

## **Drug interactions- discussion points**

**30<sup>th</sup> November 2017**

### **1. BNF interactions list- update**

The BNF interactions section has been changed – the improved content is more consistently structured, allowing you to find interactions more easily, and gives more information about the severity of an interaction and its clinical significance.

<https://bnf.nice.org.uk/interaction/>

### **2. Pro-drugs**

#### **2.1 PPIs and clopidogrel**

There is concern that Omeprazole may inhibit part of the cytochrome P450 system that converts clopidogrel to the active component needed to inhibit platelet function.

MHRA advice now states that omeprazole and esomeprazole should be discouraged in patients taking clopidogrel unless concurrent use is essential, and that an alternative PPI (e.g. Lansoprazole) should be considered.

<https://www.gov.uk/drug-safety-update/clopidogrel-and-proton-pump-inhibitors-interaction-updated-advice>

#### **2.2 Tamoxifen and antidepressants**

There is a good pharmacological reason why fluoxetine and paroxetine may make tamoxifen less effective – they are potent inhibitors of the enzyme (CYP2D6) that converts tamoxifen to its active metabolite endoxifen.

MHRA advice is that we should not use fluoxetine/paroxetine/duloxetine with tamoxifen.

<https://www.gov.uk/drug-safety-update/tamoxifen-for-breast-cancer>

### **3. Hyperkalaemia**

Take extra care with concomitant use of spironolactone/eplerenone with ACE inhibitors/ARBs. Regularly monitor serum potassium and renal function.

MHRA has issued advice on concomitant use of a potassium-sparing diuretic and an ACE inhibitor or an ARB for heart failure.

<https://www.gov.uk/drug-safety-update/spironolactone-and-renin-angiotensin-system-drugs-in-heart-failure-risk-of-potentially-fatal-hyperkalaemia>

### **4. Additive CNS depression**

Additive risks of CNS depressants are a concern in polypharmacy. Consider reviewing all medications especially in the frail elderly.

MHRA recently issued advice about Gabapentin risks with or without concomitant opioid use.

<https://www.gov.uk/drug-safety-update/gabapentin-neurontin-risk-of-severe-respiratory-depression>

### **5. Drug-induced prolonged QT**

Be aware of the common drugs that prolong QT interval. Avoid combining two drugs that prolong the QT interval. Current MHRA advice regarding some implicated drugs is listed below.

<https://www.gov.uk/drug-safety-update/hydroxyzine-atarax-ucerax-risk-of-qt-interval-prolongation-and-torsade-de-pointes>

<https://www.gov.uk/drug-safety-update/domperidone-risks-of-cardiac-side-effects>

<https://www.gov.uk/drug-safety-update/citalopram-and-escitalopram-qt-interval-prolongation>

<https://www.gov.uk/drug-safety-update/quinine-reminder-of-dose-dependent-qt-prolonging-effects-updated-medicine-interactions>