

# Anti-tuberculosis Treatment Selector

Charts revised October 2021. Full information available at [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)

For personal use only. Not for distribution. For personal use only. Not for distribution. For personal use only. Not for distribution. For personal use only. Not for distribution.

	ATV/c	ATV/r	DRV/c	DRV/r	LPV/r	DOR	EFV	ETV	NVP	RPV oral	FTR	MVC	BIC/F/TAF	CAB oral	CAB/RPV	DTG	EVG/c/F/TAF	EVG/c/F/TDF	RAL	FTC/TAF	FTC/TDF	TDF	
<b>First line and Second line Drugs</b>																							
Amikacin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Bedaquiline	↑♥	↑♥	↑	↑	↑62%♥	↔	↓18%	↓	↑3%	↔♥	↔♥	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Capreomycin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑↑ <sup>b</sup>	↔	↔	↔	↑ <sup>c</sup>	↑↑ <sup>b</sup>	↑↑ <sup>a,d</sup>	↔	↑↑ <sup>e</sup>	↑↑ <sup>a</sup>	↑↑ <sup>a</sup>
Clofazimine	↔♥	↔♥	↔	↔	↔♥	↑	↔	↔	↔	↑♥	↑♥	↑	↑ <sup>f</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Cycloserine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Delamanid	g	g	g	g	g	↔	↔ <sup>h</sup>	↔	↔	↔♥	↔♥	↔	↔	↔	↔	↔	↔	g	g	↔	↔	↔	
Ethambutol	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Ethionamide	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Isoniazid	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Kanamycin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Moxifloxacin	↑♥	↓♥	↔	↓	↓♥	↔	↓	↓	↔	↔♥	↔♥	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Para-aminosalicylic acid	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑↑ <sup>i</sup>	↔	↔	↔	↑	↑↑ <sup>i</sup>	↑↑ <sup>j</sup>	↔	↑↑ <sup>i</sup>	↑↑ <sup>j</sup>	↑↑ <sup>j</sup>
Pyrazinamide	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Rifabutin	↑↓	↑	↑↓	↑50%	↑	↓50% <sup>k</sup>	↓38%	↓37%	↑17%	↓42% <sup>l</sup>	↓30%	m	↓38% <sup>n</sup>	↔	↓	↔	↑↓	↑↓	↑19%	↓ <sup>o</sup>	↔	↔	
Rifampicin	↓	↓72%	↓	↓57%	↓75%	↓82%	↓26%	↓	↓58%	↓80%	↓82%	↓ <sup>p</sup>	↓75% <sup>n</sup>	↓59%	↓	↓	↓54% <sup>q</sup>	↓	↓	↓40%	↓ <sup>o</sup>	↔	↓12%
Rifapentine	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓ <sup>p</sup>	↓	↓	↓	↓	↓ <sup>r</sup>	↓	↓	↓	↓ <sup>o</sup>	↔	↔
Streptomycin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	

**Interactions with CAB/RPV long acting injections**

Pharmacokinetic interactions shown are mostly with RPV. QT interactions shown are with RPV.

**Interactions with Ibalizumab**

None

**Interactions with Abacavir (ABC), Lamivudine (3TC) or Zidovudine (ZDV)**

ABC: Potentially moderately increased abacavir exposure with rifampicin but no a priori dose adjustment required.  
 3TC: Exposure of lamivudine and/or capreomycin may increase when coadministered. Monitor renal function as appropriate.  
 3TC: Exposure of lamivudine and/or para-aminosalicylic acid may increase when coadministered.  
 ZDV: Rifampicin decreased ZDV AUC by 47%. Coadministration is not recommended in ZDV's European label, but the US label says routine dose modification is not warranted.

**Colour Legend**

- No clinically significant interaction expected.
- These drugs should not be coadministered.
- Potential interaction which may require a dose 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 anti-tuberculosis drug
- ↓ Potential decreased exposure of the anti-tuberculosis drug
- ↔ 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.
- 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 Coadministration with tenofovir-DF should be avoided with concurrent or recent use of a nephrotoxic agent. If concomitant use of tenofovir-DF and nephrotoxic agents is unavoidable, renal function should be monitored closely.
- b Coadministration may increase concentrations of capreomycin and emtricitabine. Renal function should be monitored as clinically appropriate.
- c Aminoglycosides are nephrotoxic (risk is dose and treatment duration related). Renal function should be monitored as clinically appropriate and the dosage of the antiretroviral adjusted accordingly.
- d Coadministration may increase concentrations of capreomycin, emtricitabine and tenofovir. Renal function should be monitored as clinically appropriate.
- e Coadministration may increase concentrations of capreomycin and emtricitabine. Renal function should be monitored as clinically appropriate.
- f Coadministration may increase bictegravir concentrations, but this is unlikely to be clinically significant.
- g Coadministration is expected to increase concentrations of DM-6705, a delamanid metabolite which is associated with QT prolongation. Frequent ECG monitoring is recommended.
- h A higher rate of neuropsychiatric adverse effects (e.g., euphoric mood and abnormal dreams) was observed with delamanid plus efavirenz compared to either drug alone.
- i Coadministration may increase concentrations of para-aminosalicylic acid and emtricitabine.
- j Coadministration may increase concentrations of para-aminosalicylic acid, emtricitabine and tenofovir. However, a clinical study performed with tenofovir and the calcium salt of para-aminosalicylic acid showed an unexpected substantial reduction in tenofovir exposure. The mechanism is unclear but could relate to reduced absorption in presence of the calcium salt of para-aminosalicylic acid. Until further data are available on the mechanism on the interaction, caution is needed when coadministering tenofovir with the calcium salt of para-aminosalicylic acid.
- k The product label for doravirine recommends to increase doravirine dosage to 100 mg twice daily when co-administered with rifabutin. Doravirine should be kept at 100 mg twice daily for at least another 2 weeks following cessation of rifabutin due to the persisting inducing effect upon discontinuation of a moderate/strong inducer.
- l The rilpivirine dose should be increased to 50 mg once daily during coadministration (and decreased to 25 mg once daily when rifabutin is stopped). Note, it is recommended to maintain rilpivirine 50 mg once daily for at least another 2 weeks following cessation of rifabutin due to the persisting inducing effect upon discontinuation of a moderate/strong inducer.
- m No dose adjustment for MVC in absence of PI. With PI (except TPV/r, FPV/r), give MVC 150 mg twice daily.
- n Numbers refer to decrease in bictegravir AUC; decreases in the absorption of tenofovir alafenamide and thereby its plasma concentrations are also expected.
- o Coadministration is expected to decrease the exposure of tenofovir alafenamide; no effect on emtricitabine is expected.
- p Give MVC 600 mg twice daily
- q A dose adjustment of dolutegravir to 50 mg twice daily is recommended in treatment-naïve or INSTI-naïve patients. Alternatives to rifampicin should be used where possible for INSTI-experienced patients with certain INSTI-associated resistance substitutions or clinically suspected INSTI resistance.
- r Based on dolutegravir interactions studies with rifabutin and rifampicin, consider administering dolutegravir at 50 mg twice daily in the presence of rifapentine.