

# rTMS/CBT compared to antidepressant treatment

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rTMS in combination with CBT is a more (cost)effective treatment option for patients with non-psychotic depression with a moderate level of treatment resistance compared to treatment as usual (switching to a tricyclic antidepressant (TCA) or...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Depressed mood disorders and disturbances
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON24799

### Source

NTR

### Brief title

DETECT

### Condition

- Depressed mood disorders and disturbances

### Health condition

Major depressive disorder

### Research involving

Human

### Sponsors and support

**Primary sponsor:** ZonMw

**Source(s) of monetary or material Support:** ZonMw

## Intervention

- Medical device

## Explanation

## Outcome measures

### Primary outcome

Score on the Hamilton Depression Rating Scale (HDRS-17)

### Secondary outcome

Remission (cost-effectiveness) Quality adjusted life years

## Study description

### Background summary

Rationale: Repetitive transcranial magnetic stimulation (rTMS) is widely used both in fundamental cognitive neuroscientific studies as well as clinical applied studies investigating its potential mood stabilizing role. Objectives: To examine the effect of high frequency rTMS over the left DLPFC in combination with CBT as a cost-effective treatment alternative for the current pharmacological switch in combination with CBT for depressed patients with a moderate level of treatment-resistance. Study design: A randomized, multicenter, prospective clinical superiority trial with regular assessments during a 12 month follow up from baseline onwards. 90 patients with moderate to severe, non-psychotic, unipolar depression, who did not respond to 2 adequate antidepressant trials, will be included. The intervention consists of max. 25 sessions of repetitive transcranial magnetic stimulation (rTMS) over the course of 8 weeks (schema of 4, 4, 4, 3, 3, 3, 2, 2 sessions per week) and cognitive behavior therapy (CBT) on top of continued antidepressants (AD) [rTMS + AD cont + CBT]. The control condition consists of a switch in AD according to the Dutch stepped care guidelines and CBT. Main study parameters/endpoints: Clinical outcome is determined by the reduction in depressive symptoms measured by the Hamilton depression rating scale (HDRS-17) after 8 weeks of treatment and 4 and 6 months follow up. We will also calculate remission (HDRS-17 <7) and response (50% reduction HDRS-17) rates at these time points. Quality of life and societal costs and health consumption will be assessed for the economic evaluation during the six month follow-up period. An extended follow-up until twelve months will be available for a subgroup of patients.

### Study objective

rTMS in combination with CBT is a more (cost)effective treatment option for patients with

non-psychotic depression with a moderate level of treatment resistance compared to treatment as usual (switching to a tricyclic antidepressant (TCA) or augmenting TCA with an atypical antipsychotic or lithium, in combination with CBT).

## Study design

Baseline, 8 weeks of treatment, follow-up at 4 and 6 months, extended follow-up at 9 and 12 months

## Intervention

Repetitive Transcranial Magnetic Stimulation (rTMS) + cognitive behavioral therapy (CBT)  
Treatment as usual (switching to TCA or augmenting TCA with atypical antipsychotic or lithium) + cognitive behavioral therapy (CBT)

## Contacts

### Public

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### Scientific

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## Eligibility criteria

### Age

Adults (18-64 years)

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Elderly (65 years and older)

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## Inclusion criteria

>18 years of age. Failed response to 2 adequate dose-duration trials with antidepressants. Current episode of less than two years. Moderate or severe depression (HDRS-17 > 16) without psychotic features.

## Exclusion criteria

Lifetime diagnosis of bipolar disorder, schizophrenia or schizoaffective disorder, current substance abuse disorder, or organic brain syndrome. Presence of a concurrent significant medical condition impeding the ability to participate. Previous treatment with rTMS. Epilepsy, convulsion or seizure. Serious head trauma or brain surgery. Large or ferromagnetic metal parts in the head (except for a dental wire) Implanted cardiac pacemaker or neurostimulator. Pregnancy. Previous treatment with ECT.

## Study design

### Design

Study phase:	N/A
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Treatment

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	15-08-2019
Enrollment:	90
Type:	Actual

### IPD sharing statement

**Plan to share IPD:** No

## Ethics review

Approved WMO	
Date:	06-05-2019

Application type: First submission  
Review commission: METC Oost-Nederland  
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## Study registrations

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

ID: 54536  
Bron: ToetsingOnline  
Titel:

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

No registrations found.

### In other registers

Register	ID
NTR-new	NL7628
CCMO	NL68540.091.19
OMON	NL-OMON54536

## Study results