

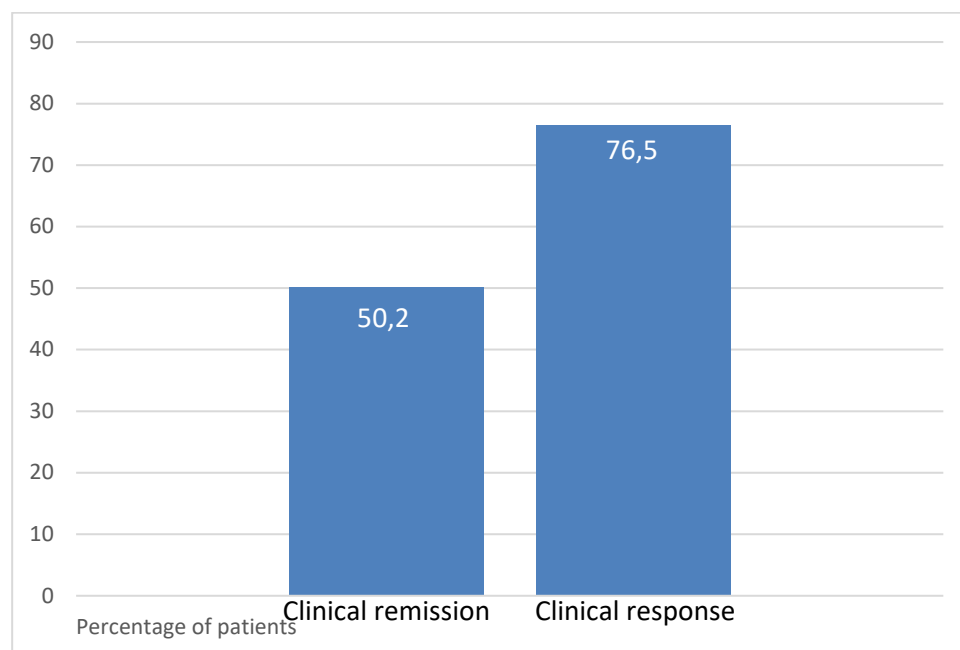
## Clinical outcomes of first 311 patients completing SmartFocus electric field navigated rTMS therapy for treatment of major depressive disorder (MDD)

Clinical outcomes of SmartFocus rTMS treated patients are being collected in a registry with information being provided by participating clinical sites using the technology.

Of the first 311 patients completing treatment at clinical sites in the U.S.A. 156 (50.2%) had achieved clinical remission and 238 (76.5%) had obtained a clinical response at end of treatment (Figure 1). Further, the patient reported experience of receiving treatment was generally very positive as reflected by a mean score of 9.38 on a scale of 0 to 10.<sup>1</sup>

The results are based on the patient reported outcome measures Beck's Depression Inventory (BDI, range of scores of test 0 – 63) and Patient Health Questionnaire – 9 (PHQ-9, range of scores of test 0-27). Remission was defined as a PHQ9 score of less than 5 or BDI score of less than 10 while clinical response was defined as a PHQ9 score of less than 10 or BDI score of less than 19 at end of treatment.

**Figure 1. Clinical remission and response rates at end of SmartFocus rTMS treatment in patients with Major Depressive Disorder**



These outcomes are higher than what is usually reported for rTMS treatment of MDD: In a well-conducted multisite study, remission rates were 26.5-28.7 % and the patient-reported response rates were 41.5-56.4 %<sup>2</sup>. The present patient-reported remission and response rates are also higher than those reported using the same outcome measure (PHQ-9) in a large >3800 patient series from a registry of patients completing clinical rTMS treatment (remission 29.7-36.2%, response 62.7-70.4%)<sup>3</sup>.

The average patient reported Patient Health Questionnaire (PHQ-9) depression symptom severity score in the Nexstim registry was 20.9 before treatment and decreased to 6.6 by end of treatment. In the >3800 patient series the average PHQ-9 score before treatment was reported to be 19.8 and to have decreased to 11.1 by end of treatment<sup>2</sup>.

- 1) Data on file at Nexstim Plc
- 2) Carpenter L. et al. Transcranial magnetic stimulation (TMS) for major depression: a multisite, naturalistic, observational study of acute treatment outcomes in clinical practice. *Depress Anxiety*. 2012 Jul;29(7):587-96. Epub 2012 Jun 11.
- 3) Sackheim, H. et al. Clinical outcomes in a large registry of patients with major depressive disorder treated with Transcranial Magnetic Stimulation. *Journal of Affective Disorders* 277 (2020) 65–74.