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# Betaxolol

National Cancer Institute

## Source

National Cancer Institute. *Betaxolol*. NCI Thesaurus. Code C61652.

A racemic mixture and selective beta-1 adrenergic receptor antagonist with antihypertensive and anti-glaucoma activities and devoid of intrinsic sympathomimetic activity. Betaxolol selectively and competitively binds to and blocks beta-1 adrenergic receptors in the heart, thereby decreasing cardiac contractility and rate. This leads to a reduction in cardiac output and lowers blood pressure. When applied topically in the eye, this agent reduces aqueous humor secretion and lowers the intraocular pressure (IOP). In addition, betaxolol prevents the release of renin, a hormone secreted by the kidneys that causes constriction of blood vessels.