

Date of report 16 May 2019

# Reported case interaction between Raltegravir and Melphalan

### **Drugs suspected to be involved in the DDI**

Perpetrator	Daily Dose
Raltegravir	800 (mg)
Dose adjustment performed No	Administration Route Oral
Start date	End date
March 1, 2018	Ongoing
Victim	Daily Dose
<b>Melphalan</b>	50 (mg)
Dose adjustment performed No	Administration Route Intravenous
Start date	End date
April 1, 2019	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	Age
Male	29
eGFR (mL/min) >60	Liver function impairment <b>No</b>

#### 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