Open Peer Review on Qeios

Amiodarone Hydrochloride

National Cancer Institute

Source

National Cancer Institute. Amiodarone Hydrochloride. NCI Thesaurus. Code C236.

The hydrochloride salt of an iodine-rich benzofuran derivative with antiarrhythmic and vasodilatory activities. As a class III antiarrhythmic agent, amiodarone blocks the myocardial calcium, potassium and sodium channels in cardiac tissue, resulting in prolongation of the cardiac action potential and refractory period. In addition, this agent inhibits alpha- and beta-adrenergic receptors, resulting in a reduction in sympathetic stimulation of the heart, a negative chronotropic effect, and a decrease in myocardial oxygen demands. Amiodarone may cause vasodilation by stimulation of the release of nitric oxide and cyclooxygenase-dependent relaxing endothelial factors.