## Quinidine sulphate

IUPAC: (R)-(6-Methoxyquinolin-4-yl)((3S,4R,7S)-3-vinylquinuclidin-7-yl) methanol

MOA: It complexes with lipoproteins of cell membranes of the myocardia, thus blocking Na channel conductivity and the flow of Na into the cell, and facilitate the release of K from myocardial cells, which as a result leads to a weak suppression of depolarization of myocardial cells, reduction of repolarization time, and a slowing of the propagation of excitation.

Uses: For the treatment of ventricular pre-excitation and cardiac dysrhythmias.

Procainamide hydrochloride

IUPAC: p-Amino-N-(2-diethylaminoethyl)benzamide

MOA: Complexes with lipoproteins of cell membranes of the myocardia, thus blocking Na channel conductivity and the flow of Na into the cell, and facilitate the release of K from myocardial cells, which as a result leads to a weak suppression of depolarization of myocardial cells, reduction of repolarization time, and a slowing of the propagation of excitation.

Uses: For the treatment of ventricular pre-excitation and cardiac dysrhythmias.

Disopyramide Phosphate

$$\begin{array}{c|c}
O & NH_2 \\
\hline
N & 2 & 1 & 4 \\
\hline
3 & N & .H_3PO_4
\end{array}$$

IUPAC: 4-[bis(propan-2-yl)amino]-2-phenyl-2-(pyridin-2-yl)butanamide

MOA: Disopyramide is a Type 1A antiarrhythmic drug (ie, similar to procainamide and quinidine). It inhibits the fast sodium channels. In animal studies Disopyramide decreases the rate of diastolic depolarization (phase 4) in cells with augmented automaticity, decreases the upstroke velocity (phase 0) and increases the action potential duration of normal cardiac cells.

Uses: For the treatment of documented ventricular arrhythmias, such as sustained ventricular tachycardia, ventricular pre-excitation and cardiac dysrhythmias.