# MRI to quantify renal tumour motion: an observational study in order to develop a radiation treatment for renal cancer.

Published: 11-04-2011 Last updated: 27-04-2024

To quantify renal tumour motion using MRI.

**Ethical review** Approved WMO

**Status** Recruitment stopped

**Health condition type** Renal and urinary tract neoplasms malignant and unspecified

**Study type** Observational invasive

# **Summary**

## ID

NL-OMON38074

#### Source

**ToetsingOnline** 

#### **Brief title**

MRI to quantify renal tumour motion.

#### **Condition**

- Renal and urinary tract neoplasms malignant and unspecified
- Renal disorders (excl nephropathies)

#### Synonym

Kidney tumour, Renal lesion

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Universitair Medisch Centrum Utrecht

Source(s) of monetary or material Support: Ministerie van OC&W

#### Intervention

**Keyword:** MRI, Radiotherapy, Renal tumour

#### **Outcome measures**

## **Primary outcome**

Quantify renal tumour movement with MRI.

## **Secondary outcome**

Determine the reproducibility of a renal tumour position during multiple

breath-holds.

# **Study description**

## **Background summary**

Non-metastasised renal tumours are currently treated with a whole or partial nephrectomy. Radiotherapy is a non-invasive alternative treatment for renal tumours. To avoid normal tissue damage during radiotherapy image-guidance with good soft tissue contrast, only available in MRI, should be present. An MRI accelerator, which is a combination of a radiotherapy treatment machine and an MRI scanner, will be clinically available in about two years. An MRI accelerator will enable to detect the tumour position real-time during the radiotherapy treatment and will, non-invasively, be able to spare much healthy kidney tissue. To design a treatment on the MRI-accelerator the tumour motion should be known.

## **Study objective**

To quantify renal tumour motion using MRI.

## Study design

Observational study to investigate kidney and renal tumour motion.

## Study burden and risks

Patients will undergo one MRI scan of approximately 30 minutes. No contrast will be administered. The use of MRI is after proper screening free of any

risks. For the patients included in the study there is no individual benefit.

## **Contacts**

#### **Public**

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## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

## **Inclusion criteria**

- Renal leasion
- Written informed consent

## **Exclusion criteria**

- Patients who meet exclusion criteria for MRI following the protocol of the department of radiology UMCU.
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# Study design

## **Design**

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Diagnostic

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 23-06-2011

Enrollment: 23

Type: Actual

## **Ethics review**

Approved WMO

Date: 11-04-2011

Application type: First submission

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

Approved WMO

Date: 24-04-2012 Application type: Amendment

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

## **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

CCMO NL35291.041.11