

# Lymphatic mapping for image guided radiotherapy in patients with locally advanced cervical cancer, a pilot study

No registrations found.

|                              |                            |
|------------------------------|----------------------------|
| <b>Ethical review</b>        | Positive opinion           |
| <b>Status</b>                | Recruiting                 |
| <b>Health condition type</b> | -                          |
| <b>Study type</b>            | Observational non invasive |

## Summary

### ID

NL-OMON22806

### Source

NTR

### Brief title

LaMA

### Health condition

uterine cervical cancer

## Sponsors and support

**Primary sponsor:** Amsterdam University Medical Center University of Amsterdam

**Source(s) of monetary or material Support:** AMC Foundation

## Intervention

## Outcome measures

### Primary outcome

Feasibility of the lymphatic mapping procedure in locally advanced cervical cancer

### Secondary outcome

Agreement of the lymphatic map with the radiotherapy treatment plan including previous imaging (MRI / CT / FDG-PET/CT)

## Study description

### Background summary

Lymph node metastasis is an important unfavourable prognostic factor in locally advanced cervical cancer (LACC), thus preferably all lymph nodes with metastases should be included in the radiotherapy treatment plan. At our institution, the radiotherapy treatment plan consists of external beam radiotherapy of the pelvis, extended to the para-aortal region if there are evidently suspicious lymph nodes on imaging, histopathologically proven when feasible. An extra boost is given to the parametria when there is suspicion of parametrium involvement on imaging and/or during investigation under anaesthesia, and to suspicious lymph nodes. External beam radiotherapy is followed by additional brachytherapy to the primary tumour.

If no lymphadenectomy is performed, it can be challenging to prove lymph node metastases on imaging, especially micrometastases. Early recurrence of cervical cancer occurs most of the time in lymph nodes. This suggests that in a patient with lymph node recurrence, the radiation treatment was suboptimal: the nodes with recurrent disease were either not included in the radiation treatment plan or did not receive a sufficient radiation dose. Lymphatic mapping is a procedure in which all lymph nodes with drainage from the primary tumor, i.e. all nodes with potential (micro)metastases, can be imaged. These nodes are not necessarily suspicious on other imaging techniques.

Objective:

The goal of this pilot study is to

1. investigate the feasibility of the lymphatic mapping procedure in locally advanced cervical cancer
2. study the agreement of the lymphatic map with the radiotherapy treatment plan including previous imaging (MRI / CT / FDG-PET/CT)

### Study objective

1. It is feasible to perform lymphatic mapping in locally advanced uterine cervical cancer.
2. There are lymph nodes on the lymphatic map which are not included in the radiation treatment plan or did not receive sufficient radiation dose.

### Study design

Start date 20-07-2020.

Primary outcome: After completion of the 2nd lymphatic map imaging (1 day after inclusion).

Method: visual assessment. Visualisation of lymph nodes on both sides of the tumor is considered a positive outcome. Visualised nodes are nodes at risk.

Secondary outcome: After inclusion of all patients.

Method: the details of the RT treatment plan (location and dose of RT on lymph nodes; blinded to the lymphatic map) is retrieved from the electronic patient chart. The RT data will be compared to the localisation of nodes at risk on the lymphatic map.

## Contacts

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## Eligibility criteria

### **Inclusion criteria**

Histologically proven locally advanced cervical cancer [FIGO stage IIB-IVA].  
>18 years old.  
Treatment with curative (chemo)radiation.  
Signed informed consent.

### **Exclusion criteria**

Pregnancy.  
Administration of the radioactive tracer cannot be ensured properly due to obesity.  
Patients with tumors in which no circumferential injection of [<sup>99m</sup>Tc]Tc-nanocolloid is possible due to the size or position of the tumor.

## Study design

## Design

|                     |                            |
|---------------------|----------------------------|
| Study type:         | Observational non invasive |
| Intervention model: | Other                      |
| Allocation:         | Non controlled trial       |
| Masking:            | Open (masking not used)    |
| Control:            | N/A , unknown              |

## Recruitment

|                           |             |
|---------------------------|-------------|
| NL                        |             |
| Recruitment status:       | Recruiting  |
| Start date (anticipated): | 20-07-2020  |
| Enrollment:               | 40          |
| Type:                     | Anticipated |

## IPD sharing statement

**Plan to share IPD:** Undecided

## Ethics review

|                   |                  |
|-------------------|------------------|
| Positive opinion  |                  |
| Date:             | 04-03-2021       |
| Application type: | First submission |

## Study registrations

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

ID: 55075  
Bron: ToetsingOnline  
Titel:

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

No registrations found.

## In other registers

| Register | ID             |
|----------|----------------|
| NTR-new  | NL9323         |
| CCMO     | NL73563.018.20 |
| OMON     | NL-OMON55075   |

## Study results