clinical cases DDIs

Date of report 28 Jun 2019

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

Drugs suspected to be involved in the DDI

Perpetrator
Cobicistat

Daily Dose
150 mg (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
March 1, 2016

End date
Ongoing

Victim
Quetiapine

Daily Dose
600 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
July 1, 2016

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Elvitegravir/Cobicistat/Emtricitabine/Tenofovir-AF

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

Quetiapine, Mirtazapine, Clonazepam, Desvenlafaxine

Clinical case description

Gender

Male

Age

55

eGFR (mL/min)

>60

Liver function impairment

No

Description

55 years old HIV+ man with severe chronic depression. For this reason, quetiapine was initiated in July 2016, while he was on ART with EVG/c/FTC/TDF (Stribild). The initial dose of quetiapine was 100-25-25 mg and it was increased progressively (100-25-50 mg, 100-100-200 mg) until the current dose (since December 2016): 300 mg twice daily. In July 2017 ART was switched to EVG/c/FTC/TAF (Genvoya). He has never presented quetiapine toxicity related symptoms.

Clinical Outcome

No unwanted outcome

Editorial Comment

It is important to note that in the European SPC both EVG/c/FTC/TDF and EVG/c/FTC/TAF are 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. The interesting point about this case is that the dose of quetiapine was progressively increased over a period of time and at the current dose of 600 mg there have been no apparent adverse effects due to supra therapeutic concentrations of quetiapine. Despite this particular case it is important to be very cautious about this interaction. Note that quetiapine can be administered over a range of doses and the greatest concern will be at higher doses when the implications of increasing the exposure is greatest.

University of Liverpool Recommendation

- These drugs should not be coadministered

For more information click here