

# Self-sizing Radiofrequency Ablation balloon for eradication of Barrett's esophagus: a randomized trial comparing three different treatment regimens

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON24632

### Source

Nationaal Trial Register

### Health condition

Barrett's esophagus, Barrett's neoplasia, Barrett's dysplasia, Radiofrequency ablation, Intestinal metaplasia

## Sponsors and support

**Primary sponsor:** KU Gasthuisberg Leuven, Belgium

**Source(s) of monetary or material Support:** Covidien GI Solutions

## Intervention

## Outcome measures

### Primary outcome

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Primary outcome:

Percentage of endoscopically visual surface regression of BE epithelium at 3 months, as scored by two independent endoscopists blinded to the treatment regimen.

### **Secondary outcome**

1. Adverse events
2. Patient's discomfort after RFA treatment
3. Procedure time

## **Study description**

### **Background summary**

In this trial, three regimens for circumferential radiofrequency ablation treatment with the RFA self-sizing balloon will be compared. The first regimen is the standardly used regimen (1x-clean-1x). The two simple regimens are the simplified protocol with 2x-ablation-no clean and the simplified protocol with 1x ablation-no clean.

### **Study objective**

The percentage of endoscopic resolution of Barrett's esophagus at 3 months is non-inferior with two simple protocol versus the standard protocol.

### **Study design**

1. At follow-up endoscopy at 3 months after the circumferential RFA treatment the primary endpoint will be scored
2. During and in the interval from directly after the circumferential RFA procedure until follow-up endoscopy after 3 months, the secondary endpoints are scored

### **Intervention**

Circumferential radiofrequency ablation of Barrett's esophagus with the Self-sizing RFA balloon.

Inspection of the Barrett's segment and randomization

The esophagus is evaluated using white light high-resolution endoscopy (WLE) and narrow band imaging (NBI). The extent of columnar lined esophagus is documented according to the Prague C&M classification<sup>15</sup> and by taking still images with WLE+NBI at 1 cm intervals. In the absence of visible abnormalities and no severe stenosis, patients are subsequently randomized to circumferential ablation with the Self Sizing RFA balloon using the simplified or the standard ablation regimen.

Patients will be blinded for the administered treatment regimen.

Standard ablation regimen

After mapping and randomization, the Barrett's segment is flushed with the mucolytic agent acetylcysteine (1%) followed by flushing with tap water. The Self Sizing RFA balloon (GI Solutions Covidien, Sunnyvale, CA) is then introduced and positioned at the desired treatment zone. The device is inflated, and the electrode unfurls until the electrode contacts the esophageal wall. Under visual control the BE is ablated (12 J/cm<sup>2</sup> at 300 Watt) working proximal to distal using visual repositioning. A small overlap (i.e. <1cm) between ablation zones is allowed. After the first ablation pass, the endoscope is removed followed by removal of the ablation catheter. The coagulum is cleaned off the balloon catheter. The endoscope is reintroduced to irrigate and suction the ablation zone. A distal attachment cap may be attached to the tip of the endoscope to gently wipe of the coagulum from the ablated segment. After irrigating and suctioning the debris away as much as possible, the Self Sizing RFA RCT November 2014 vs 1 Page 10 van 16 ablation zone is cleaned by forcefully flushing water through a spraying catheter. The stomach is emptied and deflated, the endoscope is removed and the ablation catheter is reintroduced to repeat the ablation. After this second ablation no additional cleaning of the ablation zone is required. First, the endoscope is removed, followed by careful removal of the ablation catheter.

Simplified ablation regimens:

In the first simplified ablation regimen flushing with the mucolytic agent acetylcysteine (1%) is not performed, but

the esophageal wall will be cleaned with water through the waterjet channel of the endoscope. After the first ablation (12 J/cm<sup>2</sup> at 300W), immediately a second ablation is performed of the same zone without a cleaning step. After deflation, the balloon is advanced distally to ablate subsequent zones with a double ablation in an identical way.

In the second simplified ablation regimen flushing with the mucolytic agent acetylcysteine (1%) is not performed, but the esophageal wall will be cleaned with water through the waterjet channel of the endoscope. There is only one ablation instead of two.

## Contacts

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## Eligibility criteria

### Inclusion criteria

1. Patients aged 18-85 years, with biopsy proven LGD, HGD or EC in a BE after local expert pathology review.

2. Scheduled circumferential ablation for BE with flat LGD, HGD, or for BE after prior endoscopic resection (ER) for lesions containing HGD or EC (<2 cm and <50% of the circumference).
3. Pretreatment biopsies and/or ER specimens reviewed by a local expert pathologist.
4. Written informed consent.

## **Exclusion criteria**

1. Patients with a BE segment < 2cm or >15 cm prior to ER.
2. Any prior endoscopic ablation treatment.
3. Significant esophageal stenosis prior to initial treatment, preventing passage of a therapeutic endoscope OR any prior endoscopic dilatation for esophageal stenosis.
4. Presence of esophageal varices.
5. Anti-coagulant therapy (apart from aspirin or NSAID) that cannot be discontinued prior to ER or RFA, OR uncorrectable hemostatic disorders.
6. In case of prior ER: patients with ER of multiple lesions in a single ER session are not eligible, if one of the resections measures more than the aforementioned size criteria, OR if resections of different lesions are not separated by a free circumferential segment of at least 1 cm.
7. In case of prior ER: a specimen showing carcinoma with positive vertical resection margins, deep submucosal invasion (>T1sm1), poorly or undifferentiated cancer (G3 or G4), or lymphatic/vascular invasion.
8. In case of prior ER: invasive cancer in any of the biopsies obtained at high-resolution endoscopy after ER.
9. An interval > 6 months between the last high-resolution endoscopy with biopsies and RFA.
10. An interval < 6 weeks between ER and RFA.
11. Patients unable to give informed consent.

## Study design

### Design

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

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	01-09-2015
Enrollment:	108
Type:	Actual

### IPD sharing statement

**Plan to share IPD:** No

## Ethics review

Positive opinion	
Date:	18-05-2015
Application type:	First submission

## 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	ID
NTR-new	NL5059
NTR-old	NTR5191
Other	NL51663.018.14 CCMO : 2014_380 METC AMC

## Study results

### Summary results

In preparation