Resource: ART Drug-Drug Interactions

August 2024

Table 34: Antipsychotics [a] (also see drug package inserts)		
→ First-generation, second-generation, atypical		
Class or Drug	**Mechanism of Action**	**Clinical Comments**
• NRTIs • Dolutegravir (DTG) • Bictegravir (BIC) • Cabotegravir (CAB) • Raltegravir (RAL) • Doravirine (DOR)	No significant interactions are expected.	No dose adjustments are necessary.
Elvitegravir (EVG), boosted	Several antipsychotic agents are substrates of CYP3A, and inhibitors of this enzyme may increase their concentrations.	• **Quetiapine:** Reduce dose to 1/6 if initiating ART in patients on stabilized quetiapine. • **All other antipsychotics:** Use at lowest dose possible in patients taking boosted ARVs; monitor for adverse effects.
Boosted PIs	• **Haloperidol:** Boosted PIs may moderately increase haloperidol concentrations. • **Aripiprazole, brexpiprazole:** RTV-boosted PIs may increase aripiprazole and brexpiprazole levels. • **Risperidone:** Boosted PIs may moderately increase risperidone levels. • **Clozapine:** Interaction has not been studied but boosted PIs may theoretically increase clozapine concentrations, increasing risk of adverse effects. • **Iloperidone, lumateperone, lurasidone, cariprazine:** Levels are likely to be increased by all PIs, whether boosted or not.	• **Quetiapine:** – Patients on stabilized quetiapine: Reduce dose to 1/6 if initiating ART; monitor for QT prolongation. – Patients stabilized on boosted PI: Use lowest dose and titrate slowly to achieve clinical effect; monitor for QT prolongation. • **Lurasidone:** No data available. Avoid coadministration; consider alternative antipsychotic or ARV agent. • **Haloperidol:** Monitor for QT prolongation. • **Iloperidone:** Decrease iloperidone dose by 50%. • **Aripiprazole:** Initiate at 25% of standard starting dose and titrate slowly to achieve clinical effect; monitor carefully for efficacy and adjust dose as necessary. • **Brexpiprazole:** Administer at 50% of brexpiprazole dose and adjust dose as necessary. • **Lumateperone:** Do not coadminister. • **Pimozide:** Concomitant use is contraindicated. • **Risperidone:** Initiate at low dose and titrate slowly to achieve clinical effect; monitor for adverse effects.

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		• **Ziprasidone:** Monitor for adverse effects, including QTc prolongation. • **Cariprazine:** Consult DHHS guideline for full dosing recommendations and clinical comments [DHHS 2022]. • **Clozapine:** Monitor carefully for clozapine-related adverse effects.
Ritonavir (RTV)	• **Haloperidol:** Boosted PIs may moderately increase haloperidol concentrations. • **Aripiprazole, brexpiprazole:** RTV-boosted PIs may increase aripiprazole and brexpiprazole levels. • **Risperidone:** Boosted PIs may moderately increase risperidone levels. • **Clozapine:** Interaction has not been studied but RTV may theoretically increase clozapine concentrations, increasing risk of adverse effects. • **Iloperidone, lumateperone, lurasidone, cariprazine:** Levels are likely to be increased by all PIs, whether boosted or not.	• **Quetiapine:** – Patients on stabilized quetiapine: If initiating ART, reduce dose to 1/6; monitor for QT prolongation. – Patients stabilized on boosted PI: Use lowest dose and titrate slowly to achieve clinical effect; monitor for QT prolongation. • **Lurasidone:** No data available. Avoid coadministration; consider alternative antipsychotic or ARV agent. • **Haloperidol:** Monitor for QT prolongation. • **Iloperidone:** Decrease iloperidone dose by 50%. • **Aripiprazole:** Initiate at 25% of standard starting dose and titrate slowly to achieve clinical effect; monitor carefully and adjust dose as necessary. • **Brexpiprazole:** Administer at 50% of brexpiprazole dose and adjust dose as necessary. • **Lumateperone:** Do not coadminister. • **Pimozide:** Concomitant use is contraindicated. • **Risperidone:** Initiate at low dose and titrate slowly to achieve clinical effect; monitor for adverse effects. • **Ziprasidone:** Monitor for adverse effects, including QTc prolongation. • **Cariprazine:** Consult DHHS guideline for full dosing recommendations and clinical comments [DHHS 2022]. • **Clozapine:** Monitor carefully for clozapine-related adverse effects.
Atazanavir (ATV), unboosted	**Lurasidone:** ATV decreases lurasidone metabolism via CYP3A.	**Lurasidone:** Decrease lurasidone dose by 50%; monitor for adverse effects, including QT prolongation.
Rilpivirine (RPV)	No significant interactions reported.	No dose adjustments are necessary, but avoid excess doses of either antipsychotic or RPV because excess doses of both drugs may increase risk of QT prolongation.

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Efavirenz (EFV)	• **Quetiapine:** EFV may reduce quetiapine concentrations. • **Aripiprazole, brexpiprazole:** EFV may decrease aripiprazole and brexpiprazole concentrations. • **Risperidone, olanzapine:** EFV may decrease risperidone and olanzapine efficacy.	**Quetiapine, aripiprazole, brexpiprazole, risperidone, olanzapine:** Titrate slowly to achieve clinical effect; monitor for efficacy and adverse effects.
Etravirine (ETR)	• **Aripiprazole, brexpiprazole:** ETR may decrease aripiprazole and brexpiprazole concentrations. • **Risperidone:** ETR may decrease risperidone efficacy.	**Aripiprazole, brexpiprazole, risperidone:** Titrate slowly to achieve clinical effect; monitor for efficacy and adverse effects.
Fostemsavir (FTR)	FTR may prolong QT.	Use caution when combining FTR with other medications known to prolong QT interval.
Lenacapavir (LEN)	**Pimozide:** Moderate inhibition of P-gP potentially increases pimozide levels.	**Pimozide:** Do not coadminister.

Abbreviations: ART, antiretroviral therapy; ARV, antiretroviral; CYP, cytochrome P450; DHHS, U.S. Department of Health and Human Services; NRTI, nucleoside reverse transcriptase inhibitor; P-gP, P-glycoprotein; PI, protease inhibitor.

Note:

a. Coadministration of antipsychotics and ARVs may result in QT prolongation; monitor closely.

Reference

DHHS. Guidelines for the use of antiretroviral agents in adults and adolescents with HIV: drug-drug interactions: Table 24a. Drug interactions between protease inhibitors and other drugs. 2022 Sep 1. https://clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-arv/drug-interactions-between-protease?view=full [accessed 2022 Jun 30]