

Pharmacological activities of some new synthesized polycyclic triazolo pyrazolo pyridazine derivatives

Saleh A Bahashwan¹, Naif O Al-Harbi², Ahmed A Fayed^{1,3}, Abd El-Galil E Amr^{2,3}, Khalid A Shadid⁵ and Ali M Alalawi¹

¹Taibah University, Saudi Arabia

²King Saud University, Saudi Arabia

³National Research Center, Egypt

⁴Al-Ahliyya Amman University, Jordan

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, antibacterials, cardio-vascular as well as agro chemical and veterin 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, antiinflammatory 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 antiarrhythmic 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, antifilarial, antibiotic, antibacterial, antifungal, and anti-inflammatory . Recent studies have shown the synthesis of some new azole candidates as antimicrobial and anticancer agents.

bhswan@yahoo.com