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WO 02/069948 A1

(54) Title: USE OF $GABA_A$ INVERSE AGONISTS IN COMBINATION WITH NICOTINE RECEPTOR PARTIAL AGONISTS, ESTROGEN, SELECTIVE ESTROGEN MODULATORS, OR VITAMIN E FOR THE TREATMENT OF COGNITIVE DISORDERS

(57) Abstract: A pharmaceutical composition and method of treatment of diseases of cognitive dysfunction in a mammal comprising administration of a $GABA_A$ inverse agonist or a pharmaceutically acceptable salt thereof; and a nicotine receptor partial agonist, an estrogenic agent, selective estrogen receptor modulator or vitamin E or a pharmaceutically acceptable salt thereof; and a pharmaceutically acceptable carrier. The $GABA_A$ inverse agonist, and nicotine receptor partial agonist, estrogen, selective estrogen receptor modulator or vitamin E are present in amounts that render the composition effective enhancing cognition or in the treatment of diseases of cognitive dysfunction including but not limited to Alzheimer's Disease (AD), mild cognitive impairment, age-related cognitive decline, vascular dementia, Parkinson's disease, Huntington's disease, memory impairment associated with depression or anxiety, schizophrenia, Down's syndrome, stroke, traumatic brain injury (TBI), AIDS associated dementia and attention deficit disorder. The method of using these compositions is also disclosed.