

# MRI-guided High-Intensity Focused Ultrasound Ablation of Breast Cancer.

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruiting
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON25994

### Source

NTR

### Health condition

Breast cancer, MRI-guided High-Intensity Focused Ultrasound Ablation

## Sponsors and support

**Primary sponsor:** University Medical Center Utrecht, Department of Radiology

**Source(s) of monetary or material Support:** Center for Translational Molecular Medicine (CTMM)

## Intervention

## Outcome measures

### Primary outcome

The main objective of this feasibility study is to determine treatment accuracy of MR-HIFU in breast cancer patients using a dedicated MR-HIFU breast system.

### Secondary outcome

The secondary objective of this feasibility study is to determine safety of MR-HIFU in breast cancer patients using a dedicated MR-HIFU breast system.

## Study description

### Background summary

N/A

### Study objective

N/A

### Study design

MRI scan and HIFU treatment.

### Intervention

Intervention with MR-HIFU:

HIFU uses focused ultrasound waves to heat and thermally ablate tissue. In this study only a part of the breast tumor will be ablated. The MRI system identifies the ultrasound path and monitors heat rise in the breast tissue and the surrounding structures.

## Contacts

### Public

Department of Radiology<br>  
University Medical Center Utrecht<br>  
Heidelberglaan 100  
Laura Merckel  
Utrecht 3584 CX  
The Netherlands  
+31 (0)88 7550286

### Scientific

Department of Radiology<br>  
University Medical Center Utrecht<br>  
Heidelberglaan 100  
Laura Merckel  
Utrecht 3584 CX  
The Netherlands  
+31 (0)88 7550286

## Eligibility criteria

### Inclusion criteria

1. Female aged 18 years and over;
2. Able to give informed consent herself;
3. World Health Organization performance score  $\leq 2$ ;
4. Weight  $< 80$  kg;
5. The target breast fits into the cup of the dedicated MR-HIFU breast system;
6. Patients with cT1-2 ( $\geq 1.0$  cm) invasive breast cancer, confirmed by histopathology;
7. Size of the tumor is determined on mammography or ultrasound.

### Exclusion criteria

1. Patients treated with neo-adjuvant systemic therapy;
2. Contra-indications for MRI scanning according to the hospital guidelines;
3. Contra-indications to injection of gadolinium-based contrast agent, including known prior allergic reaction to any contrast-agent, and renal failure, defined by GFR  $< 30$  mL/min/1.73m<sup>2</sup>;
4. Macro calcifications around the targeted tumor;
5. Scar tissue or surgical clips in the direct path of the HIFU beam;
6. Pregnant or lactating women;
7. Patients who don't want to be informed about unexpected findings on MRI.

## Study design

## Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

## Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	13-09-2012
Enrollment:	10
Type:	Anticipated

## Ethics review

Positive opinion	
Date:	20-09-2012
Application type:	First submission

## Study registrations

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

ID: 39336  
Bron: ToetsingOnline  
Titel:

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

No registrations found.

## In other registers

Register	ID
NTR-new	NL3472

**Register**

NTR-old

CCMO

ISRCTN

OMON

**ID**

NTR3624

NL39519.041.12

ISRCTN wordt niet meer aangevraagd.

NL-OMON39336

## Study results

**Summary results**

N/A