



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 illicit 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 after 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.

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## University of Liverpool Recommendation

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

For more information [click here](#)