clinical cases DDIs

Date of report 26 Apr 2022

Reported case interaction between **Ritonavir** and **Apixaban**

Drugs suspected to be involved in the DDI

Perpetrator
Ritonavir

Daily Dose
100 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Unknown

End date
Ongoing

Victim
Apixaban

Daily Dose
5 (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 (with Ritonavir or Cobicistat)
Emtricitabine/Tenofovir-DF

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

Apixaban 2.5 mg BID, Levetiracetam 1000 mg BID, Lamotrigine 75 mg BID

Clinical case description

Gender

Male

Age

73

eGFR (mL/min)

>60

Liver function impairment

No

Description

A 73-year-old male treated with ritonavir boosted darunavir was initially started on warfarin for the treatment of a newly diagnosed non-valvular atrial fibrillation. Due to the difficulty in normalizing INR while receiving warfarin treatment and due to bleeding episodes that occurred while the patient was receiving this medication, it was decided to switch warfarin to the direct oral anticoagulant apixaban. The patient received apixaban at a dose of 2.5 mg twice daily together with darunavir/ritonavir and did not present adverse effects including bleeding or recurrent thrombus. The present case has been published by Lomakina V et al. J Pharm Pract 2022.

Clinical Outcome

No unwanted outcome

Editorial Comment

The product labels for apixaban do not recommend the concomitant use with strong dual CYP3A4 and P-gp inhibitors, although the US label for apixaban gives the option to use apixaban at a reduced dose (i.e., 2.5 mg) if needed.
This case is consistent with previous observations in six HIV infected patients who were successfully treated a reduced dose of apixaban while on ritonavir boosted regimens (Nisly SA et al. Int J STD AIDS 2019).

University of Liverpool Recommendation

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

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