

Cancer Therapies Treatment Selector

Charts revised October 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/TFD	RAL	ABC	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	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Chlorambucil	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Cisplatin	↑	↑	↑	↑	↑	↔	↔	↔	↔	↔	↔	↑↑ ^e	↔	↑ ^d	↔ ^{c,d}	↔	↔	↔	↑↑ ^f	↑↑ ^e	↔ ^{c,d}
Cyclophosphamide	↓ ^g	↓ ^g	↓ ^g	↓ ^g	↓ ^g	↔	↔	↔	↔	↔	↔	↔	↔	↓ ^g	↓ ^g	↔	↔	↔	↔	↔	↔
Dacarbazine	↔	↓ ^g	↔	↔	↓ ^g	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dactinomycin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ifosfamide	↑ ⁱ	↑ ⁱ	↑ ⁱ	↑ ⁱ	↑ ⁱ	↓	↓ ^h	↓ ^h	↓ ^h	↓	↓	↑ or ↓ ^j	↔	↑ ^{c,i}	↑ ^{c,i}	↔	↔	↔	↔	↔	↔
Oxaliplatin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Procarbazine	↔	↓ ^g	↔	↔	↓ ^g	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Antimetabolite Agents																					
Capecitabine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑?	↔	↑?	↑?	↔	↑?	↑?	↑?	↑?	↔
Cytarabine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fluorouracil	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑?	↔	↑?	↑?	↔	↑?	↑?	↑?	↑?	↔
Gemcitabine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Mercaptopurine	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Methotrexate	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m	↔ ^m
Plant Alkaloids																					
Docetaxel	↑	↑	↑	↑	↑	↔	↓	↓	↓	↑?	↑?	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Etoposide	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Irinotecan	↑ ^{n,o}	↑ ^{n,o}	↑ ⁿ	↑ ⁿ	↑ ⁿ	↔	↓ ^p	↓ ^p	↓ ^p	↔	↔	↔	↔	↑ ⁿ	↑ ⁿ	↔	↔	↔	↔	↔	↔
Paclitaxel	↑	↑	↑	↑	↑	↓	↑	↓	↓	↔	↓	↓	↓	↑	↑	↔	↔	↔	↔	↔	↔
Vinblastine	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	↑	↑	↔	↔	↔	↔	↔	↔
Vincristine	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Tyrosine Kinase Inhibitors																					
Dasatinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↑	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Erlotinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Gefitinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Imatinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Lapatinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↑	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Nilotinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↑	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Pazopanib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↑	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Sunitinib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↑	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Others																					
Bortezomib	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Cetuximab	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Everolimus	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔
Sorafenib	↔	↔	↔	↔	↔	↔	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tamoxifen	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	↑	↑	↔	↔	↔	↔	↔	↔
Temsirolimus	↑	↑	↑	↑	↑	↔	↓	↓	↓	↑	↑	↔	↔	↑	↑	↔	↔	↔	↔	↔	↔

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 ABC Abacavir F or FTC emtricitabine 3TC lamivudine TAF tenofovir alafenamide TDF tenofovir-DP ZDV zidovudine

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