



CLINICAL GUIDELINES PROGRAM

NEW YORK STATE DEPARTMENT OF HEALTH AIDS INSTITUTE | HIV · HCV · SUBSTANCE USE · LGBT HEALTH

Resource: ART Drug-Drug Interactions

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Table 49: ADHD Medications and Lithium (also see drug package inserts)		
Class or Drug	Mechanism of Action	Clinical Comments
<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> Doravirine (DOR) Rilpivirine (RPV) Efavirenz (EFV) Etravirine (ETR) 	<ul style="list-style-type: none"> Modafinil: CYP3A4 induction may reduce NNRTI levels. Lithium: No significant interactions are expected. 	<ul style="list-style-type: none"> Modafinil: Avoid concurrent use due to potential loss of virologic response. Lithium: No dose adjustments are necessary.
Lenacapavir (LEN)	Modafinil: CYP3A4 induction may reduce LEN levels.	Modafinil: Consider alternative ADHD medications.
Abbreviations: ADHD, attention-deficit/hyperactivity disorder; COBI, cobicistat; CYP, cytochrome P450; NNRTI, non-nucleoside reverse transcriptase inhibitor; NRTI, nucleoside reverse transcriptase inhibitor; PI, protease inhibitor; RTV, ritonavir.		