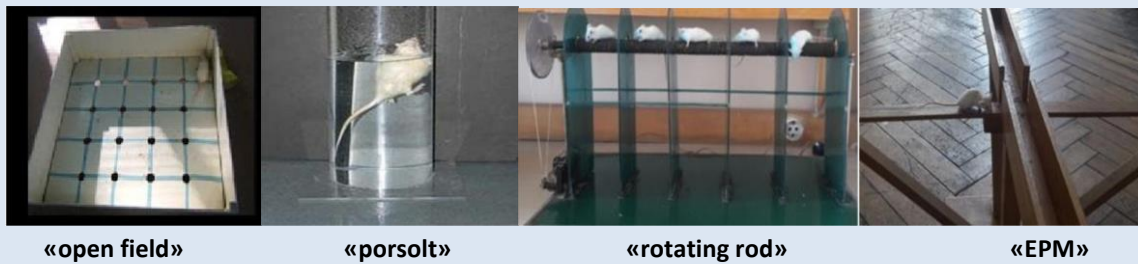
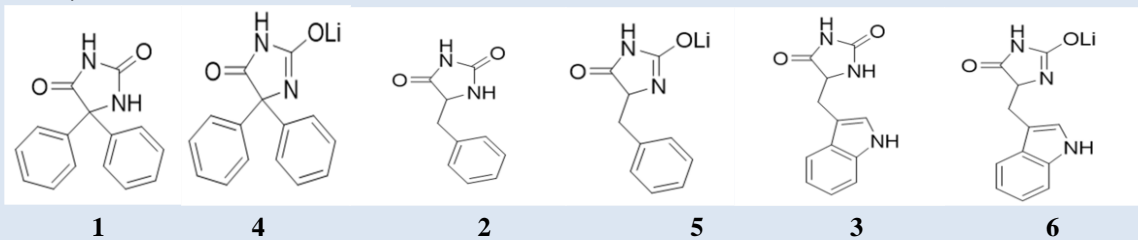


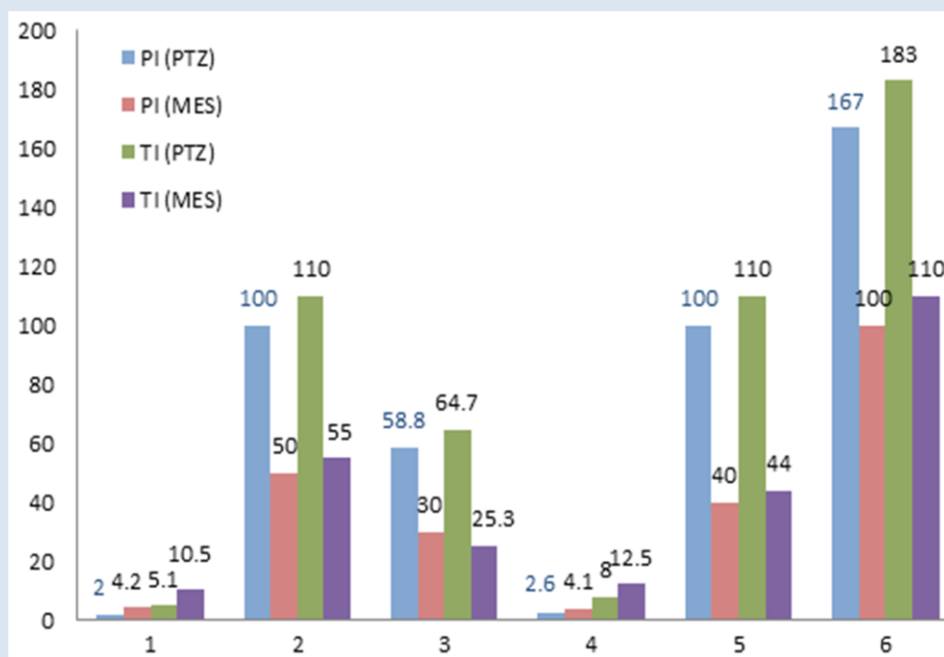
Conclusion: Hydantoin derivatives from DL-tryptophan, DL-β-phenyl-α-alanine, and Phenytoin, along with their corresponding lithium salts, were synthesized. Both the anticonvulsant and psychotropic effects of these substances have been thoroughly studied. In several models, compounds that inhibit maximal electroshock convulsions in animals and clonic pentylenetetrazole also display anxiolytic and behavior-activating effects. These compounds also exhibit antidepressant and anti-MAO effects. The investigated compounds can be used in medicine, as drugs, in the treatment of epilepsy with psychotropic disorders.

Keywords: antiepileptic drugs, derivatives of amino acid, lithium salts, neurotropic activity, pentylenetetrazole convulsions.

Graphical Abstract: Phenytoin and Li-salt, Hydantoin of *D,L*-Phe and Li-salt, Hydantoin of *D,L*-Trp and Li-salt (1,4,2,5,3,6)



Safety of new synthesized compounds (1-6) via protective (PI) and therapeutic (TI) indexes by pentylenetetrazole (PTZ) and maximal electroshock (MES) seizure



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