

International Conference on

Pharmaceutical Chemistry

September 05-07, 2016 Frankfurt, Germany

Activity of some phenoxyalkyl- and phenoxyethoxyethylamine derivatives on the central nervous system

Anna Maria Waszkielewicz

Jagiellonian University Medical College, Poland

The aim of the study was determination of correlation between activities: anticonvulsant, analgesic, antidepressant and anxiolytic, among novel compounds, as well as finding mechanism of action of these compounds. Premise for the above aim constitutes coexistence and common etiology of these disorders, such as trauma, intoxication, or neurodegeneration. Among epilepsy patients, morbidity in migraine is 2.4 times as high as between patients who have no seizures. 20-50% of epilepsy patients suffer from depression. Special situation is observed for patients such as children or pregnant women, as well as those who suffer from drug-resistant epilepsy. It is known that anticonvulsants such as carbamazepine, valproates, or gabapentin improve mood and that tianeptine may cause depression. On the other hand, epilepsy can be caused by maprotyline and klomipramine. Drugs such as venlafaxine and selective serotonin reuptake inhibitors are considered relatively safe. Based on our experience regarding phenoxyalkyl- and phenoxyethoxyethylaminoalkanol and their anticonvulsant and analgesic activity, new phenoxyalkyl and phenoxyethoxyethyl derivatives of piperazine have been designed and synthesized for *in vivo* screening for epilepsy (maximal electroshock, MES), neurotoxicity (rotarod), antidepressant-like activity (Porsolt test), as well as anxiolytic activity (four-plate test) have been examined. Receptor profile for the compounds has been determined. As an additional assay, mutagenic activity was excluded. Moreover, metabolic stability was determined with use of murine liver microsomes for the most active compounds.

Biography

Anna Maria Waszkielewicz defended her PhD in 2008 in Medicinal Chemistry. She has published more than 35 papers in reputed journals (overall IF>60) and has been serving as an Editorial Board Member of reputed Organic Chemistry – Current Research as well as Jacobs Journal of Organic Chemistry. She was granted patents for new drug candidates in US, EPO, Russia, Japan, Canada, Korea, and Poland. She has coordinated cooperation between National Cancer Institute and Jagiellonian University Medical College in discovery of anticancer agents. She is an Assistant Professor at Department of Bioorganic Chemistry, Chair of Organic Chemistry, Jagiellonian University Medical College, Poland.

awaszkie@cm-uj.krakow.pl**Notes:**