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# Pilocarpine Hydrochloride

National Cancer Institute

## Source

National Cancer Institute. *Pilocarpine Hydrochloride*. NCI Thesaurus. Code C748.

The hydrochloride salt of a natural alkaloid extracted from plants of the genus *Pilocarpus* with cholinergic agonist activity. As a cholinergic parasympathomimetic agent, pilocarpine predominantly binds to muscarinic receptors, thereby inducing exocrine gland secretion and stimulating smooth muscle in the bronchi, urinary tract, biliary tract, and intestinal tract. When applied topically to the eye, this agent stimulates the sphincter pupillae to contract, resulting in miosis; stimulates the ciliary muscle to contract, resulting in spasm of accommodation; and may cause a transitory rise in intraocular pressure followed by a more persistent fall due to opening of the trabecular meshwork and an increase in the outflow of aqueous humor.