

SCHIFF BASES: AN EVERGREEN PHARMACOPHORE IN MEDICINAL CHEMISTRY

AMIT CHAWLA*, KAUR KULDEEP, PAYAL CHAWLA & DHAWAN R.K.

Khalsa College of Pharmacy, Amritsar, Punjab, India

ABSTRACT

Schiff bases are used widely in pharmaceutical industry and have interesting pharmacological activities. Schiff bases possess excellent characteristics, structural similarities with natural biological substances, relatively simple preparation procedures and the synthetic flexibility that enables design of suitable structural properties. Many biologically important Schiff bases have been reported in the literature possessing, antibacterial, antifungal, antimicrobial, anticonvulsant, anti-HIV, anti-inflammatory, antitumor and catalytic activities. Schiff bases have been studied for their important properties in catalysis. They show catalytic activity in hydrogenation of olefins, applications in biomimetic catalytic reactions and an interesting application of schiff bases is their use as an effective corrosion inhibitor. Many commercial inhibitors include aldehydes or amines, but presumably due to the C=N bond the schiff bases function more efficiently in many cases.

KEYWORDS: Schiff Base, Antitumor, Catalyst, Biomimetic