clinical cases DDIs

Date of report 13 Feb 2020

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
Feb. 15, 2018

End date
Jan. 15, 2020

Victim
Quetiapine

Daily Dose
300 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Unknown

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, pregabalin, mirtazapine, clorazepate, gemfibrozil

Clinical case description

Gender

Male

Age

41

eGFR (mL/min)

>60

Liver function impairment

No

Description

HIV patient on stable treatment with ABC/3TC+etravirine. Psychiatric disorder on treatment with quetiapine (300 mg qd). Antiretroviral treatment was simplified to EVG/c/FTC/TAF, while maintaining all his medication for psychiatric disorder. The patient has been receiving quetiapine 300 mg qd and cobicistat for the last year at least, without significant side effects. Even so, antiretroviral treatment was changed to BIC/FTC/TAF to avoid eventual DDIs with quetiapine, but also with clorazepate and mirtazapine.

Clinical Outcome

No unwanted outcome

Editorial Comment

Quetiapine is metabolized by CYP3A4 and therefore coadministration with a strong CYP3A4 inhibitor like cobicistat is predicted to increase quetiapine exposure by 6 fold which can increase the risk of QT interval prolongation. Although no deleterious consequences were observed in this case, coadministration of a high dose of quetiapine in presence of a strong CYP3A4 inhibitor is not recommended unless quetiapine dose is reduced to 1/6 of the original dose.

University of Liverpool Recommendation

- These drugs should not be coadministered

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