

Title of the study	DETECT - rTMS/CBT as next step in antidepressant non-responders. A randomized comparison with current stepped care approaches to major depressive disorder
Short summary of the study	In the DETECT trial we investigate the (cost-)effectiveness of rTMS as a treatment for depression compared to the next pharmacological step in the treatment algorithm. Both groups also receive cognitive behavioral therapy. The trial consists of 8 weeks of treatment, followed by follow-up assessments at 4 and 6 months. We expect rTMS to be more (cost-)effective than medication in reducing depressive symptoms. This trial is performed at multiple centers across the country.
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Study period	08-2019 - 11-2022
Status of project	Recruitment ongoing
Funding	ZonMw
Number of participating centers	6
Link to study website	www.detectonderzoek.nl
Link to trial registration	https://www.trialregister.nl/trial/7628
Research question(s)	Is rTMS more effective in reducing depressive symptoms compared to treatment as usual? Is rTMS more cost-effective compared to treatment as usual? What are the effects of rTMS compared to treatment as usual on symptoms associated with depression, such as but not limited to anhedonia, rumination and sleep? What are the effects of expectations regarding treatment on treatment outcomes?
Study population (disorder)	Unipolar depression
Total sample size (as in METC protocol)	132
Neuromodulation modality	rTMS (including TBS)
TMS hardware	MagStim, MagVenture, Deymed
Coil type	Figure-of-eight
Stimulation target	Left DLPFC
Method used for coil placement	Beam F3/F4
Coil orientation	45 degrees
Frequency	10 Hz
Inter-train interval	25

Train duration	5
Number of pulses per session	3000
% of resting motor threshold	120
Other relevant rTMS parameters (e.g. priming)	n.a.
If TMS is NOT part of your control condition, please describe your control condition in the box below. Otherwise, please fill in the TMS related questions. Please also use this field in case of no control condition or multiple control conditions.	Control condition consists of treatment as usual (pharmacological switch or augmentation)
Adjuvant treatment	Cognitive therapy, Medication
Number of sessions	25
Frequency of sessions	4, 4, 4, 3, 3, 3, 2, 2x per week
Primary outcome	Change in depression severity (based on HDRS-17)
Secondary outcomes	Response, remission, QALYs
Covariates	age, gender, depression severity