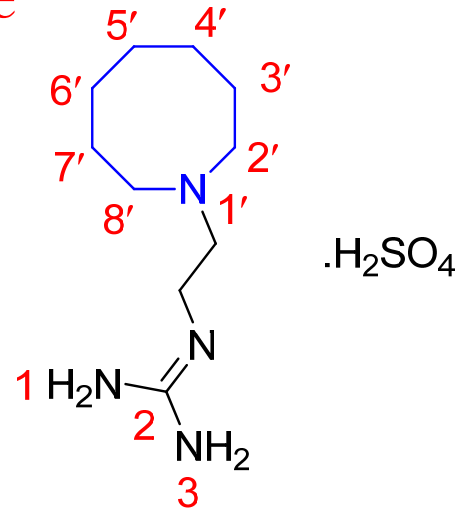


Adrenergic Neuron blockers

Guanethidine monosulphate

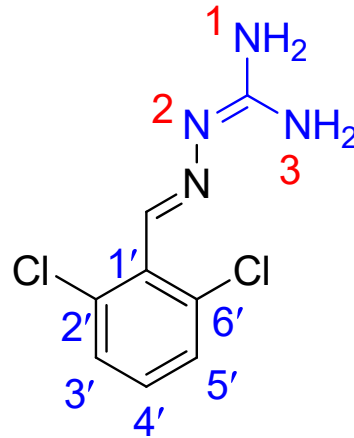


IUPAC: (2-(Octahydro-1'-azocinyl)ethyl)guanidine

MOA: Guanethidine acts at the sympathetic neuroeffector junction by inhibiting or interfering with the release and/or distribution of norepinephrine (NE). Guanethidine at the nerve terminal blocks the release of noradrenaline in response to an action potential. Sympathetic blockade results in modest decreases in peripheral resistance, cardiac output and blood pressure.

Uses: For the treatment of moderate and severe hypertension, either alone or as an adjunct, and for the treatment of renal hypertension.

Guanabenz acetate

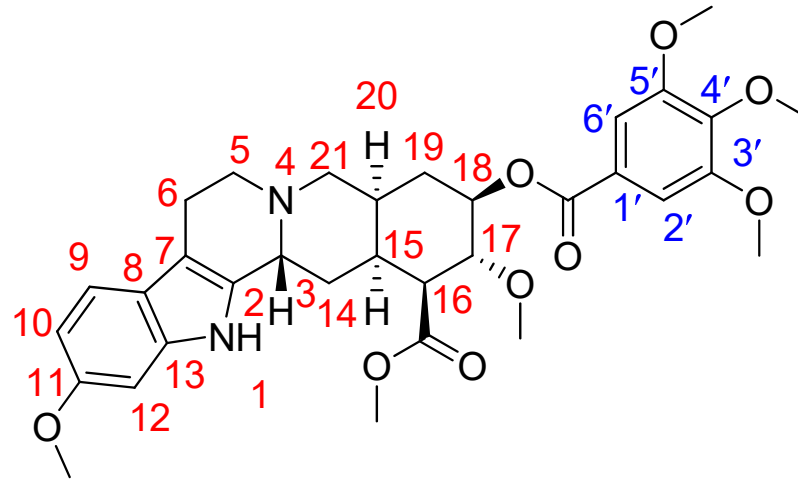


IUPAC: 2- {[(2,6-dichlorophenyl)methylidene]amino } guanidine

MOA: Guanabenz's antihypertensive effect is thought to be due to central alpha-adrenergic stimulation, which results in a decreased sympathetic outflow to the heart, kidneys, and peripheral vasculature in addition to a decreased systolic and diastolic blood pressure and a slight slowing of pulse rate. Chronic administration of guanabenz also causes a decrease in peripheral vascular resistance.

Uses: For management of High blood pressure.

Reserpine



IUPAC: (3beta,16beta,17alpha,18beta,20alpha)-11,17-Dimethoxy-18-[(3',4',5'-trimethoxybenzoyl)oxy]yohimban-16-carboxylic acid methyl ester

MOA: Reserpine's mechanism of action is through inhibition of the $\text{ATP}/\text{Mg}^{2+}$ pump responsible for the uptake of neurotransmitters into storage vesicles located in the presynaptic neuron. The neurotransmitters that are not are then readily metabolized by monoamine oxidase (MAO) causing a reduction in catecholamines.

Uses: For the treatment of hypertension.