

# Anti-Hypertensive Treatment Selector

Charts revised November 2017. Full information available at [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)

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		ATV/r	DRV/r	LPV/r	EFV	ETV	NVP	RPV	MVC	DTG	RAL	ABC	FTC	3TC	TDF	ZDV	E/C/F/TAF	E/C/F/TDF
ACE Inhibitors	Cilazapril	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Enalapril	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Lisinopril	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Perindopril	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Quinapril	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Ramipril	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Trandolapril	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Angiotensin Antagonists	Candesartan	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Irbesartan	↓	↓	↓	↑	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↓	↓	
	Losartan	↓ <sup>a</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↑ <sup>b</sup>	↑ <sup>b</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↓ <sup>a</sup>	↓ <sup>a</sup>	
	Olmesartan	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Telmisartan	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Valsartan	↑	↑	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
B Blockers	Atenolol	↔ <sup>d</sup>	↔	↔ <sup>d</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Bisoprolol	↑ <sup>d</sup>	↑	↑ <sup>d</sup>	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	
	Carvedilol	↑ <sup>d</sup>	↑↓	↑↓ <sup>d</sup>	↑↓	↑↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	
	Metoprolol	↑ <sup>d</sup>	↑	↑ <sup>d</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	
	Propranolol	↑ <sup>d</sup>	↑	↑ <sup>d</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	
Calcium Channel Agonists	Amlodipine	↑ <sup>c</sup>	↑	↑ <sup>d</sup>	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	
	Diltiazem	↑ <sup>c</sup>	↑	↑ <sup>d</sup>	↓69%	↓↑	↓	↑↑	↑↑	↑↑	↔	↔	↔	↔	↔	↑	↑↑	
	Felodipine	↑ <sup>c</sup>	↑	↑ <sup>d</sup>	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑↑	
	Lacidipine	↑ <sup>c</sup>	↑	↑ <sup>d</sup>	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	
	Lercanidipine	↑	↑	↑	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	
	Nicardipine	↑ <sup>c</sup>	↑	↑ <sup>d</sup>	↓	↓↑	↓	↑↑	↑↑	↑↑	↔	↔	↔	↔	↔	↑	↑	
	Nifedipine	↑ <sup>c</sup>	↑	↑ <sup>d</sup>	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	
	Nisoldipine	↑ <sup>c</sup>	↑	↑ <sup>d</sup>	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	
Diuretics	Verapamil	↑ <sup>c</sup>	↑	↑ <sup>d</sup>	↓	↓↑	↓	↑↑	↑↑	↑↑	↔	↔	↔	↔	↑↑	↔	↑	↑↑
	Amiloride	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Bendroflumethiazide	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
	Chlortalidone	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
	Furosemide	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑↑	↔	↔	
	Indapamide	↑	↑	↑	↓	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↑	↑	
Others	Torasemide	↓	↓	↓	↑	↑	↑	↔	↔	↔	↔	↔	↔	↔	↔	↓	↓	
	Doxazosin	↑	↑	↑	↓	↓	↓	↓	↓	↔	↔	↔	↔	↔	↔	↑	↑	
	Spironolactone	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	

### Colour Legend

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

### Text Legend

- ↑ Potential increased exposure of the antihypertensive
- ↓ Potential decreased exposure of the antihypertensive
- ↔ No significant effect

Numbers refer to increased or decreased AUC of the antihypertensive as observed in drug-drug interaction studies.

- a Concentrations of parent drug decreased but concentrations of active metabolite increased.
- b Concentrations of parent drug increased but concentrations of active metabolite decreased.
- c ECG monitoring recommended
- d Risk of PR interval prolongation

Note: although some drug interactions are predicted to potentially require a dosage adjustment based on the drug's metabolic pathway, clinical experience with a particular antihypertensive and HIV drug may indicate that dosage adjustments are not an a priori requirement.

Abbreviations    ATV atazanavir    DRV darunavir    LPV lopinavir    /r ritonavir    EFV efavirenz    ETV etravirine    NVP nevirapine    RPV rilpivirine    MVC maraviroc    DTG dolutegravir    RAL raltegravir  
 ABC abacavir    FTC emtricitabine    3TC lamivudine    TDF tenofovir disoproxil fumarate    ZDV zidovudine    E/C/F Elvitegravir/Cobicistat/FTC    TAF tenofovir alafenamide

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