clinical cases DDIs

Date of report 10 May 2019

Reported case interaction between **Cobicistat** and **Atorvastatin**

Drugs suspected to be involved in the DDI

Perpetrator
Cobicistat

Daily Dose
150 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
April 1, 2016

End date
Ongoing

Victim
Atorvastatin

Daily Dose
40 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Jan. 1, 2019

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Elvitegravir/Cobicistat/Emtricitabine/Tenofovir-AF

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

Atorvastatin, Aspirin, Bisoprolol

Clinical case description

Gender

Male

Age

66

eGFR (mL/min)

>60

Liver function impairment

No

Description

66 year-old male. Coronary disease with MI in 2005 (coronary stent). HIV infection on cART with elvitegravir/cobicistat/FTC/TAF since April 2016. Dyslipidemia on treatment with atorvastatin. Suboptimal control of LDL-cholesterol with atorvastatin 20 mg qd (LDL 92 mg/dL; target <70 mg/dL). In January 2019 atorvastatin dose in increased to 40 mg qd. Good tolerance. In May 2019 LDL-cholesterol decreased to 62 mg/dL. Liver enzyme levels (AST/ALT) and CPK levels remained within the normal range.

Clinical Outcome

No unwanted outcome

Editorial Comment

Atorvastatin is metabolized by CYP3A4. Coadministration with elvitegravir/cobicistat is expected to increase atorvastatin concentrations. If the use of atorvastatin is considered necessary, start with the lowest dose of atorvastatin and titrate carefully while monitoring for safety. A daily dose of 40 mg atorvastatin should not be exceeded with careful safety monitoring. Suboptimal cardiovascular risk management has been described in HIV patients. Intensification of lipid lowering therapy and control of other cardiovascular risk factors may be required (Rosan A van Zoest, et al. Eur J Prev Cardiol. 2017 Aug; 24(12): 1297–1307).

University of Liverpool Recommendation

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

For more information click here