus (BO), autofluorescence imaging (AFI) suffers from high false-positive (FP) rates and improved targeted detection of high-grade intraepithelial neoplasia (HGIN) and early cancer (EC) by AFI can be compensated by obtaining random biopsies. Third generation AFI may improve detection of early neoplasia and reduce FP-rate. We hypothesize that the new AFI-III system – compared to the conventional AFI-II – enhances the distinction between early neoplasia and inflammation in BO and thus reduces the amount of false positive lesions, allowing for targeted sampling and better detection of early neoplasia in BO.

This is the first randomized crossover study comparing the third generation AFI system with the conventional AFI in a selected group of patients with BE with and without dysplasia. Patients with Barrett's oesophagus with and without early neoplasia will undergo regular diagnostic imaging endoscopy for the detection of early neoplastic lesions. Patients are subsequently randomized to undergo either first AFI II or AFI III endoscopy, followed by a second endoscopy with the other system, in the same session by a second endoscopist, blinded for the results of the first endoscopy.

#### **Study objective**

We hypothesize that the new AFI-III system - compared to the conventional AFI-II - enhances

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the distinction between early neoplasia and inflammation in BO and thus reduces the amount of false positive lesions, allowing for targeted sampling and better detection of early neoplasia in BO.

This is the first randomized crossover study comparing the third generation AFI system with the conventional AFI in a selected group of patients with BE with and without dysplasia.

#### Study design

N/A

#### Intervention

Patients will undergo regular diagnostic imaging endoscopy for the detection of early neoplastic lesions. Patients are subsequently randomized to undergo either first AFI II or AFI III endoscopy, followed by a second endoscopy with the other system, in the same session by a blinded endoscopist for the results of the first endoscopy

## **Contacts**

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# **Eligibility criteria**

#### **Inclusion criteria**

- 1. Age over 18 years;
- 2. Prior diagnosis of BO defined as columnar lined esophageal epithelium upon endoscopy and intestinal metaplasia upon histological assessment of esophageal biopsies;
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- 3. Confirmed diagnosis of EC, HGIN, LGIN or non-dysplastic BO;
- 4. Written informed consent.

#### **Exclusion criteria**

- 1. Active erosive esophagitis grade B or higher according to the Los Angeles classification of erosive oesophagitis [17]17;
- 2. Advanced neoplastic lesion (i.e. any lesion considered not amendable for endoscopic treatment based its endoscopic appearance);
- 3. Unable to undergo biopsy sampling (e.g. due to coagulation disorders, esophageal varices).

# Study design

## **Design**

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: Active

### **Recruitment**

NL

Recruitment status: Recruiting
Start date (anticipated): 01-01-2010

Enrollment: 84

Type: Anticipated

## **Ethics review**

Positive opinion

Date: 18-01-2012

# **Study registrations**

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

ID: 34541

Bron: ToetsingOnline

Titel:

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

No registrations found.

## In other registers

Register ID

NTR-new NL3094 NTR-old NTR3248

CCMO NL32287.018.10

ISRCTN wordt niet meer aangevraagd.

OMON NL-OMON34541

# **Study results**

#### **Summary results**

Curvers WL, Herrero LA, Wallace MB, e.a. Endoscopic tri-modal imaging is more effective than standard endoscopy in identifying early-stage neoplasia in Barrett's esophagus. Gastroenterology. 2010;139(4):1106-1114.