

# Interactions with Protease Inhibitors

Charts revised October 2021. Full information available at [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)

Please note that if a drug is not listed it cannot automatically be assumed it is safe to coadminister.

	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Anaesthetics &amp; Muscle Relaxants</b>											
Alcuronium	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bupivacaine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Cisatracurium	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Desflurane	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Dexmedetomidine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Enflurane	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ephedrine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Etidocaine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Halothane	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Isoflurane	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ketamine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Minaxolone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Nitrous oxide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Propofol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Rocuronium	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Sevoflurane	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Sufentanil	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Suxamethonium (succinylcholine)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tetracaine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Thiopental	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tizanidine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Vecuronium	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
<b>Analgesics</b>											
Alfentanil	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Aspirin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Buprenorphine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Celecoxib	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Codeine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Dextropropoxyphene	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Diamorphine (diacetylmorphine)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Diclofenac	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Dihydrocodeine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Fentanyl	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Hydrocodone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Hydromorphone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ibuprofen	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Mefenamic acid	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Meloxicam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Methadone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Morphine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Naproxen	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Nimesulide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Oxycodone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Paracetamol (Acetaminophen)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Pethidine (Meperidine)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Piroxicam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tapentadol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tramadol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
<b>Anthelmintics</b>											
Albendazole	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Diethylcarbamazine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ivermectin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Levamisole (Ergamisol)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Mebendazole	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Niclosamide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Oxamniquine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Praziquantel	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Pyrantel	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Suramin sodium	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Triclabendazole	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
<b>Antiarrhythmics</b>											
Amiodarone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bepidil	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Digoxin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Disopyramide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Dofetilide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Flecainide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Lidocaine (Lignocaine)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Mexiletine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Propafenone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Quinidine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦

	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Antibacterials</b>											
Amikacin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Amoxicillin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ampicillin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Azithromycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bedaquiline	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Capreomycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Cefalexin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Cefazolin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Cefixime	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Cefotaxime	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ceftazidime	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ceftriaxone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Chloramphenicol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ciprofloxacin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Clarithromycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Clavulanic acid	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Clindamycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Clofazimine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Cloxacillin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Cycloserine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Dapsone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Delamanid	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Doxycycline	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ertapenem	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Erythromycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ethambutol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ethionamide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Flucloxacillin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Gentamicin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Imipenem/Cilastatin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Isoniazid	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Kanamycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Levofloxacin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Linezolid	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Meropenem	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Metronidazole	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Moxifloxacin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Nitrofurantoin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ofloxacin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Para-aminosalicylic acid	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Penicillins	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Piperacillin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Pyrazinamide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Rifabutin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Rifampicin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Rifapentine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Rifaximin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Spectinomycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Streptomycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Sulfadiazine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tazobactam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Telithromycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tetracyclines	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tinidazole	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Trimethoprim/Sulfamethoxazole	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Vancomycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
<b>Anti-coagulant, Anti-platelet and Fibrinolytic</b>											
Acenocoumarol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Apixaban	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Argatroban	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Aspirin (anti-platelet)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Betrixaban	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Clopidogrel	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Dabigatran	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Dalteparin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Dipyridamole	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Edoxaban	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Enoxaparin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Fondaparinux	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Heparin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Phenprocoumon	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Prasugrel	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Rivaroxaban	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Streptokinase	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ticagrelor	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Warfarin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦

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### Key to abbreviations

ATV	Atazanavir alone (Reyataz <sup>®</sup> )	DRV/r	Darunavir + R
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	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Anticonvulsants</b>											
Carbamazepine	●	●	■	●	●	■	■	■	■	■	■
Clonazepam	■	■	■	■	■	■	■	■	■	■	■
Eslicarbazepine	■	■	■	■	■	■	■	■	■	■	■
Ethosuximide	■	■	■	■	■	■	■	■	■	■	■
Gabapentin	■	■	■	■	■	■	■	■	■	■	■
Lacosamide	▲	▲	▲	■	■	■	■	■	■	■	■
Lamotrigine	■	▲	■	■	■	■	■	■	■	■	■
Levetiracetam	■	■	■	■	■	■	■	■	■	■	■
Oxcarbazepine	■	■	■	■	●	■	■	■	■	■	■
Phenobarbital (Phenobarbitone)	●	●	■	●	●	■	■	■	■	■	■
Phenytoin	●	●	■	●	●	■	■	■	■	■	■
Pregabalin	■	■	■	■	■	■	■	■	■	■	■
Primidone	●	●	■	●	●	■	■	■	■	■	■
Tiagabine	■	■	■	■	■	■	■	■	■	■	■
Topiramate	■	■	■	■	■	■	■	■	■	■	■
Valproate (Divalproex)	■	■	■	■	■	■	■	■	■	■	■
Vigabatrin	■	■	■	■	■	■	■	■	■	■	■
Zonisamide	■	■	■	■	■	■	■	■	■	■	■
<b>Antidepressants</b>											
Agomelatine	■	■	■	■	■	■	■	■	■	■	■
Amitriptyline	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Bupropion	■	■	■	■	■	■	■	■	■	■	■
Citalopram	■	■	■	■	■	■	■	■	■	■	■
Clomipramine	■	■	■	■	■	■	■	■	■	■	■
Desipramine	■	■	■	■	■	■	■	■	■	■	■
Desvenlafaxine	■	■	■	■	■	■	■	■	■	■	■
Doxepin	■	■	■	■	■	■	■	■	■	■	■
Duloxetine	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Escitalopram	■	■	■	■	■	■	■	■	■	■	■
Fluoxetine	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Fluvoxamine	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Imipramine	■	■	■	■	■	■	■	■	■	■	■
Lithium	■	■	■	■	■	■	■	■	■	■	■
Maprotiline	■	■	■	■	■	■	■	■	■	■	■
Mianserin	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Milnacipran	■	■	■	■	■	■	■	■	■	■	■
Mirtazapine	■	■	■	■	■	■	■	■	■	■	■
Nefazodone	■	■	■	■	■	■	■	■	■	■	■
Nortriptyline	■	■	■	■	■	■	■	■	■	■	■
Paroxetine	■	■	■	■	■	■	■	■	■	■	■
Phenelzine	■	■	■	■	■	■	■	■	■	■	■
Reboxetine	■	■	■	■	■	■	■	■	■	■	■
Sertraline	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Tranlycypromine	■	■	■	■	■	■	■	■	■	■	■
Trazodone	■	■	■	■	■	■	■	■	■	■	■
Trimipramine	■	■	■	■	■	■	■	■	■	■	■
Venlafaxine	■	■	■	■	■	■	■	■	■	■	■
Vortioxetine	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
<b>Anti-diabetics</b>											
Acarbose	■	■	■	■	■	■	■	■	■	■	■
Alogliptin	■	■	■	■	■	■	■	■	■	■	■
Canagliflozin	■	■	■	■	■	■	■	■	■	■	■
Dapagliflozin	■	■	■	■	■	■	■	■	■	■	■
Dulaglutide	■	■	■	■	■	■	■	■	■	■	■
Empagliflozin	■	■	■	■	■	■	■	■	■	■	■
Exenatide	■	■	■	■	■	■	■	■	■	■	■
Glibenclamide (Glyburide)	■	■	■	■	■	■	■	■	■	■	■
Gliclazide	■	■	■	■	■	■	■	■	■	■	■
Glimepiride	■	■	■	■	■	■	■	■	■	■	■
Glipizide	■	■	■	■	■	■	■	■	■	■	■
Insulin	■	■	■	■	■	■	■	■	■	■	■
Linagliptin	■	■	■	■	■	■	■	■	■	■	■
Liraglutide	■	■	■	■	■	■	■	■	■	■	■
ATV/r	■	■	■	■	■	■	■	■	■	■	■
Metformin	■	■	■	■	■	■	■	■	■	■	■
Nateglinide	■	■	■	■	■	■	■	■	■	■	■
Proglitazone	■	■	■	■	■	■	■	■	■	■	■
Repaglinide	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Rosiglitazone	■	■	■	■	■	■	■	■	■	■	■
Saxagliptin	■	■	■	■	■	■	■	■	■	■	■
Semaglutide	■	■	■	■	■	■	■	■	■	■	■
Sitagliptin	■	■	■	■	■	■	■	■	■	■	■
Tolbutamide	■	■	■	■	■	■	■	■	■	■	■
Vildagliptin	■	■	■	■	■	■	■	■	■	■	■

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	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Antifungals</b>											
Amphotericin B	■	■	■	■	■	■	■	■	■	■	■
Anidulafungin	■	■	■	■	■	■	■	■	■	■	■
Caspofungin	▲	▲	▲	■	■	■	■	■	■	■	■
Clotrimazole (pessary, troche)	■	■	■	■	■	■	■	■	■	■	■
Clotrimazole (topical)	■	■	■	■	■	■	■	■	■	■	■
Fluconazole	■	■	■	■	▲	▲	■	■	■	■	■
Flucytosine	■	■	■	■	■	■	■	■	■	■	■
Griseofulvin	■	■	■	■	■	■	■	■	■	■	■
Isavuconazole	●	●	■	●	●	■	■	■	■	■	■
Itraconazole	■	■	■	■	■	■	■	■	■	■	■
Ketoconazole	■	■	■	■	■	■	■	■	■	■	■
Miconazole	■	■	■	■	■	■	■	■	■	■	■
Nystatin	■	■	■	■	■	■	■	■	■	■	■
Posaconazole	■	■	■	■	■	■	■	■	■	■	■
Terbinafine	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Voriconazole	■	■	■	■	■	■	■	■	■	■	■
<b>Antihistamines</b>											
Astemizole	●	●	●	●	●	●	●	●	●	●	●
Cetirizine	■	■	■	■	■	■	■	■	■	■	■
Chlorphenamine	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Diphenhydramine	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Fexofenadine	■	■	■	■	■	■	■	■	■	■	■
Levocetirizine	■	■	■	■	■	■	■	■	■	■	■
Loratadine	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Promethazine	■	■	■	■	■	■	■	■	■	■	■
Terfenadine	●	●	●	●	●	●	●	●	●	●	●
<b>Antimigraine Agents</b>											
Almotriptan	■	■	■	■	■	■	■	■	■	■	■
Dihydroergotamine	●	●	●	●	●	●	●	●	●	●	●
Eletriptan	●	●	●	●	●	●	●	●	●	●	●
Ergotamine	●	●	●	●	●	●	●	●	●	●	●
Rizatriptan	■	■	■	■	■	■	■	■	■	■	■
Sumatriptan	■	■	■	■	■	■	■	■	■	■	■
Zolmitriptan	■	■	■	■	■	■	■	■	■	■	■
<b>Antiprotozoals</b>											
Amodiaquine	▲	▲	▲	■	■	■	■	■	■	■	■
Artemisinin	■	■	■	■	■	■	■	■	■	■	■
Atovaquone	■	■	■	■	■	■	■	■	■	■	■
Benznidazole	■	■	■	■	■	■	■	■	■	■	■
Chloroquine	■	■	■	▲	▲	▲	■	■	■	■	■
Diloxanide	■	■	■	■	■	■	■	■	■	■	■
Eflornithine	■	■	■	■	■	■	■	■	■	■	■
Halofantrine	●	●	●	●	●	●	●	●	●	●	●
Hydroxychloroquine	■	■	■	▲	▲	▲	▲	▲	▲	▲	▲
Lumefantrine	■	■	■	■	■	■	■	■	■	■	■
Mefloquine	■	■	■	■	■	■	■	■	■	■	■
Meglumine antimoniate	■	■	■	■	■	■	■	■	■	■	■
Melarsoprol	■	■	■	■	■	■	■	■	■	■	■
Miltefosine	■	■	■	■	■	■	■	■	■	■	■
Nifurtimox	■	■	■	■	■	■	■	■	■	■	■
Paromomycin	■	■	■	■	■	■	■	■	■	■	■
Pentamidine	■	■	■	■	■	■	■	■	■	■	■
Piperazine	■	■	■	■	■	■	■	■	■	■	■
Primaquine	■	■	■	■	■	■	■	■	■	■	■
Proguanil	■	■	■	■	■	■	■	■	■	■	■
Pyrimethamine	■	■	■	■	■	■	■	■	■	■	■
Quinine	■	■	■	■	■	■	■	■	■	■	■
Sodium stibogluconate	■	■	■	■	■	■	■	■	■	■	■
Sulfadoxine	■	■	■	■	■	■	■	■	■	■	■

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**Key to abbreviations**

ATV	Atazanavir alone (Reyataz <sup>®</sup> )	DRV/r	Darunavir + Ritonavir (Prezista <sup>®</sup> +Norvir <sup>®</sup> )
ATV/c	Atazanavir/cobicistat (Evotaz <sup>®</sup> )	FPV	Fosamprenavir (Telzir <sup>®</sup> , Lexiva <sup>®</sup> )
ATV/r	Atazanavir + Ritonavir (Reyataz <sup>®</sup> +Norvir <sup>®</sup> )	LPV	Lopinavir (Kaletra <sup>®</sup> )
DRV/c	Darunavir/cobicistat (Rezolsta <sup>®</sup> , Prezcofix <sup>®</sup> )	RTV	Ritonavir (Norvir <sup>®</sup> )
SYM	Darunavir/cobicistat/ FTC/TAF (Symtuza <sup>®</sup> )	TPV	Tipranavir (Aptivus <sup>®</sup> )

**Key to symbols**

●	These drugs should not be coadministered
■	Potential interaction - may require close monitoring, alteration of drug dosage or timing of administration
▲	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment is unlikely to be required
◆	No clinically significant interaction expected

Where advice differs between countries, and/or between boosted and unboosted regimens, the charts reflect the more cautious option.

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# Interactions with Protease Inhibitors

Charts revised October 2021. Full information available at [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)

Page 3 of 6

Please note that if a drug is not listed it cannot automatically be assumed it is safe to coadminister.

	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Antipsychotics/Neuroleptics</b>											
Amisulpride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Aripiprazole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Asenapine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Chlorpromazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Clozapine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fluphenazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Haloperidol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Iloperidone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Levomopromazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Olanzapine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Paliperidone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Perazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Periciazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Perphenazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pimozide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pipotiazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Quetiapine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Risperidone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sulpiride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Thioridazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tiapride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ziprasidone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Zotepine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Zuclopenthixol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<b>Antivirals</b>											
Aciclovir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Adefovir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Amantadine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bulevirtide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cidofovir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Daclatasvir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Elbasvir/Grazoprevir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Entecavir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Famciclovir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Foscarnet	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ganciclovir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Glecaprevir/Pibrentasvir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ledipasvir/Sofosbuvir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Letermovir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ombitasvir/Paritaprevir/r	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ombitasvir/Paritaprevir/r + Dasabuvir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Oseltamivir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Remdesivir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ribavirin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Rimantadine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Simeprevir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sofosbuvir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sofosbuvir/Velpatasvir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sofosbuvir/Velpatasvir/Voxilaprevir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Telbivudine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tenofovir alafenamide (HBV)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Valaciclovir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Zanamivir	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Anxiolytics/Hypnotics/Sedatives</b>											
Alprazolam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bromazepam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bupirone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Chlordiazepoxide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Clobazam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Clorazepate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Diazepam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Estazolam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Flunitrazepam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Flurazepam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hydroxyzine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lorazepam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lormetazepam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Midazolam (oral)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Midazolam (parenteral)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Oxazepam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Temazepam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Triazolam	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Zaleplon	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Zolpidem	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Zopiclone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<b>Beta Blockers</b>											
Atenolol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bisoprolol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Carvedilol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Metoprolol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nebivolol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Oxprenolol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pindolol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Propranolol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Timolol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<b>Bronchodilators</b>											
Acidinium bromide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Aminophylline	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Formoterol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Glycopyrronium bromide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Indacaterol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ipratropium bromide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Montelukast	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Olodaterol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Roflumilast	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Salbutamol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Salmeterol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Terbutaline	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Theophylline	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tiotropium bromide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Umeclidinium bromide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Vilanterol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<b>Calcium Channel Blockers</b>											
Amlodipine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Diltiazem	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Felodipine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nicardipine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nifedipine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nisoldipine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nitrendipine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Verapamil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

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**Key to abbreviations**

ATV	Atazanavir alone (Reyataz®)	DRV/r	Darunavir + Ritonavir (Prezista®+Norvir®)
ATV/c	Atazanavir/cobicistat (Evotaz®)	FPV	Fosamprenavir (Telzir®, Lexiva®)
ATV/r	Atazanavir + Ritonavir (Reyataz®+Norvir®)	LPV	Lopinavir (Kaletra®)
DRV/c	Darunavir/cobicistat (Rezolsta®, Prezcofix®)	RTV	Ritonavir (Norvir®)
SYM	Darunavir/cobicistat/ FTC/TAF (Symtuza®)	TPV	Tipranavir (Aptivus®)

**Key to symbols**

●	These drugs should not be coadministered
■	Potential interaction - may require close monitoring, alteration of drug dosage or timing of administration
▲	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment is unlikely to be required
◆	No clinically significant interaction expected

Where advice differs between countries, and/or between boosted and unboosted regimens, the charts reflect the more cautious option.

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# Interactions with Protease Inhibitors

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Page 4 of 6

Please note that if a drug is not listed it cannot automatically be assumed it is safe to coadminister.

	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Cancer Therapies</b>											
Abiraterone	▲	▲	▲	◆	◆	◆	◆	◆	▲	◆	◆
Anastrozole	▲	▲	▲	◆	◆	◆	◆	◆	▲	◆	◆
Asparaginase	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Avelumab	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bevacizumab	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bexarotene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bleomycin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bortezomib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Brentuximab vedotin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Capecitabine	◆	◆	◆	◆	▲	◆	◆	◆	◆	◆	◆
Carboplatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cetuximab	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Chlorambucil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cisplatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cyclophosphamide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cytarabine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dacarbazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dactinomycin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dasatinib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Daurorubicin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Docetaxel	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Doxorubicin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Droloxifene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Enzalutamide	●	●	●	●	●	●	●	●	●	●	●
Epirubicin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Erlotinib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Estramustine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Etoposide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Everolimus	●	●	●	●	●	●	●	●	●	●	●
Exemestane	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fludarabine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fluorouracil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Formestane	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Gefitinib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Gemcitabine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ifosfamide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Imatinib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Irinotecan	●	●	●	◆	◆	◆	◆	◆	◆	◆	◆
Lapatinib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lenalidomide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Letrozole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mercaptopurine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mesna	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Methotrexate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mitoxantrone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nilotinib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Oxaliplatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Paclitaxel	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pazopanib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Polatuzumab vedotin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Procarbazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Rituximab	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sorafenib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sunitinib	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tamoxifen	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Temsirolimus	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Topotecan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Toremifene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Trastuzumab	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Trastuzumab emtansine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Vinblastine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Vincristine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Vinorelbine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Vorinostat	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

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	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Contraceptives/HRT</b>											
Bazedoxifene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Conjugated estrogens	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Desogestrel (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Desogestrel (POP)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Drospirenone (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Drospirenone (HRT)	◆	●	◆	◆	◆	◆	◆	◆	◆	◆	◆
Drospirenone (POP)	▲	●	▲	▲	▲	▲	▲	▲	▲	▲	▲
Hydrogesterone (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Estradiol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ethinylestradiol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Etonogestrel (implant)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Etonogestrel (vaginal ring)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Gestodene (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Levonorgestrel (COC)	◆	▲	▲	◆	◆	◆	◆	◆	◆	◆	◆
Levonorgestrel (emergency contraception)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Levonorgestrel (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Levonorgestrel (implant)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Levonorgestrel (IUD)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Levonorgestrel (POP)	◆	▲	▲	◆	◆	◆	◆	◆	◆	◆	◆
Medroxyprogesterone (depot injection)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Medroxyprogesterone (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norelgestromin (patch)	◆	◆	▲	◆	◆	◆	◆	◆	◆	◆	◆
Norethisterone [Norethindrone] (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norethisterone [Norethindrone] (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norethisterone [Norethindrone] (IM depot)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norethisterone [Norethindrone] (POP)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Norgestimate (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norgestimate (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norgestrel (COC)	◆	◆	▲	◆	◆	◆	◆	◆	◆	◆	◆
Norgestrel (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Progesterone (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tibolone (HRT)	◆	◆	▲	◆	◆	◆	◆	◆	◆	◆	◆
Ulipristal	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
<b>Erectile Dysfunctional Agents</b>											
Avanafil	●	●	●	●	●	●	●	●	●	●	●
Sildenafil (Erectile Dysfunction)	●	●	●	●	●	●	●	●	●	●	●
Tadalafil (Erectile Dysfunction)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Vardenafil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Yohimbine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<b>Gastrointestinal Agents</b>											
Alosetron	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Antacids	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bisacodyl	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cimetidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cisapride	●	●	●	●	●	●	●	●	●	●	●
Dexlansoprazole	●	●	●	◆	◆	◆	◆	◆	◆	◆	◆
Esomeprazole	●	●	●	◆	◆	◆	◆	◆	◆	◆	◆
Famotidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lactulose	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lansoprazole	●	●	●	◆	◆	◆	◆	◆	◆	◆	◆
Loperamide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mesalazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Omeprazole	●	●	●	◆	◆	◆	◆	◆	◆	◆	◆
Pantoprazole	●	●	●	◆	◆	◆	◆	◆	◆	◆	◆
Prucalopride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Rabeprazole	●	●	●	◆	◆	◆	◆	◆	◆	◆	◆
Ranitidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Senna	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<b>Gastrointestinal Agents (anti-emetics)</b>											
Aprepitant	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dolasetron	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Domperidone	●	●	●	●	●	●	●	●	●	●	●
Dronabinol	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Granisetron	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Metoclopramide	◆	▲	▲	◆	◆	◆	◆	◆	◆	◆	◆
Ondansetron	◆	◆	◆	▲	▲	▲	▲	▲	▲	▲	▲
Prochlorperazine	◆	◆	◆	▲	▲	▲	▲	▲	▲	▲	▲

**Key to abbreviations**

ATV	Atazanavir alone (Reyataz®)	DRV/r	Darunavir + Ritonavir (Prezista®+Norvir®)
ATV/c	Atazanavir/cobicistat (Evotaz®)	FPV	Fosamprenavir (Telzir®, Lexiva®)
ATV/r	Atazanavir + Ritonavir (Reyataz®+Norvir®)	LPV	Lopinavir (Kaletra®)
DRV/c	Darunavir/cobicistat (Rezolsta®, Precobix®)	RTV	Ritonavir (Norvir®)
SYM	Darunavir/cobicistat/ FTC/TAF (Symtuza®)	TPV	Tipranavir (Aptivus®)

**Key to symbols**

●	These drugs should not be coadministered
■	Potential interaction - may require close monitoring, alteration of drug dosage or timing of administration
▲	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment is unlikely to be required
◆	No clinically significant interaction expected

Where advice differs between countries, and/or between boosted and unboosted regimens, the charts reflect the more cautious option.

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# Interactions with Protease Inhibitors

Charts revised October 2021. Full information available at [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)

Page 5 of 6

Please note that if a drug is not listed it cannot automatically be assumed it is safe to coadminister.

	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Herbals/Supplements/Vitamins</b>											
African potato	▲	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Aloe vera	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ascorbic Acid (vitamin C) [alone]	◆	◆	◆	◆	◆	◆	◆	▲	◆	◆	◆
Ascorbic Acid [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ashwagandha (Withania somnifera)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ayahuasca	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Black cohosh	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Calcium supplements	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cat's claw (Uncaria tomentosa)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Colecalciferol (vitamin D3) [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Colecalciferol [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cubeb pepper (Piper cubeba)	▲	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cyanocobalamin [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cyanocobalamin [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Echinacea	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Eucalyptus globulus	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ferrous fumarate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Folic acid [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Folic acid [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Garlic	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ginger (Zingiber officinale)	▲	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ginkgo biloba	◆	◆	◆	◆	◆	◆	▲	▲	◆	◆	◆
Ginseng (P. ginseng, P. quinquefolius)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Goldenseal root (Hydrastis canadensis)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Grapefruit juice	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Green tea extracts (Camellia sinensis)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Guggulsterone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hops (Humulus lupulus)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Inula racemosa	▲	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Iodine [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Iodine [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Iron supplements	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Liquorice (Glycyrrhiza glabra)	▲	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Magnesium supplements	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Malabar nut tree	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Menthol	▲	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Milk thistle (silymarin)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<b>Mucuna pruriens</b>	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Multivitamins	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nicotinamide [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nicotinamide [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Phytomenadione (vitamin K) [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Phytomenadione [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pyridoxine (vitamin B6) [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pyridoxine [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Quercetin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Red yeast rice	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Retinol (vitamin A) [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Retinol (vitamin A) [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Riboflavin (vitamin B2) [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Riboflavin [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Saw palmetto (Serenoa repens)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Seville orange juice	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
St John's Wort	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Thiamine (vitamin B1) [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Thiamine [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tocopherol (vitamin E) [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tocopherol (vitamin E) [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Turmeric (Curcuma longa)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Valerian	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

	ATV	ATV/c	ATV/r	DRV/c	SYM	DRV/r	FPV	IDV	LPV	RTV	TPV
<b>Hypertension / Heart Failure Agents</b>											
Aliskiren	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ambrisentan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Amiloride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Azilsartan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Benazepril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bendroflumethiazide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bosentan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Candesartan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Captopril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Chlortalidone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cilazapril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Clonidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dopamine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Doxazosin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Enalapril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Eplerenone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Epoprostenol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Eprosartan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fosinopril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Furosemide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hydralazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hydrochlorothiazide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Iloprost	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Indapamide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Irbesartan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Isosorbide dinitrate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ivabradine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Labetalol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lacidipine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lercanidipine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lisinopril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Losartan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Macitentan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Methyldopa	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Metolazone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Moxonidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Olmesartan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Perindopril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Prazosin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Quinapril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ramipril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ranolazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Riociguat	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sacubitril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Selexipag	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sildenafil (PAH)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sodium nitroprusside	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Spirolactone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tadalafil (PAH)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Telmisartan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Terazosin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Torsemide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Trandolapril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Treprostinil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Triamterene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Valsartan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Xipamide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<b>Illicit/Recreational</b>											
Alcohol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Amphetamine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cannabis	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cocaine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ecstasy (MDMA)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
GHB (Gamma-hydroxybutyrate)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Heroin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
LSD (Lysergic acid diethylamide)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mephedrone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Methamphetamine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Phencyclidine (PCP)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Poppers (Amyl nitrate)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

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### Key to abbreviations

ATV	Atazanavir alone (Reyataz <sup>®</sup> )	DRV/r	Darunavir + Ritonavir (Prezista <sup>®</sup> +Norvir <sup>®</sup> )
ATV/c	Atazanavir/cobicistat (Evotaz <sup>®</sup> )	FPV	Fosamprenavir (Telzir <sup>®</sup> , Lexiva <sup>®</sup> )
ATV/r	Atazanavir + Ritonavir (Reyataz <sup>®</sup> +Norvir <sup>®</sup> )	LPV	Lopinavir (Kaletra <sup>®</sup> )
DRV/c	Darunavir/cobicistat (Rezolsta <sup>®</sup> , Precobix <sup>®</sup> )	RTV	Ritonavir (Norvir <sup>®</sup> )
SYM	Darunavir/cobicistat/ FTC/TAF (Symtuza <sup>®</sup> )	TPV	Tipranavir (Aptivus <sup>®</sup> )

### Key to symbols

◆	These drugs should not be coadministered
■	Potential interaction - may require close monitoring, alteration of drug dosage or timing of administration
▲	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment is unlikely to be required
◆	No clinically significant interaction expected

Where advice differs between countries, and/or between boosted and unboosted regimens, the charts reflect the more cautious option.

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