



Date of report 09 Mar 2020

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

### Drugs suspected to be involved in the DDI

Perpetrator

**Cobicistat**

Daily Dose

150 (mcg)

Dose adjustment performed

No

Administration Route

Oral

Start date

Aug. 1, 2018

End date

Ongoing

Victim

**Sildenafil**

Daily Dose

20 (mg)

Dose adjustment performed

No

Administration Route

Oral

Start date

Unknown

End date

Unknown

## Complete list of drugs taken by the patient

Antiretroviral treatment

Emtricitabine/Tenofovir-DF  
Darunavir/Cobicistat

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

sildenafil

## Clinical case description

Gender  
Male

Age  
57

eGFR (mL/min)  
>60

Liver function impairment  
No

Description

57-year-old male diagnosed with HIV infection in 2013. Since then on successful antiretroviral treatment (previously treated with non-nucleoside analogues and protease inhibitors). Last HIV RNA pVL 20 copies/ml (September 2019). Within the last 2-3 years he had been taking sildenafil on demand and occasionally suffered from dizziness. In November 2019 he continued taking sildenafil 20 mg QD (self-prescribed) together with his current antiretroviral treatment DRV/c/FTC/TDF. He consulted because of severe headache, dizziness and a few episodes of syncope. After evaluation, he was advised to reduce sildenafil dose to a maximum of 20 mg every 48 hours. One month later the patient did not complain on any side effect of sildenafil.

## Clinical Outcome

### Toxicity

## Drug Interaction Probability Scale (DIPS)

Score

**6 - Probable**

## Editorial Comment

Based on theoretical considerations darunavir/cobicistat is expected to increase sildenafil plasma concentrations (CYP3A inhibition). Concomitant use of sildenafil for the treatment of erectile dysfunction with darunavir/cobicistat should be done with caution. If concomitant use of darunavir/cobicistat with sildenafil is indicated, sildenafil at a single dose not exceeding 25 mg in 48 hours is recommended. Rezolsta Summary of Product Characteristics, Janssen-Cilag Ltd, June 2018. This interaction is of great interest not only because of the clinical importance but also because it can be unnoticed in clinical practice, although it may be present in some groups of patients, such as those who practice Chemsex.

## University of Liverpool Recommendation

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

For more information [click here](#)

