Medication Safety Minute

Prescribe Safely...
Every Patient, Every Time

In the world of pharmacokinetic interactions there are

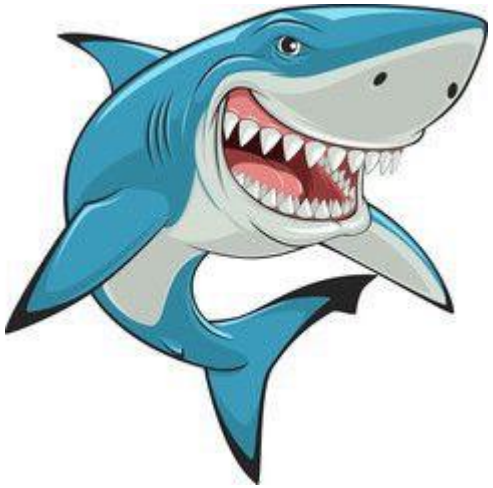
Big Fish & Small Fry...

Name 10 medications (classes / individual agents) which are particularly likely to cause clinically significant interactions



Disclaimer: St. James's Hospital cannot accept legal responsibility for any errors or omissions. Minutes are compiled for an acute teaching hospital setting & may not be applicable in other settings/jurisdictions. Refer to the SPC & other appropriate references for complete safety information.

Answer:



The Big Fish*

Azole Antifungals, e.g. itraconazole
Calcium Channel Blockers, e.g. verapamil
Carbamazepine
Ciprofloxacin
SSRIs, e.g. fluoxetine
Clarithromycin
St John's Wort
Phenytoin
Protease Inhibitors, e.g. ritonavir
Rifampicin

* *This list is not all-inclusive.*

Where a class is specified only some of the members may be significant inhibitors / inducers of Cytochrome p450 isoenzymes.



- All of these medications are classified as either strong /moderate **inhibitors** or strong **inducers** of Cytochrome p450 isoenzymes
- When they are concurrently administered with a medication metabolised by these enzymes (substrate) they may have a substantial impact on its plasma levels
- **Inhibitors may** ↑ levels of the substrate medication resulting in toxicity
- **Inducers may** ↓ levels of the substrate leading to subtherapeutic concentrations or treatment failure

ⓘ *Indiana School of Medicine Flockhart Table* & Interaction Checker on *www.uptodate.com*