clinical cases DDIs

Date of report 22 Jun 2020

Reported case interaction between **Raltegravir** and **Clopidogrel**

Drugs suspected to be involved in the DDI

Perpetrator
Raltegravir

Daily Dose
800 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Jan. 11, 2019

End date
Ongoing

Victim
Clopidogrel

Daily Dose
75 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Jan. 11, 2019

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Emtricitabine/Tenofovir-AF
Raltegravir

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

Clopidogrel, aspirin, rosuvastatin, metoprolol, ramipril, amlodipin

Clinical case description

Gender

Male

Age

52

eGFR (mL/min)

>60

Liver function impairment

Yes

Child-Pugh

Child-Pugh A

Description

This patient was diagnosed with HIV/HCV in 1997 and received several antiretroviral regimens. He had an acute myocardial infarction, treated with coronary stent and dual antiplatelet treatment (clopidogrel plus aspirin) while on cART with lopinavir/ritonavir plus raltegravir. His regimen was changed to raltegravir plus etravirine. In 2019 he had a second AMI (on aspirin), treated with drug-eluting stent and dual antiplatelet treatment (clopidogrel plus aspirin); his HAART was then changed to TAF/FTC plus raltegravir. No major bleeding nor recurrence of coronary syndrome was observed in the year of follow up.

Clinical Outcome

No unwanted outcome

Editorial Comment

Clopidogrel is a prodrug that is converted to its active metabolites via CYPs 3A4, 2B6, 2C19 and 1A2. Administration of clopidogrel with potent CYP3A4 inhibitors decreases the AUC and Cmax of clopidogrel's active metabolite, leading to insufficient inhibition of platelet aggregation. The same may be applied to etravirine, possibly due to inhibition of CYP2C19. Coadministration of clopidogrel and raltegravir has not been studied, but based on metabolism and clearance a clinically significant interaction is unlikely.

University of Liverpool Recommendation

- No clinically significant interaction expected

For more information click here