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.

**Pharmacokinetic DDIs**
1. P-glycoprotein transport system may increase levels of cyclosporin and digoxin
2. P450: may be impaired by cimetidine, gemfibrozil, clopidogrel, cardiac drugs, antifungals, antibiotics. HCQ may raise metoprolol levels!

- CQ/HCQ + QT-prolonging drugs may cause **arrhythmias**
- 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.