

Herbal & Mineral Supplements Treatment Selector

Charts revised October 2022. 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
Herbal Supplements		L			<u> </u>				_	Orai		<u> </u>		I/IAI	Orai	IXI V		I/IAI	1/101		IAI	101
African potato	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	₩	\leftrightarrow	\leftrightarrow	\leftrightarrow	↓	↓	₩	↓	₩	\leftrightarrow	₩	₩	₩	\leftrightarrow	₩	↓ a	\leftrightarrow
Aloe vera	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Black cohosh	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Cat's claw	î	1	1	Π	î	1	î	1	î	Π	ſ	Π	1	\leftrightarrow	\leftrightarrow	Π	\leftrightarrow	î	î	\leftrightarrow	\leftrightarrow	\leftrightarrow
Cubeb pepper	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	Î	\leftrightarrow	\leftrightarrow	\leftrightarrow	Π	\leftrightarrow	Ω	Π	\leftrightarrow	\leftrightarrow	Π	\leftrightarrow	î	î	\leftrightarrow	Пa	↑ a
Echinacea	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	₩	\leftrightarrow	\leftrightarrow	\leftrightarrow	₩	↓	\leftrightarrow	₩	₩	\leftrightarrow	₩	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Eucalyptus globulus	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Garlic	↓	₩	↓	₩	↓	↓	↓	↓	↓	₩	↓	\leftrightarrow	↓	₩	\leftrightarrow	\leftrightarrow	↓	↓	↓	\leftrightarrow	↓ a	\leftrightarrow
Ginger	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	↑	\leftrightarrow	\leftrightarrow	\leftrightarrow	⇑	\leftrightarrow	\leftrightarrow	Π	\leftrightarrow	\leftrightarrow	Π	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Gingko biloba	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	₩	↓	↓	↓	₩	↓	₩	↓	₩	\leftrightarrow	↓	₩	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Ginseng	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Goldenseal root	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Grapefruit juice	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	î	\leftrightarrow	\leftrightarrow	\leftrightarrow	Λ	\leftrightarrow	\leftrightarrow	î	\leftrightarrow								
Green tea extracts	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	1	? b	\leftrightarrow	\leftrightarrow	\leftrightarrow	? b	? b	\leftrightarrow	? b	? b
Guggulsterone	↓	₩	↓	₩	↓	₩	↓	₩	↓	₩	\leftrightarrow	₩	↓	\leftrightarrow	\leftrightarrow	₩	\leftrightarrow	↓	↓	\leftrightarrow	\leftrightarrow	\leftrightarrow
Hops	₩	₩	₩	₩	₩	₩	₩	₩	₩	₩	↓	₩	₩	₩	\leftrightarrow	₩	₩	₩	↓	\leftrightarrow	↓ a	\leftrightarrow
Inula racemosa	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	1	\leftrightarrow	\leftrightarrow	\leftrightarrow	Λ	Π	\leftrightarrow	Π	\leftrightarrow	\leftrightarrow	Π	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Liquorice	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	₩	\leftrightarrow	\leftrightarrow	\leftrightarrow	₩	↓	₩	↓	₩	\leftrightarrow	₩	↓	î	1	\leftrightarrow	П́а	îа
Malabar nut tree	↓	₩	↓	₩	↓	₩	↓	↓	↓	↓	↓	₩	↓	↓	\leftrightarrow	₩	↓	↓	↓	↓	\leftrightarrow	\leftrightarrow
Menthol	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	Î	\leftrightarrow	\leftrightarrow	\leftrightarrow	Λ	î	\leftrightarrow	ı	\leftrightarrow	\leftrightarrow	î	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Milk thistle	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Quercetin	11?	11?	11?	11?	11?	Î	11?	11?	11?	Λ	\leftrightarrow	\leftrightarrow	î	\leftrightarrow	\leftrightarrow	î	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Red yeast rice	1	1	1	1	1	\leftrightarrow	1	1	1	\leftrightarrow	\leftrightarrow	1	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	1	↑	\leftrightarrow	\leftrightarrow	\leftrightarrow
Saw palmetto	\leftrightarrow	\leftrightarrow	↔	\leftrightarrow	↔	\leftrightarrow	↔	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow											
Seville orange juice	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	Î	\leftrightarrow	\leftrightarrow	\leftrightarrow	ı	\leftrightarrow	\leftrightarrow	ı	\leftrightarrow								
St John's wort	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	Ųс	↓	Ųс	Ųс	↓	↓ c,d	\leftrightarrow
Turmeric	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Valerian	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Mineral supplements		<u> </u>										<u></u>				<u></u>		_				
Ascorbic acid	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	Џе	↓ e	\leftrightarrow	Ų e	↓ e	Џе	Џе	\leftrightarrow	\leftrightarrow
Calcium	↓ f	↓ f	\leftrightarrow	↓ f	\leftrightarrow	\leftrightarrow	\leftrightarrow	⇒	₩	\leftrightarrow	₩	↓	₩	₩	\leftrightarrow	\leftrightarrow						
Ferrous fumarate	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	⇒	₩	\leftrightarrow	₩	↓	₩	₩	\leftrightarrow	\leftrightarrow
Folic acid	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	Џе	↓ e	\leftrightarrow	Џе	↓ e	↓ e	Џе	\leftrightarrow	\leftrightarrow
lodine	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	Џе	↓ e	\leftrightarrow	Ų e	↓ e	↓ e	Џе	\leftrightarrow	\leftrightarrow
Iron (infusion/injection)	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow
Iron (oral)	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	⇒	₩	\leftrightarrow	↓	↓	₩	\	\leftrightarrow	\leftrightarrow
Magnesium	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	₩	₩	\leftrightarrow	↓	↓	₩	₩	\leftrightarrow	\leftrightarrow
Multivitamins	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	⇒	↓	\leftrightarrow	↓	↓	₩	₩	\leftrightarrow	\leftrightarrow
Nicotinamide	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	Џе	↓ e	\leftrightarrow	Ų e	↓ e	↓ e	Џе	\leftrightarrow	\leftrightarrow
Various vitamins	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	↓ g	↓ g	\leftrightarrow	↓ g	↓ g	↓ g	↓ g	\leftrightarrow	\leftrightarrow

Interactions with CAB/RPV long acting injections

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

No clinically significant interaction expected.

These drugs should not be coadministered.

Potential interaction which may require a

dose adjustment or close monitoring.

Interactions with Lenacapavir

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

> Potential interaction predicted to be of weak intensity. No a priori dosage adjustment is recommended.

Interactions with Ibalizumab None

Colour Legend

Text Legend Potential increased exposure of the supplement

ABC: No clinically relevant interactions expected.

3TC: No clinically relevant interactions expected.

↓ Potential decreased exposure of the supplement

. → No significant effect

 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.

Interactions with Abacavir (ABC), Lamivudine (3TC), Tenofovir-DF (TDF) or Zidovudine (ZDV)

TDF: The effect of green tea on tenofovir is unclear (b).
TDF: Caution with Cat's claw and Cubeb pepper as tenofovir systemic concentrations could potentially increase.
ZDV: No clinically relevant interactions expected.

1 Potential increased exposure of HIV drug

Potential decreased exposure of HIV drug

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

- No effect on emtricitabine expected.
- The effect on tenofovir is unclear as green tea extracts appeared to inhibit P-gp in vivo, but a contradictory effect was observed in vivo.
- Coadministration is not recommended in product label. However, a low risk of a clinically relevant pharmacokinetic interaction has been shown with low-hyperforin formulations (<1 mg/day) of St John's Wort (hyperforin is the constituent responsible for induction of CYPs and P-gp). Coadministration may be considered with St John's Wort formulations that clearly state the hyperforin content and which have a total daily hyperforin dose of 1 mg or less.
- No effect on emtricitabline is expected, but tenofovir alafenamide concentrations may decrease which may result in loss of therapeutic effect and development of resistance.
- Only when used in multivitamin preparations as they can contain mineral supplements.
- Calcium supplements containing calcium carbonate may decrease atazanavir or rilpivirine concentrations due to gastric pH increase.
- Only for vitamin preparations containing divalent cations.

Abbreviations ATV atazanavir FTR fostemsavir LeN lenacapavir WC maraviroc BIC bictegravir CAB cabotegravir DTG dolutegravir DTG dolutegravir DTG dolutegravir BTG dolutegravir DTG dolutegravir D © Liverpool Drug Interactions Group, University of Liverpool, 3rd Floor William Henry Duncan Building, 6 West Derby Street, Liverpool, L7 8TX.

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