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(54) Title: COMBINATIONS OF GABAA ALPHA 5 AGONISTS AND SV2A INHIBITORS AND METHODS OF USING IN THE TREATMENT OF COGNITIVE IMPAIRMENT

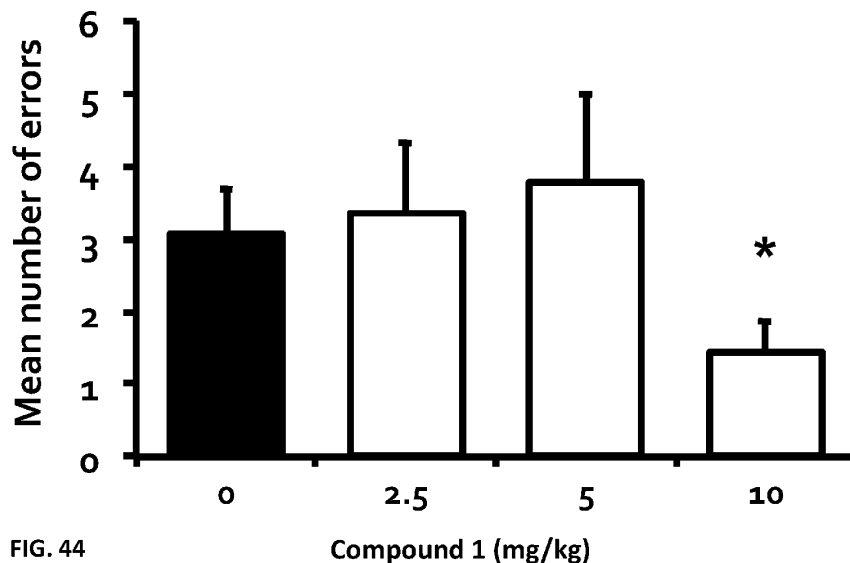


FIG. 44

(57) Abstract: This disclosure relates to methods, uses, combinations, pharmaceutical compositions, combinations for use, and pharmaceutical compositions for use useful for treating cognitive impairment associated with central nervous system (CNS) disorders. In particular, it relates to the use of inhibitors of synaptic vesicle glycoprotein 2A (SV2A), in combination with GABA_A α 5 receptor agonists, in treating cognitive impairment associated with central nervous system (CNS) disorders in a subject in need or at risk thereof, including, without limitation, subjects having or at risk for age-related cognitive impairment, mild cognitive impairment (MCI), amnesic MCI (aMCI), age-associated memory impairment (AAMI), age related cognitive decline (ARCD), dementia, Alzheimer's

[Continued on next page]

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disease (AD), prodromal AD, post traumatic stress disorder (PTSD), schizophrenia, bipolar disorder, amyotrophic lateral sclerosis, cancer-therapy-related cognitive impairment, mental retardation, Parkinson's disease, autism, compulsive behavior, and substance addiction. Further, the disclosure relates to methods, uses, combinations, pharmaceutical compositions, combinations for use, and pharmaceutical compositions for use useful for treating cognitive impairment associated with brain cancer or for treating brain cancer itself in a subject in need thereof. Additionally, the disclosure relates to methods, uses, combinations, pharmaceutical compositions, combinations for use, and pharmaceutical compositions for use useful for treating Parkinson's disease psychosis in a subject in need thereof.