

## Chloroquine (CQ) and Hydroxychloroquine (HCQ) DRUG-DRUG INTERACTIONS (DDIs)

Pharmacodynamic DDIs may occur because CQ and HCQ prolong QT-interval. Drugs like amiodarone, methadone, tricyclic antidepressants and some anti-emetics may risk malignant arrhythmia



CQ/HCQ + QT-prolongating drugs may cause arrhythmias

## **Pharmacokinetic DDIs**

 P-glycoprotein transport system may increase levels of cyclosporin and digoxin
P450: may be impaired by cimetidine, gemfibrozil, clopidorel, cardiac drugs, antifungals, antbiotics. HCQ may raise metoprolol levels!



CQ/HCQ + P-gp or P450 enzyme drugs may alter serum levels and risk toxicity



CQ and HCQ are being proposed as off-label treatments for COVID-19. Clinicians should be aware that significant pharmacodynamic and pharmacokinetic DDIs involving both drugs have been recognized.