clinical cases DDIs

Date of report 21 Jun 2019

Reported case interaction between **Cobicistat** and **Quetiapine**

Drugs suspected to be involved in the DDI

Perpetrator
Cobicistat

Daily Dose
150 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
May 1, 2018

End date
Ongoing

Victim
Quetiapine

Daily Dose
300 (mg)

Dose adjustment performed
Yes

Administration Route
Oral

Start date
March 1, 2019

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Darunavir (with Ritonavir or Cobicistat)
Dolutegravir

Complete list of all comedications taken by the patient, included that involved in the DDI

Quetiapine, duloxetine, flurazepam, tiapride, valrpoic acid, inhaled salbutamol, inhaled budesonide/formoterol fumarate

Clinical case description

Gender

Male

Age

49

eGFR (mL/min)

>60

Liver function impairment

No

Description

Patient affected by alcohol dependence, COPD, previous AIDS (disseminated MAC, Crytptosporidiosis, CD4 nadir 7 cells/ mm3), two episodes of acute pancreatitis. Incomplete adherence in the past, several RAMS in the RT gene. After an increase in quetiapine dose (from 300 mg once daily to 300 mg twice a day) the patient started to feel dizzy and to report nausea and diarrhea. Quetiapine plasma trough concentrations (12 hours after dosing) were 1061 ng/mL (range 100-500). Quetiapine dose was decreased to 300 mg once daily, with gradual improvement of the symptoms, although anxiety increased and benzodiazepines had to be added to the treatment (for anxiety and alcohol craving).

Clinical Outcome

Toxicity

Drug Interaction Probability Scale (DIPS)

Score

7 - Probable

Editorial Comment

It is important to note that in the European SPC DRV/c/FTC/TAF is contraindicated with quetiapine due to the known inhibition of CYP3A4 metabolism by cobicistat and therefore potential increase in quetiapine exposure. In the US prescribing information the recommendation is to dose reduce the quetiapine to 1/6th of the dose. Individualization of dosing to manage a drug interaction is an important principle of patient management. Titrate and monitor efficacy and adverse effects. If needed, benzodiazepines are suggested to be added in therapy in order to even the anxiolytic effect.

University of Liverpool Recommendation

- These drugs should not be coadministered

For more information click here