clinical cases DDIs

Date of report 20 Oct 2026

Reported case interaction between **Cobicistat** and **Quetiapine**

Drugs suspected to be involved in the DDI

Perpetrator
Cobicistat

Daily Dose
150 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Dec. 18, 2015

End date
Ongoing

Victim
Quetiapine

Daily Dose
50 (mg)

Dose adjustment performed
Yes

Administration Route
Oral

Start date
July 13, 2026

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Darunavir/Cobicistat/Emtricitabine/Tenofovir-AF

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

Quetiapine 50 mg QD; vortioxetine 10 mg OD; zuclopenthixol 200 mg every 14 days (long-acting); trazodone 100 mg OD; pregabalin 25 mg every 8 hours; gemfibrozil 900 mg OD; omeprazole 20 mg OD

Clinical case description

Gender

Male

Age

55

eGFR (mL/min)

>60

Liver function impairment

No

Description

A 55-year-old man was diagnosed with HIV in 1999 and started antiretroviral therapy (ART) with d4T, ddI and ATV, achieving virological suppression. In 2001, his regimen was switched to d4T, ddI and NVP. He discontinued ART in 2005 and restarted treatment in 2009 with TDF/FTC plus DRV/ritonavir, again achieving virological suppression. ART was simplified to DRV/ritonavir monotherapy in 2011 and to DRV/cobicistat monotherapy in 2015. Since 2025, he has been receiving DRV/cobicistat/FTC/TAF. His HIV viral load has remained undetectable since 2009. He has no history of opportunistic infections, and his nadir CD4 count was 342 cells/μL. His other medical history includes cured hepatitis C and dyslipidaemia.

He also has paranoid schizophrenia, which had been stable for years but worsened over the preceding year, requiring multiple hospitalisations for psychotic decompensation. In July 2026, quetiapine was added to his psychiatric treatment. Despite the interaction between quetiapine and cobicistat, DRV/cobicistat/FTC/TAF was continued because of the clinical complexity, with the intention of deferring ART changes until psychiatric stability was achieved. No drug-related toxicity has been observed.
Initiating quetiapine at a low dose may be essential in this setting, with close monitoring if dose escalation is required. Switching to an alternative ART regimen, such as one containing a second-generation INSTI, is another option; however, the treating clinicians preferred to defer this change until psychiatric stability was achieved.

Clinical Outcome

No unwanted outcome

Editorial Comment

Quetiapine is primarily metabolized by CYP3A4, and cobicistat-mediated inhibition can substantially increase its exposure, potentially leading to serious adverse reactions. The European prescribing information for DRV/cobicistat/FTC/TAF contraindicates this combination. US prescribing information allows coadministration under specific dosing and monitoring recommendations: when initiating DRV/cobicistat/FTC/TAF in a patient already receiving quetiapine, the quetiapine dose should be reduced to one sixth; when

initiating quetiapine in a patient already receiving this antiretroviral regimen, the quetiapine prescribing information should guide initial dosing and titration.
In this case, quetiapine was initiated at 50 mg, corresponding to approximately one sixth of the usual dose considered for this patient, to account for the expected increase in exposure with cobicistat. No drug-related toxicity was observed. However, tolerability in this individual does not establish the safety of the combination. An alternative antiretroviral regimen without a pharmacokinetic booster should be considered when feasible. If coadministration is maintained, careful quetiapine dosing and close monitoring for adverse effects are essential, particularly during dose escalation.
The historical use of darunavir/ritonavir and darunavir/cobicistat monotherapy was off-label and is not recommended by current HIV treatment guidelines.

University of Liverpool Recommendation

- These drugs should not be coadministered

For more information click here

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