Actual/Potential Drug Interactions Between Directly Acting Antivirals (DAAs) and Antipsychotics

Drug (route of metabolism)[1]	**Known or Potential Interactions with DAAs**	**Comments**
Aripiprazole (CYP3A4, 2D6)	Potential for ↑ aripiprazole concentrations	Use combination with caution, and monitor for aripiprazole-related toxicity (sedation, sinus tachycardia, nausea/vomiting, or dystonic reactions). Consider starting with a decreased aripiprazole dose or select an alternate agent.
Asenapine (UGT, CYP1A2>> CYP3A4, 2D6) Weak inhibitor of CYP2D6. Asenapine does not cause induction of CYP1A2 or CYP3A4	No interaction expected based on known pharmacologic characteristics.	Monitor and titrate dose according to clinical response.
Clozapine (CYP1A2> 3A4, P-gp)	Potential for ↑ clozapine concentrations	Clozapine has a narrow therapeutic index. Use combination with caution, and monitor for clozapine-related toxicity (bone marrow suppression, generalized seizures, severe sedation, confusion and delirium). Consider starting with a decreased clozapine dose or select an alternate agent. When available, clozapine therapeutic drug monitoring is recommended.[2, 3]
Olanzapine (CYP1A2, UGT, P-gp>2D6)	Potential for ↑ olanzapine concentrations.[4]	Use combination with caution, and monitor for possible olanzapine-related toxicity. Monitor and titrate dose according to clinical response.
Paliperidone Primarily renally secreted (59%); minor CYP dependant pathway (CYP3A4, P-gp>2D6), but may not be clinically relevant. Substrate and inhibitor of P-gp[4]	Potential for ↑ paliperidone concentrations.[4]	DAAs inhibit both CYP3A4 and P-gp, and clinically significant interaction, although unlikely, cannot be ruled out. Use combination with caution, and monitor for possible paliperidone-related toxicity [4] .
Quetiapine (CYP3A4>2D6, P-gp)	Potential for ↑ quetiapine concentrations.[4]	Use combination with caution, and monitor for quetiapine-related toxicity (excessive sedation). Consider starting with a decreased quetiapine dose or select an alternate agent[5].
Risperidone (CYP2D6, P-gp>3A4)	Potential for ↑ risperidone concentrations.[4]	Unlike its active metabolite paliperidone, risperidone is primarily metabolized by

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		CYP2D6. However, the elimination of paliperidone may be impaired. Use combination with caution, and monitor for possible risperidone-related toxicity.
Ziprasidone (CYP3A4>1A2) Minor CYP dependant pathway (33%).[3]	Potential for ↑ ziprasidone concentrations.	Although clinically significant interaction unlikely, use combination with caution, and monitor for possible ziprasidone-related toxicity (QTc).[6]

Legend: CYP = cytochrome P450, P-gp = p-glycoprotein, UGT = Uridine 5'-diphospho-glucuronosyltransferases

References:

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