

# Accuracy of FDG-PET and spiral CT for the early prediction of non-response to preoperative chemoradiotherapy in patients with oesophageal cancer

<b>Submission date</b> 20/12/2005	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 20/12/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 10/08/2009	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

EudraCT/CTIS number

IRAS number

**ClinicalTrials.gov number**

**Secondary identifying numbers**

NTR253

## **Study information**

**Scientific Title**

**Acronym**

NEOPEC

**Study objectives**

To compare FDG-PET and CT-scan for the early prediction of non-response to preoperative chemoradiotherapy in patients with potentially curable oesophageal cancer.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Received from local medical ethics committee

**Study design**

Multicentre randomised open label active controlled parallel group trial

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Hospital

**Study type(s)**

Diagnostic

**Participant information sheet**

**Health condition(s) or problem(s) studied**

Oesophageal cancer

**Interventions**

150 consecutive patients will be included in this prognostic accuracy study over a 3 year period. FDG-PET and CT-scan will be performed independently before and 2 weeks after the start of the chemo radiotherapy.

All patients complete the 5 weeks regimen of neoadjuvant chemo radiotherapy, regardless the test results.

## Intervention Type

Other

## Phase

Not Specified

## Primary outcome measure

The accuracy of serial FDG-PET and CT-scan for the early prediction of response versus non-response to preoperative chemoradiotherapy. The negative predictive value of serial FDG-PET and CT-scan for non-response.

These primary endpoints will quantify the diagnostic potential and clinical applicability / usefulness of each technique to predict early treatment response.

## Secondary outcome measures

The correlation between histological tumor response in the resection specimen and long term survival.

## Overall study start date

01/01/2005

## Completion date

01/01/2008

## Eligibility

### Key inclusion criteria

1. Histologically proven squamous cell carcinoma, adenocarcinoma or undifferentiated carcinoma of the intrathoracic oesophagus.
2. Surgical resectable (T2-3, N0-1, M0), as determined by Endoscopic Ultra Sound (EUS).
3. T1N1 are eligible. (T1N0 tumors and tumors in situ are not eligible).  
Tumor length longitudinal <8 cm and radial < 5 cm
4. If the tumor extends below the gastroesophageal(GE) junction into the proximal stomach, the bulk of the tumor must involve the oesophagus or GE junction. The tumor must not extend > 2 cm into the stomach. Gastric cancers with minor involvement of the GE junction or distal esophagus are not eligible.
5. No invasion of the tracheobronchial tree or presence of tracheoesophageal fistula.
6. Non pregnant, non-lactating female patients. Sexually active patients of childbearing potential must implement effective contraceptive practices during the study when treated with chemotherapy.
7. Age <18 and >75
8. ECOG performance status of 0-2
9. Granulocytes > 1.5 x 10<sup>9</sup>/l
10. Platelets > 100 x 10<sup>9</sup>/l
11. Total bilirubin < 1.5 x ULN
12. Creatinine <120 µmol/L
13. FEV1 > 1,5 L
14. Written, voluntary informed consent.

15. Patients must be accessible to follow up and management in the treatment center.

16. Patients must sufficiently understand the Dutch language to fill in quality of life questionnaires

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

150

**Key exclusion criteria**

1. Past or current history of malignancy other than entry diagnosis except for non-melanomatous skin cancer, or curatively treated carcinoma in situ of the cervix or a cured" malignancy more than 5 years prior to enrollment
2. Previous chemotherapy and radiotherapy
3. New York Heart Association Class III/IV and no history of active angina
4. Documented myocardial infarction within 6 months preceding registration (pretreatment ECG evidence of infarct only will not exclude patients)
5. Patients with a history of significant ventricular arrhythmia requiring medication or congestive heart failure History of 2nd or 3rd degree heart blocks
6. Pre-existing motor or sensory neurotoxicity greater than WHO grade 1
7. Active infection or other serious underlying medical condition which would impair the ability of the patient to receive the planned treatment, including prior allergic reactions to drugs containing Cremophor, such as teniposide or cyclosporin
8. Dementia or altered mental status that would prohibit the understanding and giving of informed consent
9. Inadequate caloric- and/ or fluid intake
10. Weight loss > 10%

**Date of first enrolment**

01/01/2005

**Date of final enrolment**

01/01/2008

**Locations****Countries of recruitment**

Netherlands

**Study participating centre**  
**Academic Medical Center**  
Amsterdam  
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1105 AZ

## Sponsor information

**Organisation**  
Academic Medical Centre (AMC) (Netherlands)

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Meibergdreef 9  
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1105 AZ

**Sponsor type**  
University/education

**Website**  
<http://www.amc.uva.nl/>

**ROR**  
<https://ror.org/03t4gr691>

## Funder(s)

**Funder type**  
Research organisation

**Funder Name**  
The Netherlands Organization for Health Research and Development (ZonMw) (Netherlands)

## Results and Publications

**Publication and dissemination plan**  
Not provided at time of registration

**Intention to publish date**

**Individual participant data (IPD) sharing plan**

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	Protocol	31/07/2008		Yes	No