

Date of report 13 Feb 2020

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

## **Drugs suspected to be involved in the DDI**

Perpetrator	Daily Dose
Cobicistat	150 (mg)
Dose adjustment performed	Administration Route
No	Oral
Start date	End date
Feb. 15, 2018	Jan. 15, 2020
Victim	Daily Dose
<b>Quetiapine</b>	300 (mg)
Dose adjustment performed	Administration Route
No	Oral
Start date	End date
<b>Unknown</b>	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	Age
Male	41
eGFR (mL/min) >60	Liver function impairment <b>No</b>

#### 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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