

Contraceptive Treatment Selector

Charts reviewed October 2018. Full information available at www.hiv-druginteractions.org

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	ATV/r	DRV/r	LPV/r	EFV	ETV	NVP	RPV	MVC	DTG	RAL	ABC	FTC	3TC	TDF	ZDV	E/C/F/TAF	E/C/F/TDF
Ethinylestradiol	↓19% ^a	↓44% ^b	↓42% ^b	↔ ↓ ^c	↑22%	↓20%	↑14%	↔	↑3%	↔	↔	↔	↔	↔	↔	↓25% ^d	↓25% ^d
Progestins (COC)																	
Desogestrel	↑ ^{a,e}	↑ ^{e,f}	↑ ^{e,f}	↓ ^g	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ ^h	↑ ^h
Drospirenone	↑ ^a	↑ ^f	↑ ^f	↓ ^g	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ ^h	↑ ^h
Gestodene	↑ ^a	↑ ^f	↑ ^f	↓ ^g	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ ^h	↑ ^h
Levonorgestrel	↑ ^a	↑ ^f	↑ ^f	↓ ^g	↓	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑
Norethisterone (Norethindrone)	↑ ^{a,i}	↓14% ^g	↓17% ^g	↓ ^g	↓5%	↓19%	↓11%	↔	↔	↔	↔	↔	↔	↔	↔	↑ ^h	↑ ^h
Norgestimate	↑85% ^a	↑ ^f	↑ ^f	↓64% ^g	↓	↓	↔	↔	↔	↑14%	↔	↔	↔	↔	↔	↑126% ^h	↑126% ^h
Norgestrel	↑ ^a	↑ ^f	↑ ^f	↓ ^g	↓	↑29%	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ ^h	↑ ^h
Progestins (POP)																	
Desogestrel	↑	↑	↑	↓ ^g	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑
Levonorgestrel	↑	↑	↑	↓ ^g	↓	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑
Norethisterone (Norethindrone)	↑50% ⁱ	↑50%	↑50%	↓ ^g	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑
Progestins (Non-oral)																	
Etonogestrel (implant)	↑	↑	↑52%	↓63% ^k	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑
Etonogestrel (CVR)	↑~80% ^l	↑ ^j	↑ ^j	↓~80% ^k	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ ^j	↑ ^j
Levonorgestrel (IUD)	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Levonorgestrel (implant)	↑	↑	↑	↓47% ^k	↓	↑14%	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑
Medroxy-progesterone (depot)	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Norelgestromin (patch)	↑ ^l	↑ ^m	↑83% ^m	↓ ^g	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ ^h	↑ ^h
Norethisterone (Norethindrone) (depot)	↔	↔	↔	↓ ^g	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑
Other																	
Levonorgestrel (EC)	↑ ⁿ	↑ ⁿ	↑ ⁿ	↓58% ^o	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ ⁿ	↑ ⁿ
Mifepristone	↑ ⁿ	↑ ⁿ	↑ ⁿ	↓	↓	↓	↑ ⁿ	↑ ⁿ	↔	↔	↔	↔	↔	↔	↔	↑ ⁿ	↑ ⁿ
Ulipristal	↑ ⁿ	↑ ⁿ	↑ ⁿ	↓ ^p	↓ ^p	↓ ^p	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ ⁿ	↑ ⁿ

Colour Legend

- No clinically significant interaction expected.
- These drugs should not be coadministered.
- Potential interaction which may require a dosage adjustment or close monitoring.
- Potential interaction predicted to be of weak intensity or unlikely to impair contraceptive efficacy. No *a priori* dosage adjustment is recommended.

Text Legend

- ↑ Potential increased exposure of the hormone
- ↓ Potential decreased exposure of the hormone
- ↔ No significant effect
- ↑ Potential increased exposure of HIV drug

Numbers refer to decreased AUC of the hormone as observed in drug-drug interaction studies.

- COC Combined oral contraceptive
- POP Progestin only contraceptive
- CVR Combined vaginal ring
- IUD Intra uterine device
- EC Emergency contraception

- a Unboosted ATV increased ethinylestradiol AUC by 48%. Use no more than 30 µg of ethinylestradiol if coadministered with unboosted ATV and at least 35 µg of ethinylestradiol if coadministered with ATV/r.
- b Alternative or additional contraceptive measures are recommended.
- c Depending on the contraceptive method, ethinylestradiol can be either unchanged (COC) or decreased (CVR). Levels of coadministered progestin were markedly decreased. A reliable method of barrier contraception must be used in addition to oral contraception.
- d European SPC states a hormonal contraceptive should contain at least 30 µg ethinylestradiol.
- e Increased conversion to the active metabolite, etonogestrel.
- f When used in a COC the estrogen component is reduced. In the absence of clinical data on the contraceptive efficacy, caution is recommended and additional contraceptive measures should be used.
- g A reliable method of barrier contraception must be used in addition to oral contraception.
- h When used in a COC, the estrogen component is reduced to a limited extent. The European SPC states a hormonal contraceptive should contain at least 30 µg ethinylestradiol.
- i Unboosted ATV increased norethisterone AUC by 2.1-fold.
- j Predicted to increase etonogestrel but to reduce ethinylestradiol concentrations. Since no dosage adjustment of ethinylestradiol is possible with the CVR, alternative forms of contraception should be used.
- k The use of implants or vaginal rings is not recommended in women on long-term treatment with hepatic enzyme-inducing drugs.
- l The efficacy of norelgestromin patch is unlikely to be impaired since the patch releases 33 µg ethinylestradiol/day which meets the recommendation in the product labels for atazanavir that the hormonal contraceptive should contain at least 30 µg ethinylestradiol in presence of atazanavir/ritonavir.
- m Norelgestromin is administered with ethinylestradiol as a transdermal patch. Ethinylestradiol exposure was reduced which may compromise contraceptive efficacy. Caution is recommended and additional contraceptive measures should be used.
- n Any increase in exposure is unlikely to be clinically significant when used as a single dose for emergency contraception.
- o Use 3 mg as a single dose for emergency contraception. Of note, the doubling of the standard dose is outside the product license and there is limited evidence in relation to efficacy.
- p Not recommended. Non-hormonal emergency contraception (Cu-IUD) should be considered.

Abbreviations ATV atazanavir DRV darunavir LPV lopinavir /r ritonavir EFV efavirenz ETV etravirine NVP nevirapine RPV rilpivirine MVC maraviroc DTG dolutegravir RAL raltegravir ABC abacavir FTC emtricitabine 3TC lamivudine TDF tenofovir disoproxil fumarate ZDV zidovudine E/C/F/Ehivtegravir/Cobicistat/FTC TAF tenofovir alafenamide

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