

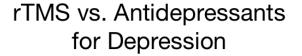
Compiled by Dr. Adrian Larsen

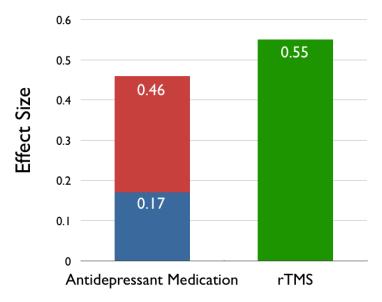
Repetitive Transcranial Magnetic Stimulation (rTMS) is a form of therapy used to address neurological conditions in the brain, most notably depression.

rTMS uses electromagnetic induction to induce weak electric currents in the brain using a rapidly changing magnetic field; this can cause activity in specific or general parts of the brain with minimal discomfort, promoting normal brain function.

A total of 289 studies on rTMS were published between 1990 and 2008, testing rTMS as a treatment tool for various neurological and psychiatric disorders including migraines, strokes, Parkinson's disease, dystonia, tinnitus, depression and auditory hallucinations.

A meta-analysis in 2008 found rTMS effective for depression, with a greater effect size than antidepressant medication. Interestingly, rTMS was more effective in the absence of antidepressant medication than it was when used in conjunction with antidepressant medication.<sup>1</sup>





<sup>&</sup>lt;sup>1</sup> Slotema CW et. al. Should We Expand the Toolbox of Psychiatric Treatment Methods to Include Repetitive Transcranial Magnetic Stimulation (rTMS)? A Meta-Analysis of the Efficacy of rTMS in Psychiatric Disorders. J Clin Psychiatry 71:7, July 2010: 873-84