clinical cases DDIs

Date of report 16 Apr 2021

Reported case interaction between **Cobicistat** and **Nebivolol**

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
Nebivolol

Daily Dose
5 (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

Nebivolol, hydrochlorothiazide,

Clinical case description

Gender

Female

Age

44

eGFR (mL/min)

>60

Liver function impairment

No

Description

44 years-old, Caucasian, female patient. HIV-infection was diagnosed at the age of 32. Her current cART is darunavir/ cobicistat plus emtricitabine/tenofovir DF. Her last HIV RNA pVL was 50 copies/ml. (January 2020). She was recently diagnosed with mild hypertension (systolic blood pressure of 155 mm Hg and diastolic pressure of 95 mm Hg). Patients is non-smoker, BMI 26 kg/m2. Her cardiologist introduced the following antihypertensive drugs: 5 mg nebivolol plus 12,5 mg hydrochlorothiazide (single tablet regimen) once daily. The patient felt dizziness, flushing, palpitations, irregular heart rate and hypotension. These side effects disappeared soon after replacing nebivolol by enalapril 20 mg qd.

Clinical Outcome

Toxicity

Drug Interaction Probability Scale (DIPS)

Score

4 - Possible

Editorial Comment

This is a potential weak interaction. Nebivolol metabolism involves CYP2D6, and darunavir/cobicistat could potentially increase nebivolol concentrations (darunavir/cobicistat is a weak inhibitor of CYP2D6). Although to limited extent, such an increase in nebivolol concentrations could lead to the development of adverse effects in some predisposed patients.

University of Liverpool Recommendation

⚠ Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment is unlikely to be required

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