clinical cases DDIs

Date of report 16 Sep 2019

Reported case interaction between **Bictegravir** and **Eslicarbazepine**

Drugs suspected to be involved in the DDI

Victim
Bictegravir

Daily Dose
50 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
June 9, 2019

End date
Ongoing

Perpetrator
Eslicarbazepine

Daily Dose
1200 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Jan. 1, 2015

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Bictegravir/Emtricitabine/Tenofovir-AF

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

levetiracetam, zonisamide and eslicarbazepine (daily dose 1200 mg)

Clinical case description

Gender

Male

Age

41

eGFR (mL/min)

>60

Liver function impairment

No

Description

A 41-year-old patient with HIV infection diagnosed in 2013. Refractory epilepsy on treatment with levetiracetam, zonisamide and eslicarbazepine (daily dose 1200 mg) since 2015. Antiretroviral treatment with raltegravir (400 mg bid), FTC/TDF since 2013. Change to BIC/FTC/TAF in June 2019 to simplify antiretroviral regimen. Despite potential low raltegravir and bictegravir concentrations due to induction of CYP3A4 and UGT1A1 by esclicarbazepine, the patient has maintained undetectable viral load (< 40 copies/mL) since October 2013 (one month after starting antiretroviral therapy).

Clinical Outcome

No unwanted outcome

Editorial Comment

Eslicarbazine is a weak inducer of CYP3A4 and lowers concentrations of levonorgestrel, ethinlyestradiol, rosuvastatin and simvastatin by 40-50%. Although not studied, concentrations of BIC (eliminated via CYP3A4 and glucuronidation) could be moderately reduced as a consequence of this DDI (probably to a greater degree than RAL, eliminated via glucuronidation). Given the refractory nature of this patient's epilepsy, seizure control is a priority, and assuming no viral resistance or tolerability issues, HIV treatment could be shaped around his antiepileptics. With durable virological suppression observed, and in the absence of other DDIs or prior integrase failure it would seem reasonable to continue this combination, under viral load monitoring.

University of Liverpool Recommendation

- These drugs should not be coadministered

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