

# Transcranial Magnetic Stimulation in depression treatment

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Finding out if adjustment of intensity and duration of rTMS stimulation will produce a more robust antidepressant effect.

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruiting
<b>Health condition type</b>	Mood disorders and disturbances NEC
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON35230

### Source

ToetsingOnline

### Brief title

rTMS in depression

## Condition

- Mood disorders and disturbances NEC

### Synonym

depression, major depressive disorder

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Sint Lucas Andreas Ziekenhuis

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

## Intervention

**Keyword:** depression, parietal, rTMS, stimulation

## Outcome measures

### Primary outcome

1. Percentage of change from baseline on the Hamilton Depression Rating Scale (HAMD, 17 items)
2. Percentage of patients with clinical response (= 50 % reduction in HAMD score)
3. Percentage of patients with partial clinical response (= 30 % reduction in HAMD score)

### Secondary outcome

Emotion Recognition Task

## Study description

### Background summary

Schutter et al. (2008) found a partial clinical effect on major depression by stimulating the right parietal cortex with rTMS. It is supposed that adjustment of intensity and duration of stimulation will produce a more robust antidepressant effect.

### Study objective

Finding out if adjustment of intensity and duration of rTMS stimulation will produce a more robust antidepressant effect.

### Study design

Randomized double-blind placebo controlled. Patients in the placebo condition may, on request, receive real rTMS treatment after the follow up period.

### Intervention

rTMS on the right parietal cortex  
2 Hz with an inter-impuls interval of 0,5 sec.

at 110 % of motor threshold  
15 sessions of 20 minutes during a period of three weeks

### **Study burden and risks**

Stimulation over the scalp with a magnetic coil is painless. There are no known side effects of rTMS stimulation other than a slight headache. Application of the proposed stimulation parameters has proven to be safe, and not to provoke epileptic seizures (lit. ...).

## **Contacts**

### **Public**

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### **Scientific**

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## **Trial sites**

### **Listed location countries**

Netherlands

## **Eligibility criteria**

### **Age**

Adults (18-64 years)

Elderly (65 years and older)

### **Inclusion criteria**

age from 18 yrs onward  
unipolar depressive disorder  
only the following medication is allowed: SSRI's, venlafaxine, mirtazapine, antihistamanics for sedation  
medication to be kept constant during the trial

## Exclusion criteria

bipolar disorder, dysthymic disorder  
suicidality  
Use of beta-blockers, other antidepressants or psychotropic medication, thyroid hormone, benzodiazepines, anti-epileptics  
history of epilepsy or epileptic abnormalities on EEG  
intracranial metal, pacemaker  
schizophrenia, addiction, mental handicap, not speaking Dutch  
lefthandedness

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Treatment

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	01-05-2011
Enrollment:	120
Type:	Actual

## Ethics review

Approved WMO

Date: 08-06-2010

Application type: First submission

Review commission: METC Amsterdam UMC

## 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	NL26903.029.09