

Drugs	
Direct M-cholinoceptors	Pilocarpine
Direct N-cholinoceptors	Cytitone (Nicotine)
Both	Carbachol (acetylcholine)

Subtypes	
Direct cholinoceptors	Binds to + activates muscarinic/nicotinic receptors
Indirect cholinoceptors	Inhibits the action of acetylcholinesterase
Muscarinic (M) cholinergic drugs	Produced at postganglionic nerve endings
Nicotinic (N) cholinergic drugs	Produced by stimulants of all autonomic ganglia

MOA	
M-cholinoceptors	Stimulate M-cholinoceptors in the exocrine glands and autonomic ganglia
N-cholinoceptors	Stimulates N-cholinoceptors in arch of aorta + the respiratory centre.

Indications	
Cholinomimetics	Bradycardia Vasodilator Decrease blood pressure Glaucoma

Typical side effects	
Cholinergic drugs	Bone marrow suppression dry mouth Fever

Pharmacological effects	
M-cholinomimetics	Miosis + decrease intraocular pressure + spasm of the accommodation

Anticholinesterases	
Drugs	AntiNicotinics - ganglion blockers AntiMuscaranics - tertiary amines (atropine, scopolamine) and quaternary amines (ipratropium, benztropine)
MOA	Inhibition of cholinesterase enzyme which inhibits the breakdown of Ach

Side effects	mydriasis, sweating, bradycardia, diarrhea
Contraindication	Bronchial asthma

Contraindications	
Cholinergic drugs	Bronchial asthma Urinary obstruction

End

