

Pharmacological activities of some new synthesized polycyclic triazolo pyrazolo pyridazine derivatives

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Pyrimidines and fused pyrimidines, being an integral part of DNA and RNA in it, play an essential role in several biological processes and have considerable chemical and pharmacological importance, particularly, the pyrimidine ring can be found in nucleoside antibiotics, antibacterial, cardio-vascular as well as agro chemical and veteran products. In addition, we reported that certain of our newly substituted heterocyclic compounds exhibited antiparkinsonian, antitumor, antimicrobial and anti-inflammatory activities. Recently, some new substituted heterocyclic derivatives have been synthesized, which exhibit antimicrobial, analgesic, anti-inflammatory and activities. In view of these observations and as continuation of our previous works in heterocyclic chemistry, we have herein synthesized some new poly heterocyclic fused ring systems containing pyrazole nuclei, and tested their anti-arrhythmic and anticoagulant activities in comparison to procaine amide and lidocaine as positive controls. Some synthetic heterocyclic system has exhibited a range of biological activities, such as antitumor, anti-filarial, antibiotic, antibacterial, antifungal, and anti-inflammatory. Recent studies have shown the synthesis of some new azole candidates as antimicrobial and antitumor agents.

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