Resource: ART Drug-Drug Interactions

August 2024

Table 32: Benzodiazepines [a] (also see drug package inserts)		
Class or Drug	Mechanism of Action	Clinical Comments
 NRTIs Dolutegravir (DTG) Bictegravir (BIC) Cabotegravir (CAB) Raltegravir (RAL) Rilpivirine (RPV) Doravirine (DOR) Fostemsavir (FTR) 	No significant interactions reported.	No dose adjustments are necessary.
Elvitegravir (EVG), boosted	Boosting with cobicistat: May increase benzodiazepine concentrations via CYP3A4 inhibition. Midazolam, triazolam: Levels likely to be increased by COBI-boosted EVG	 Alprazolam, clonazepam, diazepam: Consider alternative benzodiazepine (e.g., lorazepam, oxazepam, temazepam); if used, administer lowest effective dose; monitor closely for adverse effects. Midazolam: Oral: Concomitant use is contraindicated. Parenteral: Administer in closely monitored setting. Consider dose reduction, especially if >1 dose is administered. Triazolam: Concomitant use is contraindicated.
Boosted PIs	 Alprazolam: Boosted ARVs may increase alprazolam concentrations via CYP3A4 inhibition. Diazepam: CYP3A4 inhibition may reduce metabolism of diazepam. 	 Consider alternative benzodiazepine (e.g., lorazepam, oxazepam, temazepam). If used, administer lowest effective dose; monitor closely for adverse effects. Diazepam: Monitor for excess sedation.
Efavirenz (EFV)	Alprazolam, diazepam: EFV may reduce alprazolam and diazepam concentrations.	 Alprazolam: Monitor for benzodiazepine withdrawal if patient starts taking EFV. Alprazolam, clonazepam, diazepam: Titrate slowly to achieve clinical effect; monitor for benzodiazepine efficacy.
Etravirine (ETR)	Alprazolam, diazepam: ETR may reduce alprazolam and diazepam concentrations.	Alprazolam: Monitor for benzodiazepine withdrawal.
Lenacapavir (LEN)	Midazolam (oral), triazolam: Moderate inhibition of CYP3A4 and P-gP potentially increases sedative levels.	Midazolam (oral), triazolam: Use with caution; monitor for excess sedation.

Abbreviations: ARV, antiretroviral; COBI, cobicistat; CYP, cytochrome P450; NRTI, nucleoside reverse transcriptase inhibitor; P-gP, P-glycoprotein; PI, protease inhibitor.

a. Lorazepam, oxazepam, and temazepam do not interact clinically with and do not require dose adjustments when coadministered with ARVs.

Note: