Date of report 16 May 2019

Reported case interaction between **Raltegravir** and **Melphalan**

Drugs suspected to be involved in the DDI

Perpetrator
Raltegravir

Daily Dose
800 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
March 1, 2018

End date
Ongoing

Victim
Melphalan

Daily Dose
50 (mg)

Dose adjustment performed
No

Administration Route
Intravenous

Start date
April 1, 2019

End date
April 1, 2019

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

melphalan, carmustine, etoposide, cytarabine, acyclovir, ranitidine, pentamidine, levofloxacin, dexamethasone, metoclopramide, furosemide, fosaprepitant, granisetron, methylprednisolone, cetirizine

Clinical case description

Gender

Male

Age

29

eGFR (mL/min)

>60

Liver function impairment

No

Description

29 year-old man with HIV infection diagnosed in 2013. He refused cART until March 2018 when plasmablastic lymphoma (CD30+ stage IV B) was diagnosed. At that moment he started tenofovir alafenamide, emtricitabine and raltegravir. In March 2019, an autologous hematopoietic stem cell transplantation was performed, receiving conditioning treatment with carmustine, etoposide, cytarabine and melphalan (single dose). The regimen was administrated without dose adjustment and the patient did not present any unusual toxicity. Informartion for this cART in combination with carmustine and melphalan is not available.

Clinical Outcome

No unwanted outcome

Editorial Comment

Although the exact mechanism for melphalan metabolism is unknown, it is supposed to undergo spontaneous degradation through more than an enzymatic pathway. Thus, probability for DDI with raltegravir or other ARV would be in this context, low. However, renal toxicity may be increased with other nephrotoxic drugs such as TDF. Carmustine is presumed to be eliminated by the kidney, as it is for melphalan. There is no clinical experience published in co-administration of carmustine with ARV drugs.

University of Liverpool Recommendation

N/A