Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

Supplemental Data

Table S1: Quality Assessment for the Body of Evidence According to the GRADE System for Rating the Quality of Evidence (GRADE): Randomized Controlled Trials of Repetitive Transcranial Magnetic Stimulation Versus Sham

Number of Studies	Design	Risk of Bias	Inconsistency	Indirectness	Imprecision	Publication Bias	GRADE
Unilateral rTMS Versus Sham							
WMD							
18	RCT	Serious limitations*	No serious limitations	No serious limitations	No serious limitations	No serious limitations	Moderate
Remission Rate							
13	RCT	Serious limitations*	No serious limitations	No serious limitations	No serious limitations	No serious limitations	Moderate
Response Rate							
17	RCT	Serious limitations*	No serious limitations	No serious limitations	No serious limitations	No serious limitations	Moderate
Bilateral rTMS Versus Sham							
WMD							
4	RCT	No serious limitations†	No serious limitations	No serious limitations	No serious limitations	No serious limitations	High
Remission Rate							
6	RCT	No serious limitations†	No serious limitations	No serious limitations	No serious limitations	No serious limitations	High
Response Rate							
7	RCT	No serious limitations†	No serious limitations	No serious limitations	No serious limitations	No serious limitations	High

RCT = randomized controlled trial; rTMS = repetitive transcranial magnetic stimulation; WMD = weighted mean difference.
*Lack of allocation concealment in most studies.
†Allocation concealment performed in 3 studies.

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

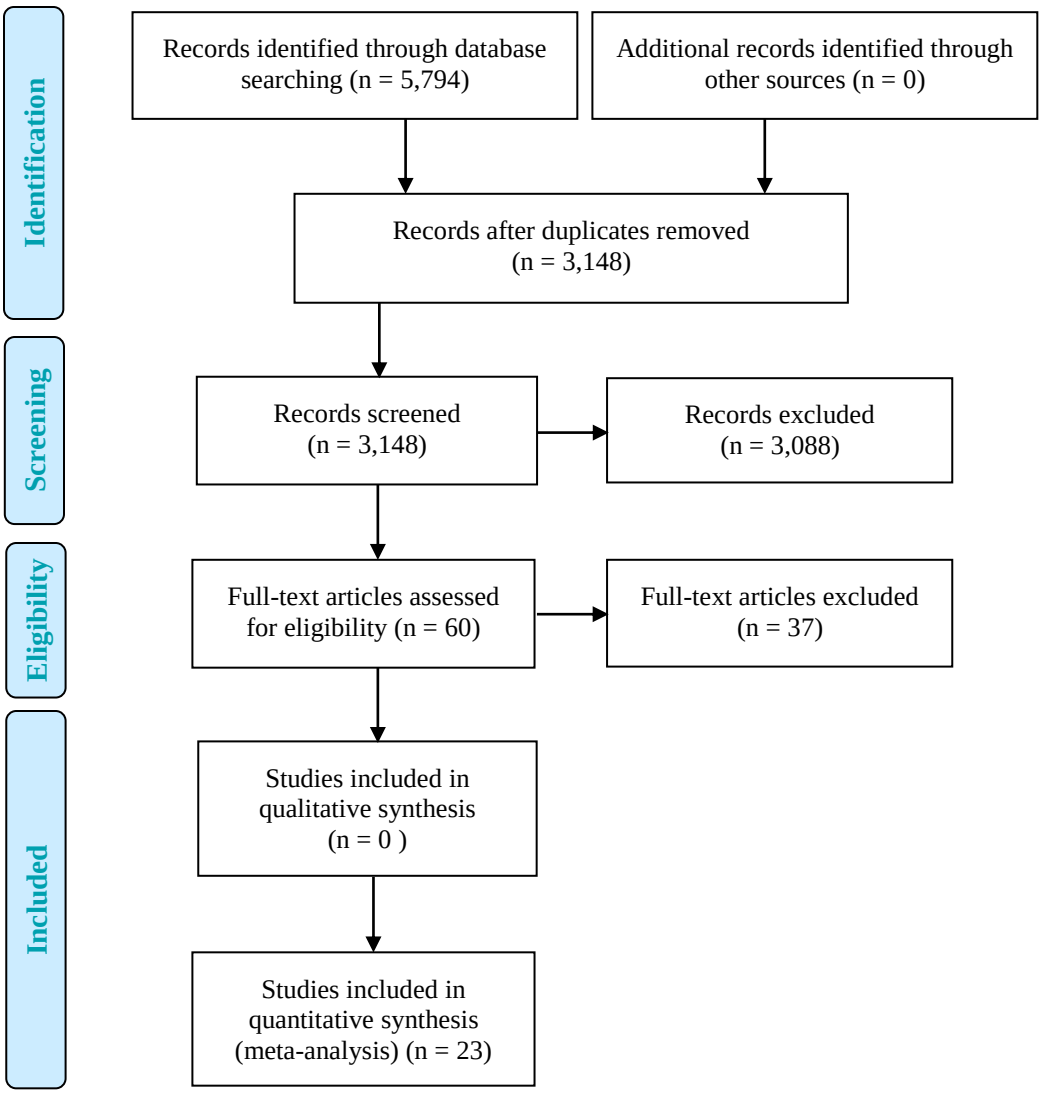

Figure S1: Flow Diagram for the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA)

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

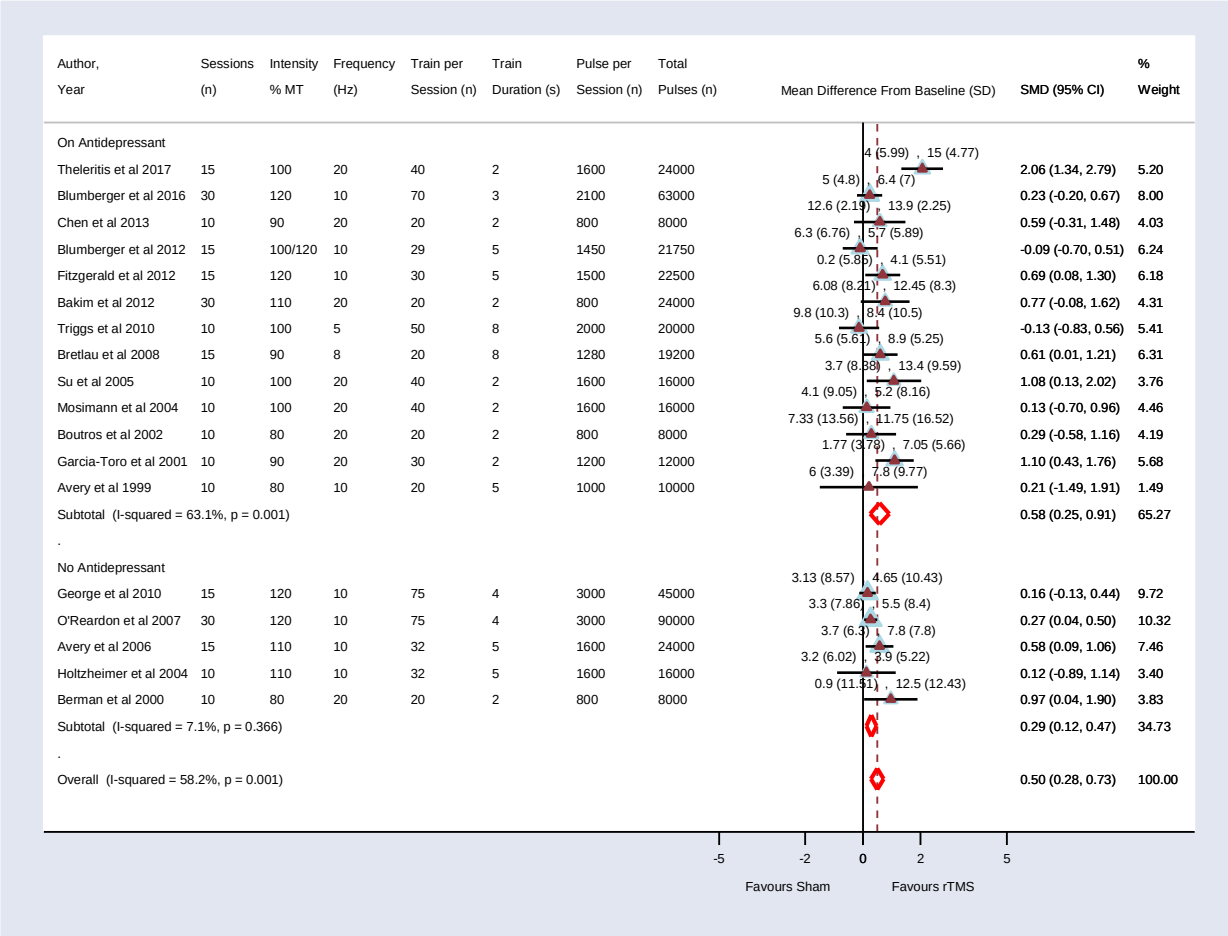

Figure S2: Standardized Mean Difference in Depression Scores: Unilateral High Frequency Repetitive Transcranial Magnetic Stimulation Versus Sham

CI = confidence interval; Hz = hertz; MT = motor threshold; rTMS = repetitive transcranial magnetic stimulation; SD = standard deviation; SMD = standardized mean difference.

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

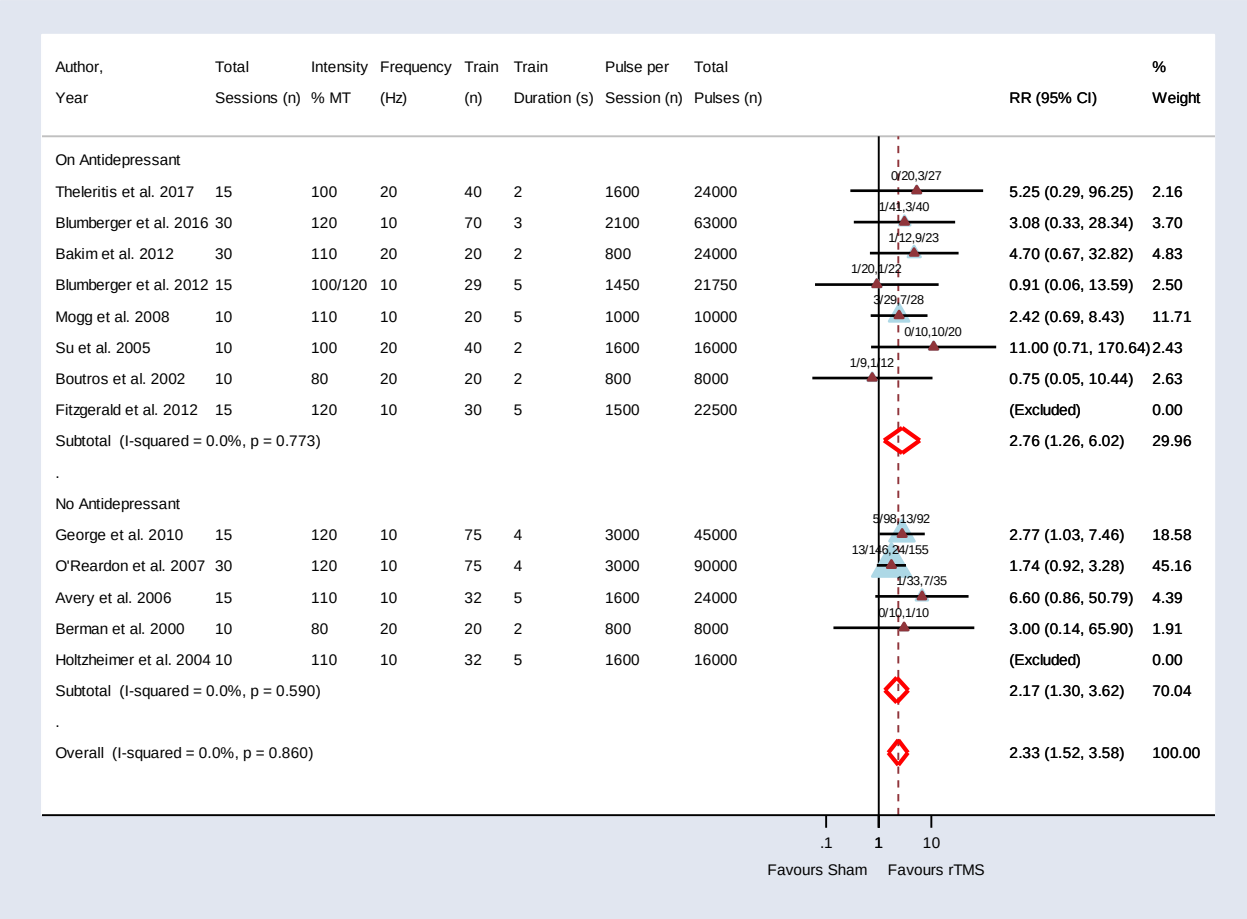

Figure S3: Remission Rates and Rate Ratios: Unilateral High Frequency Repetitive Transcranial Magnetic Stimulation Versus Sham

CI = confidence interval; Hz = hertz; MT = motor threshold; RR = rate ratio; rTMS = repetitive transcranial magnetic stimulation.

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

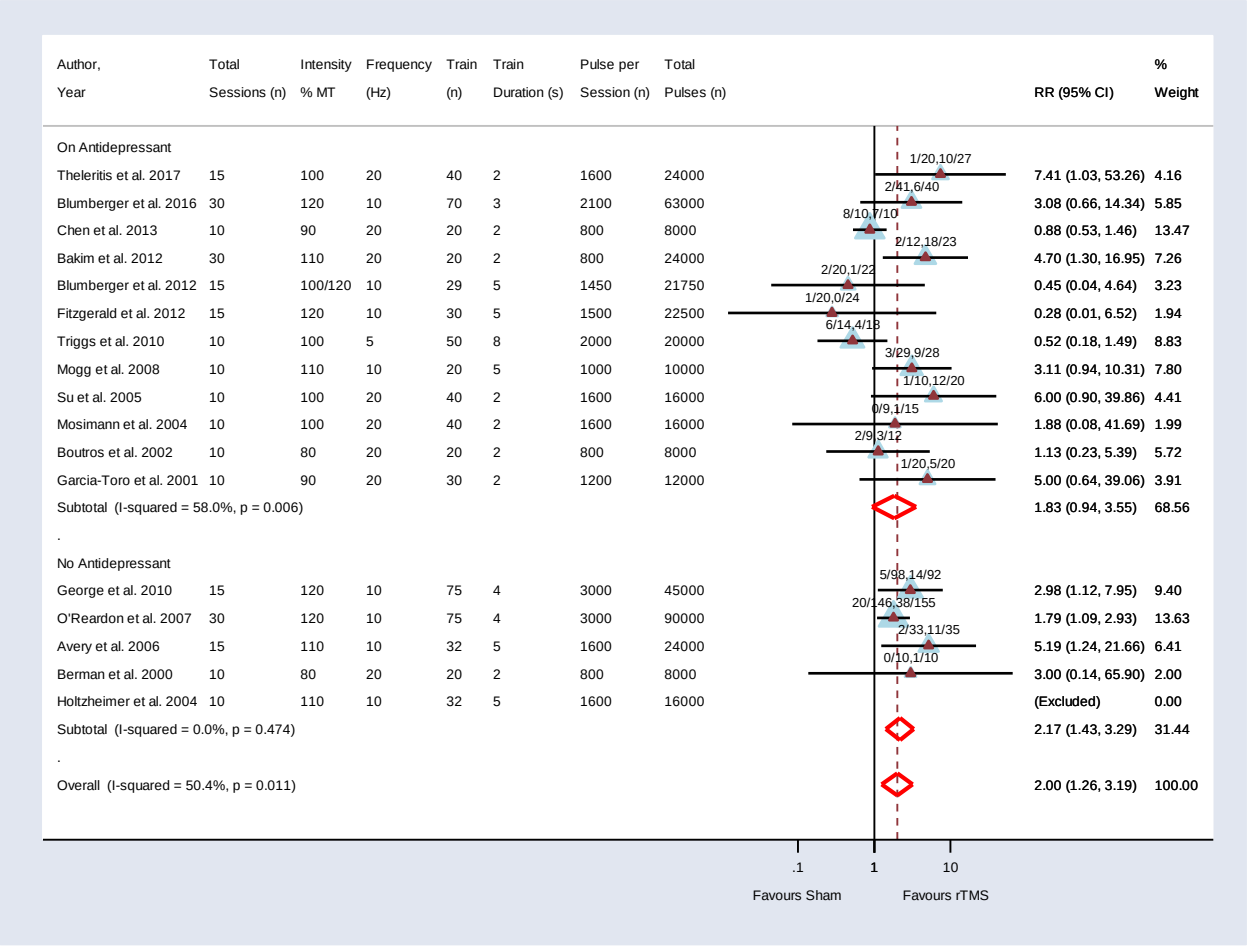

Figure S4: Response Rates and Rate Ratios: Unilateral High Frequency Repetitive Transcranial Magnetic Stimulation Versus Sham

CI = confidence interval; Hz = hertz; MT = motor threshold; RR = rate ratio; rTMS = repetitive transcranial magnetic stimulation.

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

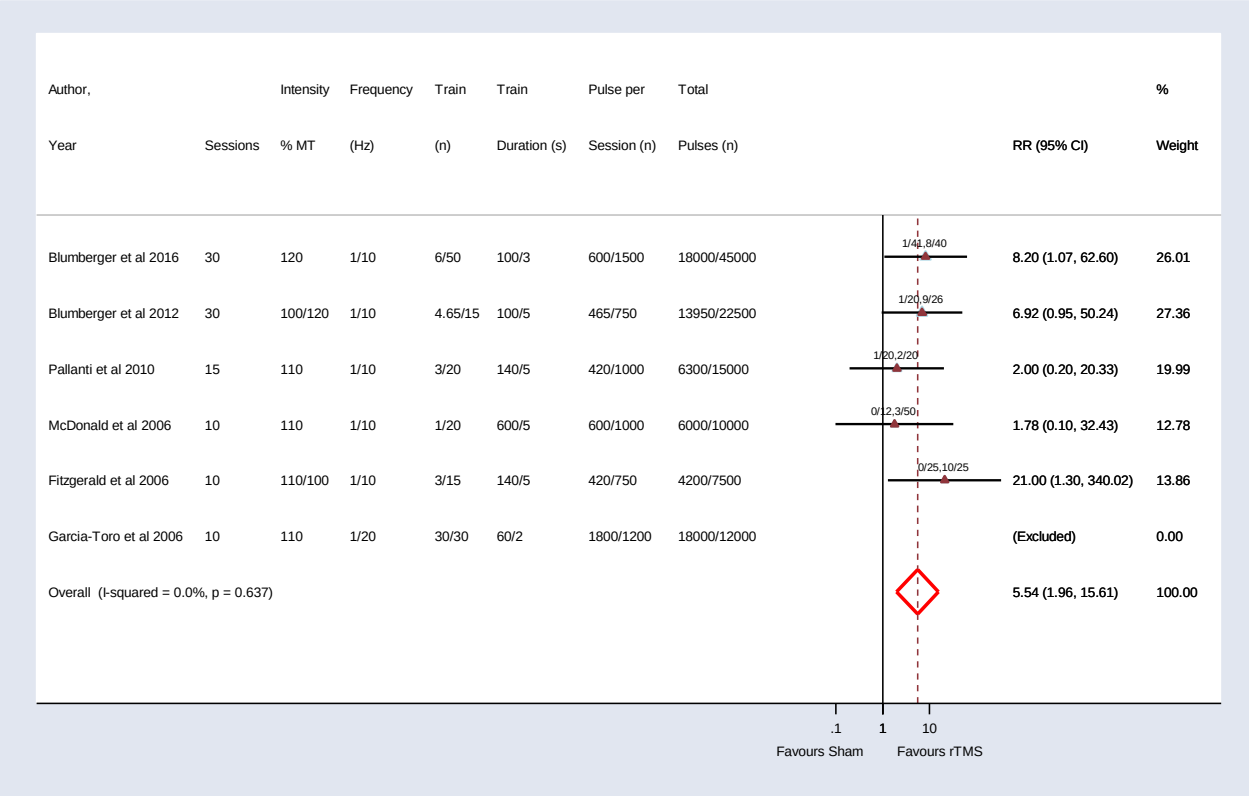

Figure S5: Remission Rates and Rate Ratios: Bilateral Sequential Repetitive Transcranial Magnetic Stimulation Versus Sham

Note: Numbers separated by slash relate to the technical parameters applied to the right and left DLPFC stimulation (right/left).
CI = confidence interval; Hz = hertz; MT = motor threshold; RR = rate ratio; rTMS = repetitive transcranial magnetic stimulation.

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

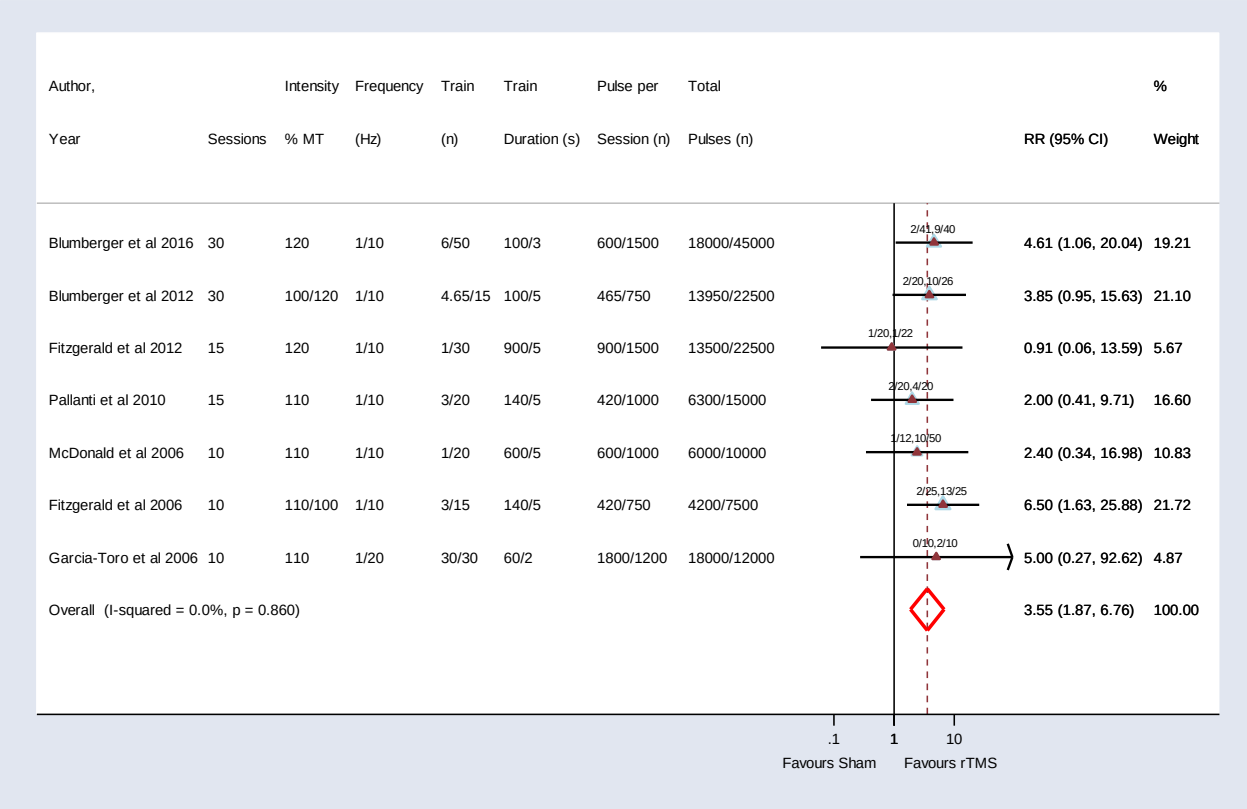

Figure S6: Response Rates and Rate Ratios: Bilateral Sequential Repetitive Transcranial Magnetic Stimulation Versus Sham

Note: Numbers separated by / relate to the technical parameters applied to the right and left DLPFC stimulation (right/left).
CI = confidence interval; Hz = hertz; MT = motor threshold; RR = rate ratio; rTMS = repetitive transcranial magnetic stimulation.

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

Literature Search – Repetitive Transcranial Magnetic Stimulation

Search date: April 03, 2017

Database: EBM Reviews - Cochrane Central Register of Controlled Trials <February 2017>, EBM Reviews - Cochrane Database of Systematic Reviews <2005 to March 29, 2017>, EBM Reviews - Health Technology Assessment <4th Quarter 2016>, EBM Reviews - NHS Economic Evaluation Database <1st Quarter 2016>, Embase <1980 to 2017 Week 14>, Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>, PsycINFO <1967 to March Week 4 2017>

Search Strategy:

---

1 Depression/ (432736)
2 exp Depressive Disorder/ (500483)
3 (depressi* or dysthymic or melancholia or TRD or "involutional psychos*" or paraphrenia).ti,ab. (1011971)
4 or/1-3 (1207712)
5 Transcranial Magnetic Stimulation/ (35458)
6 (((transcranial or trans-cranial) adj2 magnetic adj2 stimulation*) or rtms or tms).mp. (55077)
7 or/5-6 (55077)
8 4 and 7 (7994)
9 8 use ppez,coch,cctr,clhta,cleed (2591)
10 Depression/ (432736)
11 Major Depression/ (161223)
12 (depressi* or dysthymic or melancholia or TRD or "involutional psychos*" or paraphrenia).ti,ab. (1011971)
13 or/10-12 (1157605)
14 Transcranial Magnetic Stimulation/ (35458)
15 (((transcranial or trans-cranial) adj2 magnetic adj2 stimulation*) or rtms or tms).ti,ab. (47284)
16 or/14-15 (54084)
17 13 and 16 (7755)
18 17 use emez (3789)
19 exp Major Depression/ (168247)
20 (depressi* or dysthymic or melancholia or TRD or "involutional psychos*" or paraphrenia).ti,ab. (1011971)
21 or/19-20 (1028669)

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

22 exp Transcranial Magnetic Stimulation/ (35458)
23 (((transcranial or trans-cranial) adj2 magnetic adj2 stimulation*) or rtms or tms).mp. (55077)
24 or/22-23 (55077)
25 21 and 24 (7332)
26 25 use psyb (1527)
27 9 or 18 or 26 (7907)
28 limit 27 to english language [Limit not valid in CDSR; records were retained] (7258)
29 limit 28 to yr="2014 -Current" (2356)
30 29 use ppez (525)
31 29 use emez (1239)
32 29 use psyb (401)
33 29 use cctr (167)
34 29 use coch (4)
35 29 use clhta (19)
36 29 use cleed (1)
37 remove duplicates from 29 (1407)

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

Literature Search – Repetitive Transcranial Magnetic Stimulation

Search date: Nov 20, 2014
Databases searched: Ovid MEDLINE/In-Process, Embase, EBM Databases, PsycINFO
Limits: 1994-current; English

Databases: EBM Reviews - Cochrane Database of Systematic Reviews 2005 to October 2014, EBM Reviews - Database of Abstracts of Reviews of Effects 4th Quarter 2014, EBM Reviews - Cochrane Central Register of Controlled Trials October 2014, EBM Reviews - Cochrane Methodology Register 3rd Quarter 2012, EBM Reviews - Health Technology Assessment 4th Quarter 2014, EBM Reviews - NHS Economic Evaluation Database 4th Quarter 2014, Ovid MEDLINE(R) Daily Update November 19, 2014, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) 1946 to Present, Embase 1974 to 2014 November 19

Search Strategy:

#	Searches	Results
1	Depression/	341444
2	exp Depressive Disorder/ use prmz,acp,cctr,coch,clcmr,dare,clhta,cleed	92220
3	Major Depression/ use oemezd	37851
4	Treatment Resistant Depression/ use oemezd	742
5	(depressi* or dysthymic or melancholia or TRD or "involutional psychos*" or paraphrenia).ti,ab.	642939
6	or/1-5	783031
7	Transcranial Magnetic Stimulation/	22067
8	(((transcranial or trans-cranial) adj2 magnetic adj2 stimulation*) or rtms or tms).mp.	36404
9	or/7-8	36404
10	6 and 9	4766
11	limit 10 to yr="1994 -Current" [Limit not valid in DARE; records were retained]	4743
12	limit 11 to english language [Limit not valid in CDSR,ACP Journal Club,DARE,CLCMR; records were retained]	4305
13	remove duplicates from 12	2734

Database: PsycINFO <1987 to November Week 3 2014>
Search Strategy:

Appendix 1 to Sehatzadeh S, Daskalakis ZJ, Yap B, et al. Unilateral and bilateral repetitive transcranial magnetic stimulation for treatment-resistant depression: a meta-analysis of randomized controlled trials over 2 decades. *J Psychiatry Neurosci* 2019.

DOI: 10.1503/jpn. 180056

Online appendices are unedited and posted as supplied by the authors.

#	Searches	Results
1	exp Major Depression/	93059
2	(depressi* or dysthymic or melancholia or TRD or "involutional psychos*" or paraphrenia).ti,ab.	180727
3	or/1-2	186314
4	exp Transcranial Magnetic Stimulation/	4565
5	(((transcranial or trans-cranial) adj2 magnetic adj2 stimulation*) or rtms or tms).mp.	6312
6	or/4-5	6312
7	3 and 6	1182
8	limit 7 to (english language and yr="1994 -Current")	1081

HEED

depressi* OR dysthymic OR melancholia OR TRD OR psychos* OR paraphrenia =all data
AND
transcranial OR trans-cranial OR rtms OR tms =all data

5 results