

RECREATIONAL DRUGS:

AMYL NITRATE, AMPHETAMINES, CANNABIS, COCAINE/CRACK, GHB, HALLUCINOGENS, KETAMINE, HEROIN, NALOXONE

	INSTIs		NNRTIs		PIs
	<ul style="list-style-type: none"> • BICTEGRAVIR (<i>Biktarvy</i>) • DOLUTEGRAVIR (<i>Tivicay, Triumeq, Juluca</i>) • RALTEGRAVIR (<i>Isentress</i>) 	<ul style="list-style-type: none"> • ELVITEGRAVIR/COBICISTAT (<i>Stribild, Genvoya</i>) 	<ul style="list-style-type: none"> • DORAVIRINE (<i>Pifeltro, Delstrigo</i>) • RILPIVIRINE (<i>Edurant, Complera, Odefsey, Juluca</i>) 	<ul style="list-style-type: none"> • EFAVIRENZ (<i>Sustiva, Atripla</i>) • ETRAVIRINE (<i>Intelence</i>) • NEVIRAPINE (<i>Viramune</i>) 	Boosted with ritonavir (Norvir) or cobicistat <ul style="list-style-type: none"> • ATAZANAVIR (<i>Reyataz, Evotaz</i>) • DARUNAVIR (<i>Prezista, Prezcobix, Symtuza</i>) • LOPINAVIR (<i>Kaletra</i>)

AMYL NITRATE

• Poppers, ames					
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AMPHETAMINES

• MDMA/ecstasy, crystal, molly		Potential for ↑ recreational drug			Potential for ↑ recreational drug
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CANNABIS (THC), CANNABIDIOL (CBD) *Note that oral cannabis oils or dried cannabis may include THC/CBD in various ratios

• Marijuana, weed		Potential for ↑ THC & CBD		Potential for ↑ THC and ↓ CBD	Potential for ↑ THC Potential for ↑/↓ CBD
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COCAINE

• crack, base		Potential for ↑ recreational drug	Potential QT prolongation (rilpivirine)	Potential for ↑ levels of hepatotoxic metabolite	Potential for ↑ recreational drug
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GAMMA-HYDROXYBUTYRATE

• GHB, date rape drug, Geeb, liquid X		Potential for ↑ recreational drug			Potential for ↑ recreational drug
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HALLUCINOGENS

<ul style="list-style-type: none"> • LSD, acid • PCP, angel dust 		Potential for ↑ recreational drug		Potential for ↓ recreational drug	Potential for ↑ recreational drug
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KETAMINE

<ul style="list-style-type: none"> • Special K, vitamin K, KitKat 		Potential for ↑ recreational drug		Potential for ↓ recreational drug	Potential for ↑ recreational drug
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HEROIN

<ul style="list-style-type: none"> • Smack, H, tar, junk 		Potential for ↑ recreational drug		Potential for ↓ morphine (converted from heroin) with efavirenz	Potential for ↑ recreational drug
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NALOXONE

<ul style="list-style-type: none"> • Narcan 					Ritonavir-boosted PIs: potential for ↓ naloxone
					Cobicistat-boosted PIs

Legend:



No dose adjustment required.



Use combination with caution. Adjustment in drug dose or frequency or additional/more frequent monitoring may be required. May wish to consult with a pharmacist knowledgeable in HIV drug interactions.



Contraindicated/avoid combination.

Mechanism of Drug Interactions, Management and Monitoring

Class	Mechanism of Interaction	Main Interacting ARVs	Management	Monitoring
Cannabidiol (CBD)	Substrate of CYP3A4, 2C19; inhibits CYP2C19	Cobicistat-boosted elvitegravir and PIs may increase CBD. Ritonavir-boosted PIs may increase or decrease CBD. Enzyme inducing NNRTIs (efavirenz, etravirine, nevirapine) may decrease CBD levels.	Warn patient of potential for increased or decreased CBD levels; CBD dose may need to be titrated.	Toxicity: CNS effects (sedation, confusion, impairment), heart rate, blood pressure.
Cannabis (THC)	Substrate of CYP2C9>3A4	Protease Inhibitors (PI) (with ritonavir or cobicistat), elvitegravir/cobicistat, etravirine and efavirenz may increase THC levels.	Warn patient of potential for increased THC levels; THC dose may need to be titrated.	Toxicity: as above.
Stimulants: Cocaine, amphetamines GHB	Inhibition of CYP3A4 (cocaine) and CYP 2D6 (amphetamines, GHB?) leading to increased levels of stimulant	Protease Inhibitors (PI) (with ritonavir or cobicistat) & Elvitegravir/cobicistat	Warn patient of potential for unpredictable increased levels of the recreational substance and provide harm reduction advice	Toxicity: Dehydration, dry mouth, teeth grinding, tense jaw, tachycardia. GHB: seizures, bradycardia, loss or consciousness
Hallucinogens: LSD, PCP (angel dust)	Mechanism unclear but potential for inhibition or induction of drug metabolism	PIs & elvitegravir/cobicistat may increase hallucinogen concentrations Enzyme inducing NNRTIs (efavirenz, etravirine, nevirapine) may decrease levels	Warn patient of unpredictable increased levels of hallucinogen and provide harm reduction advice	Toxicity: Hallucinations, psychosis, flashbacks, seizures, hypertension.
Ketamine	Mechanism unclear but potential for inhibition or induction of drug metabolism	PIs & elvitegravir/cobicistat may increase ketamine Enzyme inducing NNRTIs (efavirenz, etravirine, nevirapine) may decrease levels	Warn patient of unpredictable increased levels and provide harm reduction advice	Toxicity: Nausea, vomiting, SOB, loss of coordination, cognitive decline

Class	Mechanism of Interaction	Main Interacting ARVs	Management	Monitoring
Heroin	Converted to morphine, which is glucuronidated (UGT2B7>UGT1A1) and a substrate of Pgp	PIs & elvitegravir/cobicistat may increase morphine Efavirenz may induce UGT and decrease morphine	Warn patient of unpredictable increased levels and provide harm reduction advice	Toxicity: decreased level of consciousness, miosis, respiratory depression. Acute symptoms may be reversed with naloxone.
Naloxone	Substrate of UGT2B7	Ritonavir-boosted PIs may induce UGT and decrease naloxone	Potential for decreased duration of naloxone efficacy	Monitor for duration of naloxone efficacy.