

# Magnesium oxide to reduce prostate motion.

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Recruiting
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON24191

### Source

NTR

### Brief title

Magnesium oxide to reduce prostate motion

### Health condition

1. Prostate cancer;
2. radiotherapy.

(NLD: prostaatkanker, bestraling).

## Sponsors and support

**Primary sponsor:** University Medical Center Utrecht, The Netherlands

**Source(s) of monetary or material Support:** University Medical Center Utrecht, The Netherlands

## Intervention

## Outcome measures

### Primary outcome

The main study parameter is the movement of the prostate during a fraction of radiotherapy. The three fiducial markers are being imaged 5 times during one fraction. These 5 images can be used to derive the range of the intrafraction movement of the prostate.

## **Secondary outcome**

Toxicity will be measured by the Common Toxicity Criteria (CTC) version 3.0 (Trotti). The physician in attendance will score the complaints before treatment and acute toxicity will be scored weekly during the treatment and four weeks after the treatment. All symptoms will be registered even if they occur only on one single occasion.

The Quality of Life (QoL) before treatment and after the treatment will be measured by RAND-36 (general health), EORTC QLQ-C30 (+3) (cancer specific) and the EORTC QLQ-PR25 (prostate specific) (Hornbrook, Aaronson, Borghede). The first QoL questionnaire will be handed over to the patient at the department and the second questionnaire will be sent to the patient.

The amount of gas will be counted by delineation of the gas pockets on the CT-scan and MR-scan before the treatment.

## **Study description**

### **Background summary**

Rationale:

Some institutes use magnesium oxide to reduce the movement of the prostate during radiotherapy treatment, however this treatment is not evidence based. The hypothesis is that magnesium oxide is effective in reducing the intrafraction motion of the prostate during radiotherapy treatment for prostate cancer.

Objective:

Main: reduced intrafraction motion.

Secondary:

1. changed toxicity;
2. change quality of life;
3. reduced gas inside the rectum.

Study design:

Double-blind placebo-controlled randomized intervention study.

Study population:

Prostate cancer patients who are being treated with external beam radiotherapy using fiducial marker-based position verification.

Intervention:

One group receives a capsule of 500mg magnesium oxide twice a day and the other group receives a placebo capsule twice a day during the radiotherapy treatment.

Main study parameters:

Reducing the intrafraction motion of the prostate with 30%.

### **Study objective**

The hypothesis is that magnesium oxide is effective in reducing the intrafraction motion of the prostate during radiotherapy treatment for prostate cancer.

### **Study design**

Before radiotherapy, during the 7 weeks radiotherapy treatment and 4 weeks after

radiotherapy.

## **Intervention**

One group receives a capsule of 500mg magnesium oxide twice a day and the other group receives a placebo capsule twice a day during the radiotherapy treatment.

## **Contacts**

### **Public**

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## **Eligibility criteria**

### **Inclusion criteria**

Prostate cancer patients scheduled for external beam radiotherapy using fiducial marker-based position verification.

### **Exclusion criteria**

1. Patients with known severe constipation;
2. Patients who receive laxatives;
3. Patients with a history of abdominal surgery;

4. Patients with known abdominal diseases (M. Crohn, colitis ulcerosa, diverticulitis);
5. Patients with known severe renal failure;
6. Patients who receive tetracyclines, digoxine, iron or ciprofloxacin;
7. Patients with known kidney stones.

## Study design

### Design

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

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	01-04-2008
Enrollment:	184
Type:	Anticipated

## Ethics review

Not applicable	
Application type:	Not applicable

## 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	NL1126
NTR-old	NTR1161
Other	N/A : 20599
ISRCTN	Wordt niet aangevraagd (NVT)

## Study results

### Summary results

N/A