

Cancer Therapies Treatment Selector

Charts revised February 2019. 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	MVC	BIC/ F/TAF	DTG	EVG/c/ F/TAF	EVG/c/ F/TDF	RAL	FTC or 3TC	F/TAF	TDF	ZDV
Anti-tumour Antibiotics																				
Bleomycin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Daunorubicin	↔ ^a	↔ ^a	↔	↔	↔ ^a	↔	↔	↔	↔	↔ ^a	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Doxorubicin	↔ ^a	↔ ^a	↔	↔	↔ ^a	↔	↔	↔	↔	↔ ^a	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Epirubicin	↔ ^a	↓ ^a	↔	↓	↓ ^a	↔	↑	↔	↔	↔ ^a	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Alkylating Agents																				
Carboplatin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^{c,d}	↔ ^b
Chlorambucil	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Cisplatin	↑	↑	↑	↑	↑	↔	↔	↔	↔	↔	↔	↑↑ ^e	↔	↑ ^d	↔ ^{c,d}	↔	↑↑ ^f	↑↑ ^e	↔ ^{c,d}	↔ ^b
Cyclophosphamide	↓ ^g	↓ ^g	↓ ^g	↓ ^g	↓ ^g	↔	↓ ^h	↓ ^h	↓ ^h	↔	↔	↔	↔	↓ ^g	↓ ^g	↔	↔	↔	↔	↔ ^b
Dacarbazine	↔	↓ ^g	↔	↓ ^g	↓ ^g	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Dactinomycin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Ifosfamide	↑ ⁱ	↑ ⁱ	↑ ⁱ	↑ ⁱ	↑ ⁱ	↓	↓ ^h	↓ ^h	↓ ^h	↓	↓	↑ or ↓ ^j	↔	↑ ^{c,l}	↑ ^{c,l}	↔	↔	↔	↔ ^c	↔ ^b
Oxaliplatin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^k	↔ ^k	↔	↔ ^c	↔	↔	↔	↔ ^c	↔ ^b
Procarbazine	↔	↓ ^g	↔	↓ ^g	↓ ^g	↔	↓ ^g	↔	↓ ^g	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Antimetabolite Agents																				
Capecitabine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔?	↔	↔?	↔?	↔	↔?	↔?	↔?	↔ ^b
Cytarabine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Fluorouracil	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔?	↔	↔?	↔?	↔	↔?	↔?	↔?	↔ ^b
Gemcitabine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Mercaptopurine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔ ^b
Methotrexate	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^{b,m}
Plant Alkaloids																				
Docetaxel	↑	↑	↑	↑	↑	↔	↓	↓	↓	↑?	↑?	↔	↔	↑	↑	↔	↔	↔	↔	↔ ^b
Etoposide	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔ ^b
Irinotecan	↑ ^{n,o}	↑ ^{n,o}	↑ ⁿ	↑ ⁿ	↑ ⁿ	↔	↓ ^p	↓ ^p	↓ ^p	↔	↔	↔	↔	↑ ⁿ	↑ ⁿ	↔	↔	↔	↔	↔ ^b
Paclitaxel	↑	↑	↑	↑	↑	↔	↑	↓	↓	↔	↓	↓	↓	↓	↑	↑	↓	↔	↔	↔ ^b
Vinblastine	↑	↑	↑	↑	↑	↔	↓	↓	↓	↓	↓	↓	↓	↓	↑	↑	↓	↔	↔	↔ ^b
Vincristine	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔ ^b
Tyrosine Kinase Inhibitors																				
Dasatinib	↑♥	↑♥	↑	↑	↑♥	↔	↓	↓	↓	↑♥	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔
Erlotinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔
Gefitinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔
Imatinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↑	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔ ^b
Lapatinib	↑♥	↑♥	↑♥	↑♥	↑♥	↔	↓	↓	↓	↑♥	↑	↔	↔	↑♥	↑♥	↔	↔	↔	↔	↔
Nilotinib	↑♥	↑♥	↑♥	↑♥	↑♥	↔	↓	↓	↓	↑♥	↑	↔	↔	↑♥	↑♥	↔	↔	↔	↔	↔
Pazopanib	↑♥	↑♥	↑♥	↑♥	↑♥	↔	↓	↓	↓	↑♥	↑	↔	↔	↑♥	↑♥	↔	↔	↔	↔	↔
Sunitinib	↑♥	↑♥	↑♥	↑♥	↑♥	↔	↓	↓	↓	↑♥	↑	↔	↔	↑♥	↑♥	↔	↔	↔	↔	↔
Others																				
Bortezomib	↑♥	↑♥	↑	↑	↑♥	↔	↓	↓	↓	↑♥	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔ ^b
Cetuximab	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Everolimus	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔
Sorafenib	↔ ^r ♥	↔ ^r ♥	↔ ^r	↔ ^r	↔ ^r ♥	↔	↓	↓	↓	↔♥	↔	↔	↔	↔ ^r	↔ ^r	↔	↔	↔	↔	↔
Tamoxifen	↑ ⁱ	↑ ⁱ	↑ ⁱ	↑ ⁱ	↑ ⁱ	↔	↓	↓	↓	↓	↓	↓ ^q	↔	↑ ⁱ	↑ ⁱ	↔	↔	↔	↔	↔
Temsirolimus	↑	↑	↑	↑	↑	↔	↓ ^g	↓ ^g	↓ ^g	↑	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔

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 cancer drug
- ↓ Potential decreased exposure of the cancer 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.
- ♡ Potential QT and/or PR prolongation due to the cytostatic agent. Use with caution; ECG monitoring recommended.

Notes

- a Cytostatic agent may induce cardiac toxicity including arrhythmias and/or non-specific ECG abnormalities; caution is warranted in presence of other drugs with potential effects on PR and QT intervals.
- b Potential additive hematological toxicity
- c Potential additive nephrotoxicity
- d The cytostatic agent may impair renal function: monitor creatinine clearance and adjust NRTI dosage accordingly (may require a change from a single tablet regimen).
- e Coadministration may increase concentrations of cisplatin and FTC. Close monitoring of renal function is recommended.
- f Concentrations of cisplatin and FTC or 3TC may increase. Close monitoring of renal function is recommended.
- g Concentrations of parent drug decreased but concentrations of the active metabolite increased.
- h Concentrations of parent drug decreased but concentrations of the active metabolite and toxic metabolite increased.
- i Concentrations of parent drug increased but concentrations of the active metabolite decreased which may result in decreased efficacy.
- j Coadministration may affect bictegravir concentrations. In addition, ifosfamide and tenofovir alafenamide may show additive renal toxicity.
- k The oxaliplatin effect may be potentially antagonised due to its reduced entry into the tumour cell arising from the inhibition of OCT2.
- l No interaction is expected with FTC, but concentrations of oxaliplatin and 3TC could increase if coadministered. Monitor side effects.
- m Use in HIV patients is contraindicated by some manufacturers.
- n Concentrations of SN-38 (active metabolite) increased.
- o Coadministration is contraindicated in the atazanavir US product label, but the European product label recommends patients should be closely monitored for adverse reactions related to irinotecan.
- p Conversion of SN-38 to inactive metabolite increased.
- q Coadministration may decrease bictegravir concentrations, but no effect on emtricitabine or tenofovir alafenamide is expected.
- r Poor tolerability has been observed in patients on ritonavir-containing regimens. (A similar effect may also occur with cobicistat-containing regimens).

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 F or FTC emtricitabine TAF tenofovir alafenamide 3TC lamivudine TDF tenofovir disoproxil fumarate ZDV zidovudine

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