VISN 5 MIRECC Research Abstract

Effects of the Alpha-7-Niccotinic Receptor Agonist DMXB in Schizophrenia: Cognitive, Neuropsychological, and Clinical Effects

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Alpha-7 nicotinic receptors are implicated in cognitive and neurophysiological deficits in schizophrenia. Nicotine reduces these deficits acutely but rapidly loses effect with repeated administration (tachyphylaxis). DMXB-A is a alpha-7 nicotinic receptor partial agonist that appears less vulnerable to tachyphylaxis. It has shown promise in brief trials for cognitive enhancement in healthy adults, schizophrenia patients, and animal models. This project is a Phase II safety/efficacy study with a randomized, double-blind, placebo controlled, crossover design. Each patient will do preliminary assessments then undergo, in succession, 4 weeks of treatment each with placebo and two doses of DMSB-A. The order of the treatment arms will be randomized. Assessments will be repeated after each arm of treatment. Twenty-four subjects will be included at MPRC/VISN 5 sites and 24 subjects at VISN 19 sites.