

# PORTEC-4a, een onderzoek naar de waarde van een individueel moleculaire risicoprofiel om de nabehandeling na operatie voor vroeg stadium baarmoederkanker (endometriumcarcinoom) te bepalen.

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Molecular risk profile-based recommendations for adjuvant treatment will, in comparison to standard vaginal brachytherapy, lead to similar vaginal recurrence and recurrence-free survival in patients with high-intermediate risk endometrial carcinoma,...

|                             |                       |
|-----------------------------|-----------------------|
| <b>Ethische beoordeling</b> | Positief advies       |
| <b>Status</b>               | Werving gestart       |
| <b>Type aandoening</b>      | -                     |
| <b>Onderzoekstype</b>       | Interventie onderzoek |

## Samenvatting

### ID

NL-OMON25791

### Bron

Nationaal Trial Register

### Verkorte titel

PORTEC-4a

### Aandoening

Endometrial cancer

Uterine cancer

Endometrial carcinoma

Endometriumcarcinoom

Baarmoederkanker

## Ondersteuning

**Primaire sponsor:** Leiden University Medical Center (LUMC)

**Overige ondersteuning:** Dutch Cancer Society (UL2011-5336)

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

vaginal recurrence

## Toelichting onderzoek

### Achtergrond van het onderzoek

Current standard postoperative treatment for women with early stage, high-intermediate risk endometrial cancer is vaginal brachytherapy, which provides excellent local control with minimal side effects. However, as there is no difference in survival, as 7-8 women have to be treated to prevent 1 vaginal recurrence, and as patients with local recurrence can be effectively salvaged, the question is if this is overtreatment and more effective prediction of the risk of relapse can save many women vaginal brachytherapy and reduce health care costs.

In recent years, the genomic characterisation of endometrial cancer as published by The Cancer Genome Atlas and subsequent independent studies of molecular risk factors such as POLE, L1CAM, MSI, p53 have provided insight into the mutations underlying endometrial cancer development and progression, and have shown strong prognostic impact. In the translational research of PORTEC1- and 2 trials (900 pts) an integrated molecular risk profile has been determined which subclassifies patients with early stage, high-intermediate risk endometrial cancer as favorable, intermediate or unfavorable, with significantly better prognostic power than the clinicopathologic risk assessment. In the PORTEC-4a trial, this integrated molecular risk profile will be used to evaluate the patient's individual risk and determine adjuvant treatment (favorable: observation; intermediate: vaginal brachytherapy; unfavorable: external beam radiotherapy) and compared to standard indication for vaginal brachytherapy for all patients with early stage, high-intermediate risk features.

Objectives and design:

Patient with early stage, high-intermediate risk endometrial carcinoma will be randomly assigned (1:2) to vaginal brachytherapy (standard arm) or molecular profile-based recommendations for either observation, vaginal brachytherapy or external beam

radiotherapy (investigational arm).

The first cohort of 50 patients were included in a pilot phase of the study, which tested the acceptability and logistics of this multicentre study. Results were positive, and the trial has continued and will include 550 evaluable patients, with international participating groups.

## **Doel van het onderzoek**

Molecular risk profile-based recommendations for adjuvant treatment will, in comparison to standard vaginal brachytherapy, lead to similar vaginal recurrence and recurrence-free survival in patients with high-intermediate risk endometrial carcinoma, while sparing about 50% of women postoperative vaginal brachytherapy and saving health care costs

## **Onderzoeksopzet**

5-year rates of vaginal control, survival, adverse events, quality of life, health care costs

Evaluation of outcomes and quality of life at 6 month intervals

Long-term outcomes at 7 years after randomisation

Publications:

Wortman BG, et al: Molecular-integrated risk profile to determine adjuvant radiotherapy in endometrial cancer: Evaluation of the pilot phase of the PORTEC-4a trial. *Gynecol Oncol*. 2018 Oct;151(1):69-75. doi: 10.1016/j.ygyno.2018.07.020. Epub 2018 Aug 3

Van den Heerik ASVM et al: PORTEC-4a: international randomized trial of molecular profile-based adjuvant treatment for women with high-intermediate risk endometrial cancer. *Int J Gynecol Cancer*. 2020 Dec;30(12):2002-2007. doi: 10.1136/ijgc-2020-001929. Epub 2020 Oct 12. PMID: 33046573

Wortman BG, et al: Brachytherapy quality assurance in the PORTEC-4a trial for molecular-integrated risk profile guided adjuvant treatment of endometrial cancer. *Radiother Oncol*. 2021 Feb;155:160-166. doi: 10.1016/j.radonc.2020.10.038. Epub 2020 Nov 5

## **Onderzoeksproduct en/of interventie**

Arm 1 (standard): vaginal brachytherapy

Arm 2 (molecular profile based recommendations for adjuvant treatment): observation, vaginal brachytherapy or external beam radiotherapy

## **Contactpersonen**

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## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

Histologically confirmed endometrioid type endometrial carcinoma, FIGO 2009 stage I, with one of the following combinations of stage, grade, age, and LVSI:

1. Stage IA, grade 3 (any age, with or without LVSI)
2. Stage IB, grade 1 or 2 and age >60 years
3. Stage IB, grade 1-2 with documented LVSI
4. Stage IB, grade 3 without LVSI
5. Stage II (microscopic), grade 1

WHO-performance status 0-2

Written informed consent

### **Belangrijkste redenen om niet deel te kunnen nemen**

## (Exclusiecriteria)

Any other stage and type of endometrial carcinoma

Histological types papillary serous carcinoma or clear cell carcinoma (at least 10% if mixed type), or undifferentiated or neuroendocrine carcinoma

Uterine sarcoma (including carcinosarcoma)

Previous malignancy (except for non-melanomatous skin cancer) < 5 yrs

Previous pelvic radiotherapy

Interval between the operation and start of radiotherapy exceeding 8 weeks

## Onderzoeksopzet

### Opzet

|                  |                         |
|------------------|-------------------------|
| Type:            | Interventie onderzoek   |
| Onderzoeksmodel: | Parallel                |
| Toewijzing:      | Gerandomiseerd          |
| Blinding:        | Open / niet geblindeerd |
| Controle:        | Actieve controle groep  |

### Deelname

|                         |                      |
|-------------------------|----------------------|
| Nederland               |                      |
| Status:                 | Werving gestart      |
| (Verwachte) startdatum: | 01-06-2016           |
| Aantal proefpersonen:   | 550                  |
| Type:                   | Verwachte startdatum |

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

**Wordt de data na het onderzoek gedeeld:** Nog niet bepaald

### Toelichting

After publication of final results with long-term FU, IPD will be provided after submission and approval of a research request and plan.

## Ethische beoordeling

Positief advies

Datum: 01-06-2016

Soort: Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

| Register | ID |
|----------|----|
|----------|----|

|         |        |
|---------|--------|
| NTR-new | NL5602 |
|---------|--------|

|         |         |
|---------|---------|
| NTR-old | NTR5841 |
|---------|---------|

Ander register METC Leiden-Den Haag-Delft : METC P16.054; CCMO NL56828.058.16

## Resultaten

### Samenvatting resultaten

Molecular profile data based on combined PORTEC-1 and PORTEC-2 trial cohort:<br>

Stelloo et al, Clinical Cancer Research 2016

PORTEC-2 trial results: Nout et al, Lancet 2010.