Galantamine is an alkaloid originally found in species of *Galanthus*, *Narcissus*, *Leucojum*, and *Lycoris*; it exhibits neuroprotective and cognition enhancing activities. Galantamine inhibits acetylcholinesterase (AChE) and acts as an allosteric agonist on nicotinic acetylcholine receptors (nAChRs) and muscarinic acetylcholine receptors (mAChRs); it is somewhat selective for α7 nAChRs. Galantamine is clinically used to improve cognitive deficits in subjects with Alzheimer’s disease. Galantamine is neuroprotective and promotes neurogenesis in an IGF-2-dependent manner. Galantamine may also inhibit P2X7 receptors, increasing Bcl-2 expression and inhibiting apoptosis.

References


