clinical cases DDIs

Date of report 20 Jul 2021

# Reported case interaction between **Ritonavir** and **Anabolic steroids/ Androgen agonists**

## Drugs suspected to be involved in the DDI

Perpetrator

**Ritonavir**

Daily Dose

100 (mg)

Dose adjustment performed

No

Administration Route

Oral

Start date

Unknown

End date

April 27, 2021

Victim

**Anabolic steroids/ Androgen agonists**

Daily Dose

Unknown

Dose adjustment performed

No

Administration Route

Oral

Start date

End date

April 13, 2021 April 28, 2021

## Complete list of drugs taken by the patient

Antiretroviral treatment

Raltegravir
Tenofovir-DF
Darunavir (with Ritonavir or Cobicistat)

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

Osta Max bodybuilding supplement (Ostarine)

## Clinical case description

Gender

Male

Age

45

eGFR (mL/min)

>60

Liver function impairment

No

Description

Acute drug-induced liver injury (DILI), with ALT rising to >1500, AST to 181 IU/L. Liver function tests normalized after discontinuing Osta Max. Osta Max contains ostarine- a selective androgen receptor modulator, which is a UGT and CYP 3a substrate.

## Clinical Outcome

**Toxicity**

## Drug Interaction Probability Scale (DIPS)

Score

**8 - Probable**

## Editorial Comment

Ostarine is a UGT and CYP 3a substrate. Inhibition of CYPs by RTV may increase the risk of drug-induced liver injury, as it happened in this patient.

## University of Liverpool Recommendation

N/A