Mecamylamine is a reversible, non-competitive, non-selective inhibitor of nicotinic acetylcholine receptors (nAChRs); it decreases channel open time and burst duration. This compound exhibits antihypertensive, antidepressant, and anxiolytic activities.

Mecamylamine crosses the blood-brain barrier and acts both centrally and peripherally, resulting in high incidence of peripheral side effects. Mecamylamine was previously clinically used to decrease blood pressure, but also reduces mood instability and depression in subjects with Tourette's syndrome and shows potential benefit as a smoking cessation therapy. In animals, mecamylamine improves activity in the forced swim test, social interaction tests, and light/dark paradigms.

References


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