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## **MUSIC-PHARMACOLOGY: AUDITORY STIMULATION (I-MAT) FOR THE TREATMENT OF DEPRESSION AND ANXIETY**

Music therapy enjoys a growing interest from neurobiological research. Different music triggers different activation patterns in depressed patients than in healthy controls. Current treatment options have similar response rates, with mostly symptom reduction, but not complete remission. Low compliance and high dropout rates emphasize the need for alternative or add-on therapies. We evaluated a novel form of receptive music therapy which can be easily administered to out-patients.

**Methods:** Enrolled subjects (n= 203, average age  $49.6 \pm 13.1$  years, 28.1% male) were randomized into four arms: Musictherapy 1 (MT1), Musictherapy 2 (MT2), Placebo (nature sounds) and waiting-list control. Subjects listened for 30 min, twice daily. Multivariate linear regression models assessed depressive symptom changes over five weeks, based on a composite scale (COMP) and the Hamilton Rating Scale for Depression (HAM-D), Beck Depression Inventory (BDI) and Hospital Anxiety and Depression Scale (HADS-D) alone.

**Results:** On average, a significant, positive change in COMP was observed for MT1 ( $\beta = 1.44$ ,  $p = 0.030$ ), but not for MT2 ( $\beta = 1.14$ ,  $p = 0.059$ ) or Placebo ( $\beta = 0.57$ ,  $p = 0.397$ ). After 15 weeks, study participation was associated with a mean HAM-D score reduction of 60% for 89.1% of the compliant probands.

**Conclusions:** The newly developed form of music-based audio therapy is associated with reduced symptoms of depression and anxiety and high treatment compliance and offers new treatment options for patients with the need for additional therapy or requiring an alternative approach.

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