Date of report 09 Dec 2024

Reported case interaction between **Dolutegravir** and **Norgestrel**

Drugs suspected to be involved in the DDI

Dolutegravir

Daily Dose
50 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Unknown

End date
Unknown

Norgestrel

Daily Dose
0.5 mg/2 mg (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Unknown

End date
Unknown

Complete list of drugs taken by the patient

Antiretroviral treatment

Dolutegravir
Lamivudine

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

Norgestrel/estradiol valerate 0.5 mg/2 mg

Clinical case description

Gender

Female

Age

47

eGFR (mL/min)

>60

Liver function impairment

No

Description

This is a 47-year-old, cisgender woman currently receiving HIV treatment with dolutegravir/lamivudine (500/300 mg) once daily. To manage her perimenopausal symptoms, she was prescribed a fixed-dose hormonal combination of norgestrel/estradiol valerate (0.5 mg/2 mg) to be taken once daily for 21 consecutive days, starting on the fifth day of her menstrual cycle. No side effects occurred following the concomitant administration of norgestrel/estradiol valerate with dolutegravir/lamivudine.

Clinical Outcome

No unwanted outcome

Editorial Comment

Coadministration of a combined oral contraceptive (COC) containing norgestrel/ethinylestradiol has not been studied. Norgestrel is a racemic mixture with levonorgestrel being biologically active. Levonorgestrel is metabolized by CYP3A4 and is glucuronidated to a minor extent, making clinically relevant interactions less likely. Ethinylestradiol is mainly metabolized by hydroxylation. Dolutegravir does not inhibit or induce CYP450 or UGT enzymes and had no clinically relevant effect on the pharmacokinetics of ethinylestradiol when administered with a COC containing ethinylestradiol/ norgestimate.

University of Liverpool Recommendation

- No clinically significant interaction expected

For more information click here