

A Brief Review on History Synthesis Mechanism of Action of Benzimidazole

Shaikh Afsana Husen, Rahul Prakash Lokhande, Akshay Dattu Adhav, Mayuri Gopinath Divekar, Mayuri Madhukar Lokhande

Samarth Institute of Pharmacy Belhe, Pune, India

Correspondence Address: Afsana Husen Shaikh

afsanashaikh1455@gmail.com

Abstract: *In the last 2-3 decades, the broad research in the application of benzimidazole derivatives made it important for mankind. Benzimidazole, a fused heterocycle bearing benzene and imidazole has gained considerable attention in the field of contemporary medicinal chemistry. benzimidazole and its derivatives have evolved as vibrant heterocyclic systems due to their potency in a wide range of bioactive compounds like analgesics, antifungals, anti-inflammatory, antihypertensives, proton pump inhibitors, anti-HIV, antiviral and so on. Benzimidazole is considered a privileged moiety for the development of molecules with therapeutic potential. Over the years several drugs viz: albendazole, pantoprazole, astemizole, telmisartan, thiabendazole, and benomyl have been developed by optimizing benzimidazole-based structures. In the present study, a series of novel benzimidazole derivatives containing chrysanthemum acid moieties was designed and synthesized. A series of benzimidazole derivatives was developed and its chemical scaffolds were authenticated By NMR, IR, elemental analyses and physicochemical properties. The synthesized compounds were screened for their Antimicrobial activity.*

Keywords: Benzimidazole, Biological activity, History Mechanism of action