clinical cases DDIs

Date of report 17 Mar 2026

Reported case interaction between **Raltegravir** and **Carbamazepine**

Drugs suspected to be involved in the DDI

Victim
Raltegravir

Daily Dose
1200 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Jan. 7, 2018

End date
Ongoing

Perpetrator
Carbamazepine

Daily Dose
600 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Jan. 5, 2015

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Emtricitabine/Tenofovir-DF
Raltegravir

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

Carbamazepine 200mg mane 400mg PM; Solifenacin 5mg OD; Tamsulosin 400mcg OD; Amlodipine 10mg OD; Lisinopril 5mg OD; Propranolol 80mg m/r OD; Sertraline 50mg OD; Omeprazole 20mg OD PRN; Vit D OTC

Clinical case description

Gender

Male

Age

55

eGFR (mL/min)

>60

Liver function impairment

No

Description

A patient receiving carbamazepine for epilepsy had been concomitantly treated with raltegravir 1200 mg QD for several years. This combination was only identified during a routine HIV follow-up visit, after approximately 6 years of coadministration. Despite the potential for drug–drug interactions, the patient had consistently maintained virological suppression and reported good adherence to all medications.

Clinical Outcome

No unwanted outcome

Editorial Comment

Coadministration of carbamazepine and raltegravir has not been formally studied but may decrease raltegravir concentrations, as raltegravir is primarily metabolized by UGT1A1 and in vitro data suggest that carbamazepine induces this enzyme. Coadministration with once-daily raltegravir (1200 mg once daily) is not recommended, as strong enzyme inducers are expected to have a more pronounced effect on raltegravir Cmin when administered once daily.
This is an interesting case. However, it is unfortunate that no information on raltegravir trough concentrations or UGT1A1 genotype is available. For instance, if the patient were a reduced UGT1A1 metabolizer (e.g., Gilbert's syndrome), the impact of enzyme induction by carbamazepine might be attenuated.
If carbamazepine or another strong UGT1A1 inducer is required in combination with an integrase strand transfer inhibitor (INSTI), dolutegravir 50 mg twice daily is the preferred option.

University of Liverpool Recommendation

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

For more information click here

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