Drug-Drug Interaction Guide: From HIV Prevention to Treatment





Table 49: ADHD Medications and Lithium (also see prescribing information)		
Class or Drug	Mechanism of Action	Clinical Comments
 NRTIs Bictegravir (BIC) Cabotegravir (CAB) Dolutegravir (DTG) Raltegravir (RAL) Fostemsavir (FTR) Maraviroc (MVC) 	No clinically significant interactions expected.	No dose adjustments are necessary.
Boosted PIs	 Methylphenidate, amphetamine, dextroamphetamine: CYP2D6 inhibition may increase drug concentrations with concurrent RTV use. Modafinil: CYP3A4 induction may reduce PI levels. Lithium: No significant interactions are expected. 	 Methylphenidate, amphetamine, dextroamphetamine may increase risk of serotonin syndrome when used concurrently with RTV and other serotonergic medications; interaction may be less significant with COBI. Consider using lower initial dose and monitor for serotonin syndrome. Modafinil: Avoid concurrent use due to potential loss of virologic response. Lithium: No dose adjustments are necessary.
Boosted Elvitegravir (EVG)	 Methylphenidate, amphetamine, dextroamphetamine: CYP2D6 inhibition may increase drug concentrations with concurrent RTV use. Less effect found with COBI. Modafinil: CYP3A4 induction may reduce EVG and COBI levels. Lithium: No significant interactions are expected. 	 Methylphenidate, amphetamine, dextroamphetamine may increase risk of serotonin syndrome when used concurrently with RTV and other serotonergic medications; interaction may be less significant with COBI. Consider using lower initial dose and monitor for serotonin syndrome. Modafinil: Avoid concurrent use due to potential loss of virologic response. Lithium: No dose adjustments are necessary.
 Doravirine (DOR) Rilpivirine (RPV) Efavirenz (EFV) Etravirine (ETR) 	Modafinil: CYP3A4 induction may reduce NNRTI levels. Lithium: No significant interactions are expected.	 Modafinil: Avoid concurrent use due to potential loss of virologic response. Lithium: No dose adjustments are necessary.

Abbreviations: ADHD, attention-deficit/hyperactivity disorder; COBI, cobicistat; CYP, cytochrome P450; NNRTI, non-nucleoside reverse transcriptase inhibitor; RTV, ritonavir.