

**HORMONAL AGENTS:
CONTRACEPTIVES AND HORMONE REPLACEMENT THERAPY**

	INSTIs		NNRTIs		PIs
	<ul style="list-style-type: none"> • BICTEGRAVIR (<i>Biktarvy</i>) • DOLUTEGRAVIR (<i>Tivicay, Trumeq, Juluca</i>) • RALTEGRAVIR (<i>Isentress</i>) 	<ul style="list-style-type: none"> • ELVITEGRAVIR/COBICISTAT (<i>Stribild, Genvoya</i>) 	<ul style="list-style-type: none"> • DORAVIRINE (<i>Pifeltro, Delstrigo</i>) • RILPIVIRINE (<i>Edurant, Complera, Odefsey, Juluca</i>) 	<ul style="list-style-type: none"> • EFAVIRENZ (<i>Sustiva, Atripla</i>) • ETRAVIRINE (<i>Intelence</i>) • NEVIRAPINE (<i>Viramune</i>) 	Boosted with ritonavir (Norvir) or cobicistat <ul style="list-style-type: none"> • ATAZANAVIR (<i>Reyataz, Evotaz</i>) • DARUNAVIR (<i>Prezista, Prezcobix, Symtuza</i>) • LOPINAVIR (<i>Kaletra</i>)

CONTRACEPTIVES




<ul style="list-style-type: none"> • Combined oral contraceptives • Transdermal contraceptives • Plan B • Nuva-Ring 		Potential for ↓ ethinyl estradiol and ↑ progestin (combined oral, transdermal, vaginal ring)		Potential for ↓ ethinyl estradiol and ↓ progestin (combined oral, transdermal, vaginal ring)	Atazanavir/ritonavir: Use OC with <u>minimum</u> 30 mcg ethinyl estradiol Darunavir, lopinavir/r: potential for ↓ ethinyl estradiol and ↑/↓ norethindrone
<ul style="list-style-type: none"> • DMPA (<i>Depo-Provera</i>) 					

HORMONE REPLACEMENT THERAPY

<ul style="list-style-type: none"> • Estrogens, 17-beta estradiol, conjugated estrogens 		Potential for ↑ estradiol		Potential for ↓ estradiol	Cobicistat-boosted PIs: potential for ↑ estradiol Ritonavir-boosted PIs: potential for ↓ estradiol
<ul style="list-style-type: none"> • Progestins, medroxy-progesterone 		Potential for ↑ progestin		Potential for ↓ progestin	Potential for ↑ progestin, especially with cobicistat

Mechanism of Drug Interactions, Management and Monitoring

Contraceptive/HRT	Mechanism of Interaction	Main Interacting ARVs	Management	Monitoring
Combined Oral Contraceptives, Plan B, Nuva-ring	Induction/inhibition of CYP3A4, induction of UGT	Ritonavir-boosted protease inhibitors, elvitegravir/cobicistat, efavirenz	Use alternate non-hormonal methods of contraception Plan B and efavirenz: may need to increase progesterone dose.	Monitor for loss of contraceptive efficacy
Hormone Replacement Therapy	Inhibition of CYP3A4. Induction of CYP3A4, 1A2, UGT	Cobicistat-boosted protease inhibitors and elvitegravir/cobicistat Efavirenz, etravirine, nevirapine, ritonavir boosted PI's	Risks of potentially elevated hormone levels may carry thromboembolic risk in long term. Consider in post menopausal females when benefits outweigh the risk. May lower levels of estradiol and medroxyprogesterone	Monitor for progesterone-related side effects and estrogen risk Dose adjustment not studied, determine risk vs benefits when using in post menopausal females

Legend:		No dose adjustment required.
		Use combination with caution. Adjustment in drug dose or frequency or additional/more frequent monitoring may be required. May wish to consult with a pharmacist knowledgeable in HIV drug interactions.
		Contraindicated/avoid combination.