Anti-malarial Treatment Selector

Charts revised March 2021. Full information available at www.hiv-druginteractions.org

	ATV/c	ATV/r	DRV/c	DRV/r	LPV/r	DOR	EFV	ETV	NVP	RPV	MVC	BIC/ F/TAF	DTG	EVG/c/ F/TAF	EVG/c/ F/TDF	RAL	ABC	FTC or 3TC	F/TAF	TDF	ZDV
First line and Second line Drugs																					
Amodiaquine	↑	↑	↔	↑	↑	↔	↑ [a]	↓?	↓29% [a]	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ [b]
Artemisinin	↑	↑	↑	↑	↑	⇓	↓	↓⇓	↓⇓	⇓	⇓	⇓ [c]	↔	↑	↑	↔	↔	↔	↔	↔	↔
Atovaquone	↔	↓10%	↔	↓ [d]	↓74% [d]	↔	↓75% [d]	↓ [d] ⇑55%	↓ [d]	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ [b]
Chloroquine	↔ [e] ♥	↔ [e] ♥	↔ [e]	↔ [e]	↔ [e] ♥	↔	↔ [f]	↔ [g]	↔ [g]	↔ ♥	↔	↔	↔	↔ [e]	↔ [e]	↔	↔	↔	↔	↔	↔
Clindamycin	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Doxycycline	↔	↔	↔	↔	↔	↔	↓?	↓?	↓?	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lumefantrine	↑ ♥	↑ ♥	↑	↑175%	↑382% ♥	↔	↓~40%	↓13%	↓ ⇓46%	↔ ♥	↔	↔	↑10%	↑	↑	↔	↔	↔	↔	↔	↔
Mefloquine	↑ ♥	↑ ♥	↑	↑	↓28% ♥ ⇓22%	↔	↓	↓	↓	↔ ♥	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Piperaquine	↑ ♥	↑ ♥	↑ [h]	↑ [h]	↑ ♥	⇑	↓	↓	↓	⇑ ♥	⇓	⇓ [c]	↔	↑ [h]	↑ [h]	↔	↔	↔	↔	↔	↔
Primaquine	↔ ♥	↔ ♥	↔	↔	↔ ♥	↔	↔ [i]	↔ [i]	↔ [i]	↔ ♥	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ [b]
Proguanil	↔	↓41% [d]	↔	↓ [d]	↓38% [d]	↔	↓44% [d]	↓ ⇑ [d]	↓ [d]	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pyrimethamine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	⇑ [j]	↔	⇑ [j]	⇑ [j]	↔	↔	⇑ [k]	⇑ [j]	↔	↔ [b]
Quinine	↑ [l] ♥	↑ [l] ♥	↑ [l]	↑ [l]	↓56% ♥	↔	↓	↓	↓	↔ ♥	⇑	↔	↔	↑ [l]	↑ [l]	↔	↔	↔	↔	↔	↔
Sulfadoxine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	⇑ [m]	↔	⇑ [m]	⇑ [m]	↔	↔	⇑ [n]	⇑ [m]	↔	↔ [b]

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-malarial drug
↓ Potential decreased exposure of the anti-malarial drug
↔ No significant effect

⇑ Potential increased exposure of HIV drug
⇓ Potential decreased exposure of HIV drug

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered with atazanavir or lopinavir; caution is advised with rilpivirine as supratherapeutic doses of rilpivirine (75 and 300 mg once daily) were shown to prolong the QT interval.

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

Notes

a Liver toxicity
b Additive haematotoxicity
c No effect on FTC or TAF is expected, but bictegravir concentrations may decrease.
d Take with a high fat meal. Consider dose increase.
e Chloroquine may increase, but to a moderate extent due to the multiple elimination pathways. No dosage adjustment is recommended but monitor toxicity.
f Chloroquine may increase (inhibition of CYP2C8) or decrease (induction of CYP3A4). No dosage adjustment is recommended but monitor toxicity and efficacy.
g Chloroquine may decrease, but to a moderate extent due to the multiple elimination pathways. No dosage adjustment is recommended but monitor efficacy.
h ECG monitoring should be considered.
i Increase of haemotoxic metabolites
j FTC exposure may increase; no a priori dosage adjustment is recommended in patients with normal renal function.
k FTC or 3TC exposure may increase; no a priori dosage adjustment is recommended in patients with normal renal function.
l An increase in exposure would be expected based on quinine metabolism, however, two interaction studies with LPV/r have shown a decrease in quinine exposure. It is recommended to monitor for side effects and also efficacy.
m Sulfadoxine is rarely used alone, but is usually given in combination with pyrimethamine. Pyrimethamine may increase FTC exposure, but no a priori dosage adjustment is recommended in patients with normal renal function.
n Sulfadoxine is rarely used alone, but is usually given in combination with pyrimethamine. Pyrimethamine may increase FTC or 3TC exposure, but no a priori dosage adjustment is recommended in patients with normal renal function.

Abbreviations ATV atazanavir DRV darunavir LPV lopinavir /c cobicistat /r ritonavir DOR doravirine EFV efavirenz ETV etravirine NVP nevirapine RPV rilpivirine MVC maraviroc
BIC bictegravir DTG dolutegravir EVG elvitegravir RAL raltegravir ABC Abacavir F or FTC emtricitabine 3TC lamivudine TAF tenofovir alafenamide TDF tenofovir-DF ZDV zidovudine