

Table 43: Methadone, Buprenorphine (BUP), Naloxone (NLX), and Naltrexone [a] (also see prescribing information)		
Class or Drug	Mechanism of Action	Clinical Comments
<ul style="list-style-type: none"> • NRTIs • Dolutegravir (DTG) • Bictegravir (BIC) • Cabotegravir (CAB) • Raltegravir (RAL) • Elvitegravir (EVG), boosted • Doravirine (DOR) • Fostemsavir (FTR) 	<p>BUP, methadone: No significant interactions are expected.</p>	<p>No dose adjustments are necessary.</p>
Atazanavir (ATV), unboosted	<ul style="list-style-type: none"> • BUP, norbuprenorphine: ATV greatly increases BUP and norbuprenorphine concentrations; may decrease ATV concentrations. • Methadone: No significant interactions are expected. 	<ul style="list-style-type: none"> • BUP: Coadministration is not recommended; RTV boosting may decrease effect. • Methadone: No dose adjustments are required; exercise caution because both drugs may increase QT prolongation.
Ritonavir (RTV)-boosted PIs	<p>BUP: RTV-boosted PIs may greatly increase BUP concentrations, but clinical significance of this is unknown because BUP dosing is based on Clinical Opiate Withdrawal Scale.</p>	<p>BUP: When administering with RTV-boosted PIs, monitor for signs of increased opioid toxicity, including sedation, impaired cognition, and respiratory distress.</p>
Cobicistat (COBI)-boosted PIs	<ul style="list-style-type: none"> • BUP/NLX: COBI-boosted PIs may increase BUP concentrations while decreasing NLX concentrations when given with sublingual BUP/NLX. • Methadone: COBI does not appear to have any significant effect on methadone concentration. 	<ul style="list-style-type: none"> • BUP, BUP/NLX: When administering with COBI-boosted PIs, titrate carefully to achieve clinical effect. • Methadone: Based on efficacy and safety, initiate at lowest possible dose and titrate to achieve clinical effect; monitor for signs and symptoms of opiate withdrawal.
RTV-boosted darunavir (DRV), taken twice per day	<ul style="list-style-type: none"> • BUP, BUP/NLX: Combination has no effect on BUP/NLX concentrations. • Methadone: RTV-boosted DRV taken twice per day may reduce methadone concentrations. 	<p>Methadone: Monitor for signs of opiate withdrawal and increase methadone dose if necessary.</p>
Rilpivirine (RPV)	<ul style="list-style-type: none"> • BUP: No significant interactions are expected. • Methadone: RPV mildly reduces methadone concentrations. 	<ul style="list-style-type: none"> • Methadone: Monitor for signs of methadone withdrawal; increase dose as necessary. • Methadone, BUP: Use cautiously with RPV; supratherapeutic doses of RPV have been known to cause increase in QT prolongation.
Efavirenz (EFV)	<ul style="list-style-type: none"> • BUP: When given with BUP (monotherapy), EFV significantly reduces BUP concentrations, but no patients developed opioid withdrawal. • Methadone: EFV induces methadone metabolism via CYP3A4 and reduces methadone concentrations. 	<ul style="list-style-type: none"> • BUP: When given with BUP, dose adjustments are unlikely to be required, but monitor for withdrawal symptoms. If withdrawal symptoms occur, increase BUP dose accordingly. • Methadone: Titrate to achieve clinical effect; monitor for signs and symptoms of opioid withdrawal.

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Etravirine (ETR)	<ul style="list-style-type: none"> • BUP: No significant interactions are expected. • Methadone: ETR may slightly increase methadone concentrations. 	<ul style="list-style-type: none"> • BUP, methadone: Titrate opioid or antagonist as required to achieve clinical effect; monitor for signs of withdrawal or opioid toxicity. • Methadone: Monitor for signs of methadone toxicity and reduce dose if necessary.
Lenacapavir (LEN)	Methadone, BUP: Moderate inhibition of CYP3A4 and P-gP potentially increases methadone or BUP levels.	<ul style="list-style-type: none"> • Patients initiating MAT while already on LEN: Initiate MAT at lowest initial or maintenance dose. • Patients initiating LEN while already on MAT: MAT dose adjustments may be needed. • Monitor for excess sedation and/or respiratory depression.
<p>Abbreviations: ARV, antiretroviral; CYP, cytochrome P450; MAT, medication-assisted therapy; NRTI, nucleoside reverse transcriptase inhibitor; P-gP, P-glycoprotein; PI, protease inhibitor.</p> <p>Note:</p> <p>a. No significant interactions are expected between ARVs, naloxone, and naltrexone.</p>		