

## **Contraceptive Treatment Selector**

Charts revised July 2018. Full information available at www.hiv-druginteractions.org

		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	$\leftrightarrow \uparrow_c$	↑22%	↓20%	↑14%	$\leftrightarrow$	↑3%	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	↓25% <sup>d</sup>	↓25% <sup>d</sup>
	Desogestrel	↑ <sup>a,e</sup>	↑ <sup>e,f</sup>	↑ <sup>e,f</sup>	↑a	<b>1</b>	<b>↓</b>	$\leftrightarrow$	↑ <sup>h</sup>	↑ <sup>h</sup>								
Progestins (COC)	Drospirenone	↑ª	↑ <sup>f</sup>	↑ <sup>f</sup>	↑a	<b>↓</b>	<b>↓</b>	$\leftrightarrow$	↑ <sup>h</sup>	↑ <sup>h</sup>								
	Gestodene	↑ª	↑ <sup>f</sup>	↑ <sup>f</sup>	∫g	<b>1</b>	<b>↓</b>	$\leftrightarrow$	↑ <sup>h</sup>	↑ <sup>h</sup>								
	Levonorgestrel	↑ª	↑ <sup>f</sup>	↑ <sup>f</sup>	↑a	<b>→</b>	1	$\leftrightarrow$	<b></b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	<b></b>	$\leftrightarrow$	<b></b>	$\leftrightarrow$	1	<b>↑</b>
	Norethisterone (Norethindrone)	↑ <sup>a,i</sup>	↓14% <sup>g</sup>	↓17% <sup>g</sup>	↑a	↓5%	↓19%	↓11%	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	<b></b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	↑ <sup>h</sup>	↑ <sup>h</sup>
	Norgestimate	↑85%ª	↑ <sup>f</sup>	↑ <sup>f</sup>	↓64% <sup>g</sup>	<b>↓</b>	<b>\</b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	↑14%	$\leftrightarrow$	<b></b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	↑126% <sup>h</sup>	↑126% <sup>h</sup>
	Norgestrel	↑ª	↑ <sup>f</sup>	↑ <sup>f</sup>	↑a	1	↑29%	$\leftrightarrow$	↑ <sup>h</sup>	↑ <sup>h</sup>								
(POP)	Desogestrel	1	1	1	↑a	<b>↓</b>	<b>↓</b>	$\leftrightarrow$	1	1								
Progestins (POP)	Levonorgestrel	1	1	1	↑a	$\downarrow$	1	$\leftrightarrow$	1	<b>↑</b>								
Proge	Norethisterone (Norethindrone)	↑50% <sup>i</sup>	↑50%	↑50%	↑a	$\downarrow$	$\downarrow$	$\leftrightarrow$	1	<b>↑</b>								
	Etonogestrel (implant)	1	1	↑52%	↓63% <sup>k</sup>	$\downarrow$	<b>↓</b>	$\leftrightarrow$	1	1								
I≘	Etonogestrel (CVR)	↑~80% <sup>j</sup>	↑ <sup>j</sup>	↑ <sup>j</sup>	↓~80% <sup>k</sup>	1	<b>↓</b>	$\leftrightarrow$	↑ <sup>j</sup>	↑ <sup>j</sup>								
(Non-oral)	Levonorgestrel (IUD)	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$
	Levonorgestrel (implant)	1	1	1	↓47% <sup>k</sup>	1	↑14%	$\leftrightarrow$	1	1								
Progestins	Medroxy- progesterone (depot)	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$
Pro	Norelgestromin (patch)	↑¹	↑ <sup>m</sup>	↑83% <sup>m</sup>	∫g	<b>↓</b>	↓	$\leftrightarrow$	<b></b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	<b></b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	↑ <sup>h</sup>	↑ <sup>h</sup>
	Norethisterone (Norethindrone) (depot)	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	↑a	1	<b>↓</b>	<b>↓</b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	<b></b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	1	1
	Levonorgestrel (EC)	↑ <sup>n</sup>	↑n	↑n	↓58%°	$\leftrightarrow$	↑n	↑ <sup>n</sup>										
Other	Mifepristone	↑ <sup>n</sup>	↑ <sup>n</sup>	↑ <sup>n</sup>	<b>\</b>	1	<b>\</b>	<b>↑</b> n	↑ n	$\leftrightarrow$	↑ <sup>n</sup>	↑ <sup>n</sup>						
	Ulipristal	↑ <sup>n</sup>	↑ <sup>n</sup>	↑ <sup>n</sup>	↓p	↓p	↓p	$\leftrightarrow$	↑ <sup>n</sup>	↑ <sup>n</sup>								

## 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 increased exposure of HIV drug

Potential decreased exposure of the hormone

No significant effect

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

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

- 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.
- 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.
- European SPC states a hormonal contraceptive should contain at least 30 µg ethinylestradiol.
- Increased conversion to the active metabolite, etonogestrel.

  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
- A reliable method of barrier contraception must be used in addition to oral contraception.
- 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. Unboosted ATV increased norethisterone AUC by 2.1-fold.
- 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.
- The use of implants or vaginal rings is not recommended in women on long-term treatment with hepatic enzyme-inducing drugs.
- 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.
- 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.
- Any increase in exposure is unlikely to be clinically significant when used as a single dose for emergency contraception.
- 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.
- Not recommended. Non-hormonal emergency contraception (Cu-IUD) should be considered.