clinical cases DDIs

Date of report 22 Jun 2020

Reported case interaction between **Cobicistat** and **Aripiprazole**

Drugs suspected to be involved in the DDI

Perpetrator
Cobicistat

Daily Dose
150 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Nov. 1, 2018

End date
Ongoing

Victim
Aripiprazole

Daily Dose
5 (mg)

Dose adjustment performed
Yes

Administration Route
Oral

Start date
June 1, 2017

End date
Feb. 1, 2019

Complete list of drugs taken by the patient

Antiretroviral treatment

Darunavir/Cobicistat/Emtricitabine/Tenofovir-AF

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

No other drugs

Clinical case description

Gender

Male

Age

21

eGFR (mL/min)

>60

Liver function impairment

No

Description

21-year-old HIV positive patient, known for ilicit substance abuse and recent HIV infection. Clinical history relevant for chronic psychotic disorder (poorly characterized) treated with aripiprazole 10mg/d orally since 2017. Following HIV diagnosis, he initiated FTC/TAF + RAL to avoid drug-drug-interactions, but later genotype showed resistance mutations for RAL (163K substitution in 98% of the sequences). ARV regimen was changed to DRV/c/FTC/TAF in November 2018, and the dose of aripiprazole was reduced to 5mg/d. Clinical response continued to be adequate and no side effects were observed. VL became undetectable afetr 3 months of follow-up. Aripiprazole is metabolized by CYP3A4 and CYP2D6. Darunavir/cobicistat could potentially increase aripiprazole concentrations, but no adverse effects were observed in our patient with dose modification (10 mg to 5mg) when cobicistat was introduced.

Clinical Outcome

No unwanted outcome

Editorial Comment

Aripiprazole is metabolized by CYP3A4 and CYP2D6. Darunavir/cobicistat could potentially increase aripiprazole concentrations. The European product label for aripiprazole advises reducing the aripiprazole dose to approximately one-half of its prescribed dose when given with potent inhibitors of CYP3A4, as in this case.

University of Liverpool Recommendation

■ Potential interaction - may require close monitoring, alteration of drug dosage or timing of administration

For more information click here