

Analgesics

Charts revised November 2024. Full information available at www.hiv-druginteractions.org

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	ATV/c	ATV/r	DRV/c	DRV/r	LPV/r	DOR	EFV	ETV	NVP	RPV oral	FTR	LEN	MVC	BIC/F/TAF	CAB oral	CAB/RPV	DTG	EVG/c/F/TAF	EVG/c/F/TDF	RAL	FTC/TAF	FTC/TDF
Non-opioid Analgesics																						
Aspirin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Celecoxib	↔	↔	↔	↔	↔	↔	↑b	↑b	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Diclofenac	↔	↔	↔	↔	↔	↔	↑b	↑b	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ibuprofen	↔	↔	↔	↔	↔	↔	↑b	↑b	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ketorolac	↔	↔	↔	↔	↔	↔	↑b	↑b	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Mefenamic acid	↔	↔	↔	↔	↔	↔	↑b	↑b	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Meloxicam	↑	↑	↑	↑	↑	↔	↑b	↑b	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Naproxen	↔	↔	↔	↔	↔	↔	↑b	↑b	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nimesulide	↔	↔	↔	↔	↔	↔	↑b	↑b	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Paracetamol	↔	↓3%	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Piroxicam	↔	↔	↔	↔	↔	↔	↑b	↑b	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Opioid Analgesics																						
Alfentanil	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Buprenorphine	↑	↑67%	↑	↓11% ^c	↑~2%	↔	↓50%	↓25%	↓9%	↔	↑30%	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Codeine	↑d	↑d	↑d	↑d	↑d	↔	↓	↓	↓	↔	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dextropropoxyphene	↑	↑	↑	↑	↑	↔	↓e	↓e	↓e	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Diamorphine	↔f	↓f,g	↔f	↓f,g	↓f,g	↔	↑	↔f	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dihydrocodeine	↑d	↑d	↑d	↑d	↑d	↔	↑d	↓	↓	↔	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fentanyl	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Hydrocodone	↓↑h	↓↑h	↓↑h	↓↑h	↓↑h	↔	↓↑i	↓↑i	↓↑i	↔	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Hydromorphone	↔	↓	↔	↓	↓	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Methadone	↔♥	↔♥	↑	↓16%	↓53%♥	↓5%	↓26%	↓52%♥	↑6%	↓~50%	↓16%♥	↑14%♥	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔
Morphine	↓f	↓f	↓f	↓f	↓f	↔	↑	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Oxycodone	↑	↑	↑	↑	↑160%	↔	↓	↓	↓	↔	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pethidine	↑	↓	↑	↓	↓	↔	↓j	↓j	↓j	↔	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Sufentanil	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tapentadol	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tramadol	↑d	↑d	↑d	↑d	↑d	↔	↓k	↔	↓k	↔	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Interactions with CAB/RPV long acting injections
Pharmacokinetic interactions shown are mostly with RPV. QT interactions shown are with RPV.

Interactions with Lenacapavir
Residual LEN may affect exposure of sensitive CYP3A4 substrates initiated within 9 months after stopping subcutaneous LEN.

Interactions with Ibalizumab
None

Interactions with Abacavir (ABC), Lamivudine (3TC), Tenofovir-DF (TDF) or Zidovudine (ZDV)
ABC: Decreased methadone exposure
3TC: No clinically relevant interactions expected.
TDF: Potential decreased renal elimination of TDF resulting in increased TDF exposure with diclofenac (a).
TDF: Potential risk of nephrotoxicity with NSAIDs (a).
ZDV: Potential additive haematological toxicity with ibuprofen and naproxen.
ZDV: Moderately increased ZDV exposure with methadone; monitor for toxicity.

Colour Legend

- Green: No clinically significant interaction expected.
- Red: These drugs should not be coadministered.
- Orange: Potential interaction which may require a dose adjustment or close monitoring.
- Yellow: Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.

Text Legend

- ↑ Potential increased exposure of the analgesic
- ↓ Potential decreased exposure of the analgesic
- ↔ No significant effect
- ♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered with atazanavir or lopinavir. Rilpivirine and fostemsavir were shown to prolong the QT interval at supratherapeutic doses. Caution is advised with rilpivirine. ECG monitoring is advised with fostemsavir and drugs with a known QT prolongation risk.
- ♡ Efavirenz has a potential risk of QT prolongation relating specifically to homozygous carriers of CYP2B6*6/*6. Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.
- ↑ Potential increased exposure of HIV drug
- ↓ Potential decreased exposure of HIV drug

- Notes**
- a Potential risk of nephrotoxicity which is increased if NSAID is used for a long duration, if the patient has a pre-existing renal dysfunction, has a low body weight or receives other drugs that may increase TDF exposure. Concurrent use of NSAIDs with TDF warrants monitoring of renal function.
 - b Clinical significance unknown. Use the lowest recommended dose particularly in patients with risk factors for cardiovascular disease, those patients at risk of developing gastrointestinal complications, patients with hepatic or renal impairment, and in elderly patients.
 - c Concentrations of norbuprenorphine increased.
 - d Potential decrease of the analgesic effect due to the reduced conversion to the active metabolite.
 - e Concentrations of parent drug decreased and concentrations of the cardiotoxic metabolite increased.
 - f Inhibition of P-gp by cobicistat, ritonavir or efavirenz could potentiate the effect of the opiate in the CNS.
 - g Concentrations of parent drug decreased but concentrations of active metabolite increased.
 - h Concentrations of hydrocodone increased, but concentrations of active metabolites (norhydrocodone and hydromorphone) decreased. The clinical significance of this is unclear.
 - i Concentrations of hydrocodone decreased, but concentrations norhydrocodone increased. The clinical significance of this is unclear.
 - j Concentrations of parent drug decreased and concentrations of the neurotoxic metabolite increased.
 - k Concentrations of parent drug decreased but no change in concentrations of the more active metabolite.