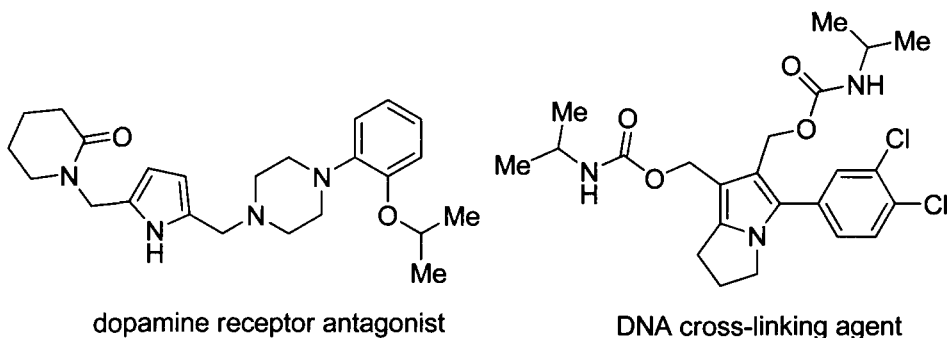


The pyrrole ring has found great use in the design and development of pharmaceuticals. Atorvastatin (Lipitor), a HMG CoA inhibitor, is the best selling drug ever. Other bioactive pyrroles shown as follows include an antipsychotic agent, a sodium-independent dopamine receptor antagonist, and a DNA cross-linking agent.



However, pyrroles are most frequently found in analgesic and anti-inflammatory drugs. Tolmetin and zomepirac were the first pyrrole-acetic acids to be used as nonsteroidal anti-inflammatory drugs (NSAIDs). Ketorolac (Toradol for inflammatory indications and Acular for ophthalmic indications), also an analgesic and anti-inflammatory, was discovered by Syntex. It was one of the top 100 selling drugs during its heydays during the 1980s. Pyrrolnitrin is an antifungal and an antibiotic.