clinical cases DDIs

Date of report 08 Apr 2021

Reported case interaction between **Cobicistat** and **Sildenafil**

Drugs suspected to be involved in the DDI

Perpetrator
Cobicistat

Daily Dose
150 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Unknown

End date
Ongoing

Victim
Sildenafil

Daily Dose
50 (mg)

Dose adjustment performed
Yes

Administration Route
Oral

Start date
Unknown

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Darunavir/Cobicistat
Emtricitabine/Tenofovir-DF

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

Sildenafil

Clinical case description

Gender

Male

Age

52

eGFR (mL/min)

>60

Liver function impairment

No

Description

52-year-old male patient was diagnosed with HIV infection in late 2010. cART was introduced at the beginning of 2011. Since, patient showed good adherence, his treatment outcome was successful. His last HIVRNA pVL, in December 2019, was below 50 copies/mL. Besides cART he did not take any other co-medications instead sildenafil. Within last 3-4 years he had been taking sildenafil occasionally with no side effects. In January 2020, he also took sildenafil 50 mg QD 1 hour before sexual intercourse together with his current cART which was: DRV/c/FTC/TDF. On that occasion he had dizziness, headache and syncope. After consultation with HIV specialist he was advised to reduce sildenafil dose to 25 mg once daily. A few weeks later patient reported that after concomitant use of sildenafil (25mg QD) and DRV/c/FTC/TDF did not suffered of any side effects.

Clinical Outcome

Toxicity

Drug Interaction Probability Scale (DIPS)

Score

4 - Possible

Editorial Comment

Sildenafil is metabolized by CYP3A4. Darunavir/cobicistat is expected to substantially increase sildenafil concentrations and may result in an increase in associated adverse events including hypotension, syncope, visual changes and prolonged erection. Use sildenafil with caution at a reduced dose not exceeding 25 mg in 48 h with increased monitoring for adverse events.

University of Liverpool Recommendation

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

For more information click here