

Interactions with NRTIs

Charts revised 31 May 2023. Full information available at www.hiv-druginteractions.org

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

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Anaesthetics & Muscle Relaxants							
Alcuronium	◆	◆	◆	◆	◆	◆	◆
Bupivacaine	◆	◆	◆	◆	◆	◆	◆
Cisatracurium	◆	◆	◆	◆	◆	◆	◆
Desflurane	◆	◆	◆	◆	◆	◆	◆
Dexmedetomidine	◆	◆	◆	◆	◆	◆	◆
Enflurane	◆	◆	◆	◆	◆	◆	◆
Ephedrine	◆	◆	◆	◆	◆	◆	◆
Etidocaine	◆	◆	◆	◆	◆	◆	◆
Halothane	◆	◆	◆	◆	◆	◆	◆
Isoflurane	◆	◆	◆	◆	◆	◆	◆
Ketamine	◆	◆	◆	◆	◆	◆	◆
Minaxolone	◆	◆	◆	◆	◆	◆	◆
Nitrous oxide	◆	◆	◆	◆	◆	◆	◆
Propofol	◆	◆	◆	◆	◆	◆	◆
Rocuronium	◆	◆	◆	◆	◆	◆	◆
Sevoflurane	◆	◆	◆	◆	◆	◆	◆
Sufentanil	◆	◆	◆	◆	◆	◆	◆
Suxamethonium (succinylcholine)	◆	◆	◆	◆	◆	◆	◆
Tetracaine	◆	◆	◆	◆	◆	◆	◆
Thiopental	◆	◆	◆	◆	◆	◆	◆
Tizanidine	◆	◆	◆	◆	◆	◆	◆
Vecuronium	◆	◆	◆	◆	◆	◆	◆
Analgesics							
Alfentanil	◆	◆	◆	◆	◆	◆	◆
Aspirin	◆	◆	◆	◆	◆	◆	◆
Buprenorphine	◆	◆	◆	◆	◆	◆	◆
Celecoxib	◆	◆	◆	◆	◆	◆	◆
Codeine	◆	◆	◆	◆	◆	◆	◆
Dextropropoxyphene	◆	◆	◆	◆	◆	◆	◆
Diamorphine (diacetylmorphine)	◆	◆	◆	◆	◆	◆	◆
Diclofenac	◆	◆	◆	◆	◆	◆	◆
Dihydrocodeine	◆	◆	◆	◆	◆	◆	◆
Fentanyl	◆	◆	◆	◆	◆	◆	◆
Hydrocodone	◆	◆	◆	◆	◆	◆	◆
Hydromorphone	◆	◆	◆	◆	◆	◆	◆
Ibuprofen	◆	◆	◆	◆	◆	◆	◆
Ketorolac	◆	◆	◆	◆	◆	◆	◆
Mefenamic acid	◆	◆	◆	◆	◆	◆	◆
Meloxicam	◆	◆	◆	◆	◆	◆	◆
Methadone	◆	◆	◆	◆	◆	◆	◆
Morphine	◆	◆	◆	◆	◆	◆	◆
Naproxen	◆	◆	◆	◆	◆	◆	◆
Nimesulide	◆	◆	◆	◆	◆	◆	◆
Oxycodone	◆	◆	◆	◆	◆	◆	◆
Paracetamol (Acetaminophen)	◆	◆	◆	◆	◆	◆	◆
Pethidine (Meperidine)	◆	◆	◆	◆	◆	◆	◆
Piroxicam	◆	◆	◆	◆	◆	◆	◆
Tapentadol	◆	◆	◆	◆	◆	◆	◆
Tramadol	◆	◆	◆	◆	◆	◆	◆
Anthelmintics							
Albendazole	◆	◆	◆	◆	◆	◆	◆
Diethylcarbamazine	◆	◆	◆	◆	◆	◆	◆
Ivermectin	◆	◆	◆	◆	◆	◆	◆
Levamisole (Ergamisol)	◆	◆	◆	◆	◆	◆	◆
Mebendazole	◆	◆	◆	◆	◆	◆	◆
Niclosamide	◆	◆	◆	◆	◆	◆	◆
Oxamniquine	◆	◆	◆	◆	◆	◆	◆
Praziquantel	◆	◆	◆	◆	◆	◆	◆
Pyrantel	◆	◆	◆	◆	◆	◆	◆
Suramin sodium	◆	◆	◆	◆	◆	◆	◆
Triclabendazole	◆	◆	◆	◆	◆	◆	◆
Antiarrhythmics							
Amiodarone	◆	◆	◆	◆	◆	◆	◆
Bepidil	◆	◆	◆	◆	◆	◆	◆
Digoxin	◆	◆	◆	◆	◆	◆	◆
Disopyramide	◆	◆	◆	◆	◆	◆	◆
Dofetilide	◆	◆	◆	◆	◆	◆	◆
Dronedarone	◆	◆	◆	◆	◆	◆	◆
Flecainide	◆	◆	◆	◆	◆	◆	◆
Lidocaine (Lignocaine)	◆	◆	◆	◆	◆	◆	◆
Mexiletine	◆	◆	◆	◆	◆	◆	◆
Propafenone	◆	◆	◆	◆	◆	◆	◆
Quinidine	◆	◆	◆	◆	◆	◆	◆

For personal use only. Not for distribution.

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Antibacterials							
Amikacin	◆	◆	◆	◆	◆	◆	◆
Amoxicillin	◆	◆	◆	◆	◆	◆	◆
Ampicillin	◆	◆	◆	◆	◆	◆	◆
Azithromycin	◆	◆	◆	◆	◆	◆	◆
Bedaquiline	◆	◆	◆	◆	◆	◆	◆
Capreomycin	◆	◆	◆	◆	◆	◆	◆
Cefalexin	◆	◆	◆	◆	◆	◆	◆
Cefazolin	◆	◆	◆	◆	◆	◆	◆
Cefixime	◆	◆	◆	◆	◆	◆	◆
Cefotaxime	◆	◆	◆	◆	◆	◆	◆
Ceftazidime	◆	◆	◆	◆	◆	◆	◆
Ceftriaxone	◆	◆	◆	◆	◆	◆	◆
Chloramphenicol	◆	◆	◆	◆	◆	◆	◆
Ciprofloxacin	◆	◆	◆	◆	◆	◆	◆
Clarithromycin	◆	◆	◆	◆	◆	◆	◆
Clavulanic acid	◆	◆	◆	◆	◆	◆	◆
Clindamycin	◆	◆	◆	◆	◆	◆	◆
Clofazimine	◆	◆	◆	◆	◆	◆	◆
Cloxacillin	◆	◆	◆	◆	◆	◆	◆
Cycloserine	◆	◆	◆	◆	◆	◆	◆
Dapsone	◆	◆	◆	◆	◆	◆	◆
Daptomycin	◆	◆	◆	◆	◆	◆	◆
Delamanid	◆	◆	◆	◆	◆	◆	◆
Doxycycline	◆	◆	◆	◆	◆	◆	◆
Ertapenem	◆	◆	◆	◆	◆	◆	◆
Erythromycin	◆	◆	◆	◆	◆	◆	◆
Ethambutol	◆	◆	◆	◆	◆	◆	◆
Ethionamide	◆	◆	◆	◆	◆	◆	◆
Flucloxacillin	◆	◆	◆	◆	◆	◆	◆
Fosfomycin	◆	◆	◆	◆	◆	◆	◆
Gentamicin	◆	◆	◆	◆	◆	◆	◆
Imipenem/Cilastatin	◆	◆	◆	◆	◆	◆	◆
Isoniazid	◆	◆	◆	◆	◆	◆	◆
Kanamycin	◆	◆	◆	◆	◆	◆	◆
Levofloxacin	◆	◆	◆	◆	◆	◆	◆
Linezolid	◆	◆	◆	◆	◆	◆	◆
Meropenem	◆	◆	◆	◆	◆	◆	◆
Metronidazole	◆	◆	◆	◆	◆	◆	◆
Moxifloxacin	◆	◆	◆	◆	◆	◆	◆
Nitrofurantoin	◆	◆	◆	◆	◆	◆	◆
Ofloxacin	◆	◆	◆	◆	◆	◆	◆
Para-aminosalicylic acid	◆	◆	◆	◆	◆	◆	◆
Penicillins	◆	◆	◆	◆	◆	◆	◆
Piperacillin	◆	◆	◆	◆	◆	◆	◆
Pretomanid	◆	◆	◆	◆	◆	◆	◆
Pyrazinamide	◆	◆	◆	◆	◆	◆	◆
Rifabutin	◆	◆	◆	◆	◆	◆	◆
Rifampicin	◆	◆	◆	◆	◆	◆	◆
Rifapentine	◆	◆	◆	◆	◆	◆	◆
Rifaximin	◆	◆	◆	◆	◆	◆	◆
Spectinomycin	◆	◆	◆	◆	◆	◆	◆
Streptomycin	◆	◆	◆	◆	◆	◆	◆
Sulfadiazine	◆	◆	◆	◆	◆	◆	◆
Tazobactam	◆	◆	◆	◆	◆	◆	◆
Telithromycin	◆	◆	◆	◆	◆	◆	◆
Tetracyclines	◆	◆	◆	◆	◆	◆	◆
Tinidazole	◆	◆	◆	◆	◆	◆	◆
Trimethoprim/Sulfamethoxazole	◆	◆	◆	◆	◆	◆	◆
Vancomycin	◆	◆	◆	◆	◆	◆	◆
Anti-coagulant, Anti-platelet and Fibrinolytic							
Acenocoumarol	◆	◆	◆	◆	◆	◆	◆
Apixaban	◆	◆	◆	◆	◆	◆	◆
Argatroban	◆	◆	◆	◆	◆	◆	◆
Aspirin (anti-platelet)	◆	◆	◆	◆	◆	◆	◆
Betrixaban	◆	◆	◆	◆	◆	◆	◆
Clopidogrel	◆	◆	◆	◆	◆	◆	◆
Dabigatran	◆	◆	◆	◆	◆	◆	◆
Dalteparin	◆	◆	◆	◆	◆	◆	◆
Dipyridamole	◆	◆	◆	◆	◆	◆	◆
Edoxaban	◆	◆	◆	◆	◆	◆	◆
Enoxaparin	◆	◆	◆	◆	◆	◆	◆
Fondaparinux	◆	◆	◆	◆	◆	◆	◆
Heparin	◆	◆	◆	◆	◆	◆	◆
Phenprocoumon	◆	◆	◆	◆	◆	◆	◆
Prasugrel	◆	◆	◆	◆	◆	◆	◆
Rivaroxaban	◆	◆	◆	◆	◆	◆	◆
Streptokinase	◆	◆	◆	◆	◆	◆	◆
Ticagrelor	◆	◆	◆	◆	◆	◆	◆
Warfarin	◆	◆	◆	◆	◆	◆	◆

Key to abbreviations

ABC	Abacavir (Ziagen [®])	3TC	Lamivudine (EpiVir [®])
FTC	Emtricitabine (Emtriva [®])	TDF	Tenofovir disoproxil fumarate (Viread [®])
F/TAF	Emtricitabine + Tenofovir alafenamide (Descovy [®])	ZDV	Zidovudine (Retrovir [®])
F/TDF	Emtricitabine + Tenofovir-DF (Truvada [®])		

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.

© Liverpool Drug Interaction Group, University of Liverpool, 3rd Floor William Henry Duncan Building, 6 West Derby Street, Liverpool, L7 8TX.

We aim to ensure that information is accurate and consistent with current knowledge and practice. However, the University of Liverpool and its servants or agents shall not be responsible or in any way liable for the continued currency of information in this publication whether arising from negligence or otherwise howsoever or for any consequences arising therefrom. The University of Liverpool expressly exclude liability for errors, omissions or inaccuracies to the fullest extent permitted by law.

Interactions with NRTIs

Charts revised 31 May 2023. Full information available at www.hiv-druginteractions.org

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

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Anticonvulsants							
Carbamazepine	▲	◆	●	◆	◆	◆	▲
Cenobamate	◆	◆	◆	▲	◆	▲	◆
Clonazepam	◆	◆	◆	◆	◆	◆	◆
Eslicarbazepine	◆	◆	◆	◆	◆	◆	◆
Ethosuximide	◆	◆	◆	◆	◆	◆	■
Gabapentin	◆	◆	◆	◆	◆	◆	◆
Lacosamide	◆	◆	◆	◆	◆	◆	◆
Lamotrigine	◆	◆	◆	◆	◆	◆	◆
Levetiracetam	◆	◆	◆	◆	◆	◆	◆
Oxcarbazepine	◆	◆	●	◆	◆	◆	◆
Phenobarbital (Phenobarbitone)	▲	◆	●	◆	◆	◆	■
Phenytoin	▲	◆	●	◆	◆	◆	▲
Pregabalin	▲	◆	◆	◆	◆	◆	◆
Primidone	▲	◆	●	◆	◆	◆	■
Sodium valproate	◆	◆	◆	◆	◆	◆	■
Tiagabine	◆	◆	◆	◆	◆	◆	◆
Topiramate	◆	◆	◆	■	◆	■	◆
Valproate semisodium (Divalproex)	◆	◆	◆	◆	◆	◆	■
Valproic acid	◆	◆	◆	◆	◆	◆	■
Vigabatrin	◆	◆	◆	◆	◆	◆	◆
Zonisamide	◆	◆	◆	◆	◆	◆	◆
Antidepressants							
Agomelatine	◆	◆	◆	◆	◆	◆	◆
Amitriptyline	◆	◆	◆	◆	◆	◆	◆
Bupropion	◆	◆	◆	◆	◆	◆	◆
Citalopram	◆	◆	◆	◆	◆	◆	◆
Clomipramine	◆	◆	◆	◆	◆	◆	◆
Desipramine	◆	◆	◆	◆	◆	◆	◆
Desvenlafaxine	◆	◆	◆	◆	◆	◆	◆
Doxepin	◆	◆	◆	◆	◆	◆	◆
Duloxetine	◆	◆	◆	◆	◆	◆	◆
Escitalopram	◆	◆	◆	◆	◆	◆	◆
Fluoxetine	◆	◆	◆	◆	◆	◆	◆
Fluvoxamine	◆	◆	◆	◆	◆	◆	◆
Imipramine	◆	◆	◆	◆	◆	◆	◆
Lithium	◆	◆	◆	■	◆	■	◆
Maprotiline	◆	◆	◆	◆	◆	◆	◆
Mianserin	◆	◆	◆	◆	◆	◆	◆
Milnacipran	◆	◆	◆	◆	◆	◆	◆
Mirtazapine	◆	◆	◆	◆	◆	◆	◆
Nefazodone	◆	◆	◆	◆	◆	◆	◆
Nortriptyline	◆	◆	◆	◆	◆	◆	◆
Paroxetine	◆	◆	◆	◆	◆	◆	◆
Phenelzine	◆	◆	◆	◆	◆	◆	◆
Reboxetine	◆	◆	◆	◆	◆	◆	◆
Sertraline	◆	◆	◆	◆	◆	◆	◆
Tranylcypromine	◆	◆	◆	◆	◆	◆	◆
Trazodone	◆	◆	◆	◆	◆	◆	◆
Trimipramine	◆	◆	◆	◆	◆	◆	◆
Venlafaxine	◆	◆	◆	◆	◆	◆	◆
Vortioxetine	◆	◆	◆	◆	◆	◆	◆
Anti-diabetics							
Acarbose	◆	◆	◆	◆	◆	◆	◆
Alogliptin	◆	◆	◆	◆	◆	◆	◆
Canagliflozin	◆	◆	◆	■	◆	■	◆
Dapagliflozin	◆	◆	◆	◆	◆	◆	◆
Dulaglutide	◆	◆	◆	◆	◆	◆	◆
Empagliflozin	◆	◆	◆	◆	◆	◆	◆
Exenatide	◆	◆	◆	◆	◆	◆	◆
Glibenclamide (Glyburide)	◆	◆	◆	◆	◆	◆	◆
Glizalide	◆	◆	◆	◆	◆	◆	◆
Glimepiride	◆	◆	◆	◆	◆	◆	◆
Glipizide	◆	◆	◆	◆	◆	◆	◆
Insulin	◆	◆	◆	◆	◆	◆	◆
Linagliptin	◆	◆	◆	◆	◆	◆	◆
Liraglutide	◆	◆	◆	◆	◆	◆	◆
Metformin	◆	◆	◆	◆	◆	◆	◆
Nateglinide	◆	◆	◆	◆	◆	◆	◆
Pioglitazone	◆	◆	◆	◆	◆	◆	◆
Repaglinide	◆	◆	◆	◆	◆	◆	◆
Rosiglitazone	◆	◆	◆	◆	◆	◆	◆
Saxagliptin	◆	◆	◆	◆	◆	◆	◆
Semaglutide	◆	◆	◆	◆	◆	◆	◆
Sitagliptin	◆	◆	◆	◆	◆	◆	◆
Tirzepatide	◆	◆	◆	▲	◆	▲	◆
Tolbutamide	◆	◆	◆	◆	◆	◆	◆
Vildagliptin	◆	◆	◆	◆	◆	◆	◆

For personal use only. Not for distribution.

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Antifungals							
Amphotericin B	◆	◆	◆	■	◆	■	■
Anidulafungin	◆	◆	◆	◆	◆	◆	◆
Caspofungin	◆	◆	◆	◆	◆	◆	◆
Clotriazole (pessary, troche)	◆	◆	◆	◆	◆	◆	◆
Clotriazole (topical)	◆	◆	◆	◆	◆	◆	◆
Fluconazole	◆	◆	▲	■	◆	■	■
Flucytosine	◆	■	■	■	■	■	■
Griseofulvin	◆	◆	◆	◆	◆	◆	◆
Isavuconazole	◆	◆	▲	◆	◆	◆	◆
Itraconazole	◆	◆	■	■	◆	■	◆
Ketoconazole	◆	◆	■	■	◆	■	◆
Miconazole	◆	◆	◆	◆	◆	◆	◆
Nystatin	◆	◆	◆	◆	◆	◆	◆
Posaconazole	◆	◆	◆	■	◆	■	◆
Terbinafine	◆	◆	◆	◆	◆	◆	◆
Voriconazole	◆	◆	◆	■	◆	■	◆
Antihistamines							
Astemizole	◆	◆	◆	◆	◆	◆	◆
Cetirizine	◆	◆	◆	◆	◆	◆	◆
Chlorphenamine	◆	◆	◆	◆	◆	◆	◆
Diphenhydramine	◆	◆	◆	◆	◆	◆	◆
Fexofenadine	◆	◆	◆	◆	◆	◆	◆
Levocetirizine	◆	◆	◆	◆	◆	◆	◆
Loratadine	◆	◆	◆	◆	◆	◆	◆
Promethazine	◆	◆	◆	◆	◆	◆	◆
Terfenadine	◆	◆	◆	◆	◆	◆	◆
Antimigraine Agents							
Almotriptan	◆	◆	◆	◆	◆	◆	◆
Dihydroergotamine	◆	◆	◆	◆	◆	◆	◆
Eletriptan	◆	◆	◆	◆	◆	◆	◆
Ergotamine	◆	◆	◆	◆	◆	◆	◆
Rizatriptan	◆	◆	◆	◆	◆	◆	◆
Sumatriptan	◆	◆	◆	◆	◆	◆	◆
Zolmitriptan	◆	◆	◆	◆	◆	◆	◆
Antiprotozoals							
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	◆	▲	▲	▲	▲	▲	▲

Key to abbreviations

ABC	Abacavir (Ziagen [®])	3TC	Lamivudine (EpiVir [®])
FTC	Emtricitabine (Emtriva [®])	TDF	Tenofovir disoproxil fumarate (Viread [®])
F/TAF	Emtricitabine + Tenofovir alafenamide (Descovy [®])	ZDV	Zidovudine (Retrovir [®])
F/TDF	Emtricitabine + Tenofovir-DF (Truvada [®])		

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.

© Liverpool Drug Interaction Group, University of Liverpool, 3rd Floor William Henry Duncan Building, 6 West Derby Street, Liverpool, L7 8TX.

We aim to ensure that information is accurate and consistent with current knowledge and practice. However, the University of Liverpool and its servants or agents shall not be responsible or in any way liable for the continued currency of information in this publication whether arising from negligence or otherwise howsoever or for any consequences arising therefrom. The University of Liverpool expressly exclude liability for errors, omissions or inaccuracies to the fullest extent permitted by law.

Interactions with NRTIs

Charts revised 31 May 2023. Full information available at www.hiv-druginteractions.org

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

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Antipsychotics/Neuroleptics							
Amisulpride	◆	◆	◆	◆	◆	◆	◆
Aripiprazole	◆	◆	◆	◆	◆	◆	◆
Asenapine	◆	◆	◆	◆	◆	◆	◆
Chlorpromazine	◆	◆	◆	◆	◆	◆	◆
Clozapine	◆	◆	◆	◆	◆	◆	◆
Fluphenazine	◆	◆	◆	◆	◆	◆	◆
Haloperidol	◆	◆	◆	◆	◆	◆	◆
Iloperidone	◆	◆	◆	◆	◆	◆	◆
Levomepromazine	◆	◆	◆	◆	◆	◆	◆
Lurasidone	◆	◆	◆	◆	◆	◆	◆
Olanzapine	◆	◆	◆	◆	◆	◆	◆
Paliperidone	◆	◆	◆	◆	◆	◆	◆
Perazine	◆	◆	◆	◆	◆	◆	◆
Periciazine	◆	◆	◆	◆	◆	◆	◆
Perphenazine	◆	◆	◆	◆	◆	◆	◆
Pimozide	◆	◆	◆	◆	◆	◆	◆
Pipotiazine	◆	◆	◆	◆	◆	◆	◆
Quetiapine	◆	◆	◆	◆	◆	◆	◆
Risperidone	◆	◆	◆	◆	◆	◆	◆
Sulpiride	◆	◆	◆	◆	◆	◆	◆
Thioridazine	◆	◆	◆	◆	◆	◆	◆
Tiapride	◆	◆	◆	◆	◆	◆	◆
Ziprasidone	◆	◆	◆	◆	◆	◆	◆
Zotepine	◆	◆	◆	◆	◆	◆	◆
Zuclophenthixol	◆	◆	◆	◆	◆	◆	◆
Antivirals							
Aciclovir	◆	◆	◆	◆	◆	◆	◆
Adefovir	◆	◆	◆	◆	◆	◆	◆
Amantadine	◆	◆	◆	◆	◆	◆	◆
Brincidofovir	◆	◆	◆	◆	◆	◆	◆
Bulevirtide	◆	◆	◆	◆	◆	◆	◆
Cidofovir	◆	◆	◆	◆	◆	◆	◆
Daclatasvir	◆	◆	◆	◆	◆	◆	◆
Elbasvir/Grazoprevir	◆	◆	◆	◆	◆	◆	◆
Entecavir	◆	◆	◆	◆	◆	◆	◆
Famciclovir	◆	◆	◆	◆	◆	◆	◆
Favipiravir	◆	◆	◆	◆	◆	◆	◆
Foscarnet	◆	◆	◆	◆	◆	◆	◆
Ganciclovir	◆	◆	◆	◆	◆	◆	◆
Glecaprevir/Pibrentasvir	◆	◆	◆	◆	◆	◆	◆
Ledipasvir/Sofosbuvir	◆	◆	◆	◆	◆	◆	◆
Letermovir	◆	◆	◆	◆	◆	◆	◆
Maribavir	◆	◆	◆	◆	◆	◆	◆
Molnupiravir	◆	◆	◆	◆	◆	◆	◆
Nirmatrelvir/Ritonavir	◆	◆	◆	◆	◆	◆	◆
Ombitasvir/Paritaprevir/r	◆	◆	◆	◆	◆	◆	◆
Ombitasvir/Paritaprevir/r + Dasabuvir	◆	◆	◆	◆	◆	◆	◆
Oseltamivir	◆	◆	◆	◆	◆	◆	◆
Remdesivir	◆	◆	◆	◆	◆	◆	◆
Ribavirin	◆	◆	◆	◆	◆	◆	◆
Rimantadine	◆	◆	◆	◆	◆	◆	◆
Simeprevir	◆	◆	◆	◆	◆	◆	◆
Sofosbuvir	◆	◆	◆	◆	◆	◆	◆
Sofosbuvir/Velpatasvir	◆	◆	◆	◆	◆	◆	◆
Sofosbuvir/Velpatasvir/Voxilaprevir	◆	◆	◆	◆	◆	◆	◆
Sotrovimab	◆	◆	◆	◆	◆	◆	◆
Tecovirimat	◆	◆	◆	◆	◆	◆	◆
Telbivudine	◆	◆	◆	◆	◆	◆	◆
Tenofovir alafenamide (HBV)	◆	◆	◆	◆	◆	◆	◆
Tixagevimab/Cilgavimab	◆	◆	◆	◆	◆	◆	◆
Valaciclovir	◆	◆	◆	◆	◆	◆	◆
Zanamivir	◆	◆	◆	◆	◆	◆	◆

For personal use only. Not for distribution.

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Anxiolytics/Hypnotics/ Sedatives							
Alprazolam	◆	◆	◆	◆	◆	◆	◆
Bromazepam	◆	◆	◆	◆	◆	◆	◆
Buspirone	◆	◆	◆	◆	◆	◆	◆
Chlordiazepoxide	◆	◆	◆	◆	◆	◆	◆
Clobazam	◆	◆	◆	◆	◆	◆	◆
Clorazepate	◆	◆	◆	◆	◆	◆	◆
Diazepam	◆	◆	◆	◆	◆	◆	◆
Estazolam	◆	◆	◆	◆	◆	◆	◆
Flunitrazepam	◆	◆	◆	◆	◆	◆	◆
Flurazepam	◆	◆	◆	◆	◆	◆	◆
Hydroxyzine	◆	◆	◆	◆	◆	◆	◆
Lorazepam	◆	◆	◆	◆	◆	◆	◆
Lormetazepam	◆	◆	◆	◆	◆	◆	◆
Melatonin	◆	◆	◆	◆	◆	◆	◆
Midazolam (oral)	◆	◆	◆	◆	◆	◆	◆
Midazolam (parenteral)	◆	◆	◆	◆	◆	◆	◆
Oxazepam	◆	◆	◆	◆	◆	◆	◆
Temazepam	◆	◆	◆	◆	◆	◆	◆
Triazolam	◆	◆	◆	◆	◆	◆	◆
Zaleplon	◆	◆	◆	◆	◆	◆	◆
Zolpidem	◆	◆	◆	◆	◆	◆	◆
Zopiclone	◆	◆	◆	◆	◆	◆	◆
Beta Blockers							
Atenolol	◆	◆	◆	◆	◆	◆	◆
Bisoprolol	◆	◆	◆	◆	◆	◆	◆
Carvedilol	◆	◆	◆	◆	◆	◆	◆
Metoprolol	◆	◆	◆	◆	◆	◆	◆
Nebivolol	◆	◆	◆	◆	◆	◆	◆
Oxprenolol	◆	◆	◆	◆	◆	◆	◆
Pindolol	◆	◆	◆	◆	◆	◆	◆
Propranolol	◆	◆	◆	◆	◆	◆	◆
Sotalol	◆	◆	◆	◆	◆	◆	◆
Timolol	◆	◆	◆	◆	◆	◆	◆
Bisphosphonates							
Alendronic acid (Alendronate)	◆	◆	◆	◆	◆	◆	◆
Ibandronic acid (Ibandronate)	◆	◆	◆	◆	◆	◆	◆
Risedronic acid (Risedronate)	◆	◆	◆	◆	◆	◆	◆
Zoledronic acid (Zoledronate)	◆	◆	◆	◆	◆	◆	◆
Bronchodilators							
Acidinium bromide	◆	◆	◆	◆	◆	◆	◆
Aminophylline	◆	◆	◆	◆	◆	◆	◆
Formoterol	◆	◆	◆	◆	◆	◆	◆
Glycopyrronium bromide	◆	◆	◆	◆	◆	◆	◆
Indacaterol	◆	◆	◆	◆	◆	◆	◆
Ipratropium bromide	◆	◆	◆	◆	◆	◆	◆
Montelukast	◆	◆	◆	◆	◆	◆	◆
Olodaterol	◆	◆	◆	◆	◆	◆	◆
Roflumilast	◆	◆	◆	◆	◆	◆	◆
Salbutamol	◆	◆	◆	◆	◆	◆	◆
Salmeterol	◆	◆	◆	◆	◆	◆	◆
Terbutaline	◆	◆	◆	◆	◆	◆	◆
Theophylline	◆	◆	◆	◆	◆	◆	◆
Tiotropium bromide	◆	◆	◆	◆	◆	◆	◆
Umeclidinium bromide	◆	◆	◆	◆	◆	◆	◆
Vilanterol	◆	◆	◆	◆	◆	◆	◆
Calcium Channel Blockers							
Amlodipine	◆	◆	◆	◆	◆	◆	◆
Diltiazem	◆	◆	◆	◆	◆	◆	◆
Felodipine	◆	◆	◆	◆	◆	◆	◆
Nicardipine	◆	◆	◆	◆	◆	◆	◆
Nifedipine	◆	◆	◆	◆	◆	◆	◆
Nisoldipine	◆	◆	◆	◆	◆	◆	◆
Nitrendipine	◆	◆	◆	◆	◆	◆	◆
Verapamil	◆	◆	◆	◆	◆	◆	◆

Key to abbreviations

ABC	Abacavir (Ziagen [®])	3TC	Lamivudine (EpiVir [®])
FTC	Emtricitabine (Emtriva [®])	TDF	Tenofovir disoproxil fumarate (Viread [®])
F/TAF	Emtricitabine + Tenofovir alafenamide (Descovy [®])	ZDV	Zidovudine (Retrovir [®])
F/TDF	Emtricitabine + Tenofovir-DF (Truvada [®])		

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.

© Liverpool Drug Interaction Group, University of Liverpool, 3rd Floor William Duncan Building, 6 West Derby Street, Liverpool, L7 8TX.

We aim to ensure that information is accurate and consistent with current knowledge and practice. However, the University of Liverpool and its servants or agents shall not be responsible or in any way liable for the continued currency of information in this publication whether arising from negligence or otherwise howsoever or for any consequences arising therefrom. The University of Liverpool expressly exclude liability for errors, omissions or inaccuracies to the fullest extent permitted by law.

Interactions with NRTIs

Charts revised 31 May 2023. Full information available at www.hiv-druginteractions.org

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

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Cancer Therapies							
Abemaciclib	◆	◆	◆	◆	◆	◆	◆
Abiraterone	◆	◆	◆	◆	◆	◆	◆
Acalabrutinib	◆	◆	◆	◆	◆	◆	◆
Anastrozole	◆	◆	◆	◆	◆	◆	◆
Apalutamide	▲	◆	◆	◆	◆	◆	◆
Asparaginase	◆	◆	◆	◆	◆	◆	◆
Avelumab	◆	◆	◆	◆	◆	◆	◆
Bevacizumab	◆	◆	◆	◆	◆	◆	◆
Bexarotene	◆	◆	◆	◆	◆	◆	◆
Bleomycin	◆	◆	◆	◆	◆	◆	◆
Blinatumomab	◆	◆	◆	◆	◆	◆	◆
Bortezomib	◆	◆	◆	◆	◆	◆	◆
Bosutinib	◆	◆	◆	◆	◆	◆	◆
Brentuximab vedotin	◆	◆	◆	◆	◆	◆	◆
Cabazitaxel	◆	◆	◆	◆	◆	◆	◆
Cabozantinib	◆	◆	◆	◆	◆	◆	◆
Capecitabine	▲	▲	▲	▲	▲	▲	▲
Carboplatin	◆	◆	◆	◆	◆	◆	◆
Cetuximab	◆	◆	◆	◆	◆	◆	◆
Chlorambucil	◆	◆	◆	◆	◆	◆	◆
Cisplatin	◆	◆	◆	◆	◆	◆	◆
Cyclophosphamide	◆	◆	◆	◆	◆	◆	◆
Cytarabine	◆	◆	◆	◆	◆	◆	◆
Dacarbazine	◆	◆	◆	◆	◆	◆	◆
Dactinomycin	◆	◆	◆	◆	◆	◆	◆
Dasatinib	◆	◆	◆	◆	◆	◆	◆
Daunorubicin	◆	◆	◆	◆	◆	◆	◆
Docetaxel	◆	◆	◆	◆	◆	◆	◆
Doxorubicin	◆	◆	◆	◆	◆	◆	◆
Droloxifene	◆	◆	◆	◆	◆	◆	◆
Enzalutamide	▲	◆	◆	◆	◆	◆	◆
Epirubicin	◆	◆	◆	◆	◆	◆	◆
Erlotinib	◆	◆	◆	◆	◆	◆	◆
Estramustine	◆	◆	◆	◆	◆	◆	◆
Etoposide	◆	◆	◆	◆	◆	◆	◆
Everolimus	◆	◆	◆	◆	◆	◆	◆
Exemestane	◆	◆	◆	◆	◆	◆	◆
Fludarabine	◆	◆	◆	◆	◆	◆	◆
Fluorouracil	▲	▲	▲	▲	▲	▲	▲
Formestane	◆	◆	◆	◆	◆	◆	◆
Gefitinib	◆	◆	◆	◆	◆	◆	◆
Gemcitabine	◆	◆	◆	◆	◆	◆	◆
Hydroxycarbamide (Hydroxyurea)	◆	◆	◆	◆	◆	◆	◆
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	◆	◆	◆	◆	◆	◆	◆
Venetoclax	◆	◆	◆	◆	◆	◆	◆
Vinblastine	◆	◆	◆	◆	◆	◆	◆
Vincristine	◆	◆	◆	◆	◆	◆	◆
Vinorelbine	◆	◆	◆	◆	◆	◆	◆
Vorinostat	◆	◆	◆	◆	◆	◆	◆

For personal use only. Not for distribution.

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Contraceptives/HRT							
Bazedoxifene	◆	◆	◆	◆	◆	◆	◆
Chlormadinone (COC)	◆	◆	◆	◆	◆	◆	◆
Conjugated estrogens	◆	◆	◆	◆	◆	◆	◆
Desogestrel (COC)	◆	◆	◆	◆	◆	◆	◆
Desogestrel (POP)	◆	◆	◆	◆	◆	◆	◆
Drospirenone (COC)	◆	◆	◆	◆	◆	◆	◆
Drospirenone (HRT)	◆	◆	◆	◆	◆	◆	◆
Drospirenone (POP)	◆	◆	◆	◆	◆	◆	◆
Dydrogesterone (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	◆	◆	◆	◆	◆	◆	◆
Erectile Dysfunctional Agents							
Avanafil	◆	◆	◆	◆	◆	◆	◆
Sildenafil (Erectile Dysfunction)	◆	◆	◆	◆	◆	◆	◆
Tadalafil (Erectile Dysfunction)	◆	◆	◆	◆	◆	◆	◆
Vardenafil	◆	◆	◆	◆	◆	◆	◆
Yohimbine	◆	◆	◆	◆	◆	◆	◆
Gastrointestinal Agents							
Alosetron	◆	◆	◆	◆	◆	◆	◆
Antacids	◆	◆	◆	◆	◆	◆	◆
Bisacodyl	◆	◆	◆	◆	◆	◆	◆
Cimetidine	◆	◆	◆	◆	◆	◆	◆
Cisapride	◆	◆	◆	◆	◆	◆	◆
Dexlansoprazole	◆	◆	◆	◆	◆	◆	◆
Esomeprazole	◆	◆	◆	◆	◆	◆	◆
Famotidine	◆	◆	◆	◆	◆	◆	◆
Lactulose	◆	◆	◆	◆	◆	◆	◆
Lansoprazole	◆	◆	◆	◆	◆	◆	◆
Loperamide	◆	◆	◆	◆	◆	◆	◆
Mebeverine	◆	◆	◆	◆	◆	◆	◆
Mesalazine	◆	◆	◆	◆	◆	◆	◆
Omeprazole	◆	◆	◆	◆	◆	◆	◆
Pantoprazole	◆	◆	◆	◆	◆	◆	◆
Prucalopride	◆	◆	◆	◆	◆	◆	◆
Rabeprazole	◆	◆	◆	◆	◆	◆	◆
Ranitidine	◆	◆	◆	◆	◆	◆	◆
Senna	◆	◆	◆	◆	◆	◆	◆
Sucralfate	◆	◆	◆	◆	◆	◆	◆
Gastrointestinal Agents (anti-emetics)							
Aprepitant	◆	◆	◆	◆	◆	◆	◆
Cyclizine	◆	◆	◆	◆	◆	◆	◆
Dolasetron	◆	◆	◆	◆	◆	◆	◆
Domperidone	◆	◆	◆	◆	◆	◆	◆
Dronabinol	◆	◆	◆	◆	◆	◆	◆
Granisetron	◆	◆	◆	◆	◆	◆	◆
Metoclopramide	◆	◆	◆	◆	◆	◆	◆
Ondansetron	◆	◆	◆	◆	◆	◆	◆
Prochlorperazine	◆	◆	◆	◆	◆	◆	◆

Key to abbreviations

ABC	Abacavir (Ziagen [®])	3TC	Lamivudine (EpiVir [®])
FTC	Emtricitabine (Emtriva [®])	TDF	Tenofovir disoproxil fumarate (Viread [®])
F/TAF	Emtricitabine + Tenofovir alafenamide (Descovy [®])	ZDV	Zidovudine (Retrovir [®])
F/TDF	Emtricitabine + Tenofovir-Df (Truvada [®])		

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.

© Liverpool Drug Interaction Group, University of Liverpool, 3rd Floor William Henry Duncan Building, 6 West Derby Street, Liverpool, L7 8TX.

We aim to ensure that information is accurate and consistent with current knowledge and practice. However, the University of Liverpool and its servants or agents shall not be responsible or in any way liable for the continued currency of information in this publication whether arising from negligence or otherwise howsoever or for any consequences arising therefrom. The University of Liverpool expressly exclude liability for errors, omissions or inaccuracies to the fullest extent permitted by law.

Interactions with NRTIs

Charts revised 31 May 2023. Full information available at www.hiv-druginteractions.org

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

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Herbals/Supplements/Vitamins							
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 (injection/infusion)	◆	◆	◆	◆	◆	◆	◆
Iron supplements (oral)	◆	◆	◆	◆	◆	◆	◆
Liquorice (Glycyrrhiza glabra)	◆	◆	▲	■	◆	■	◆
Magnesium supplements	◆	◆	◆	◆	◆	◆	◆
Malabar nut tree	◆	◆	◆	◆	◆	◆	◆
Menthol	◆	◆	◆	◆	◆	◆	◆
Milk thistle (silymarin)	◆	◆	◆	◆	◆	◆	◆
Mucuna pruriens	◆	◆	◆	◆	◆	◆	◆
Multivitamins	◆	◆	◆	◆	◆	◆	◆
Nicotinamide [alone]	◆	◆	◆	◆	◆	◆	◆
Nicotinamide [in multivitamins]	◆	◆	◆	◆	◆	◆	◆
Omega-3 fatty acids [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	◆	◆	◆	◆	◆	◆	◆
Zinc	◆	◆	◆	◆	◆	◆	◆

For personal use only. Not for distribution.

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Hypertension / Heart Failure Agents							
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	◆	◆	◆	◆	◆	◆	◆
Isoorbide dinitrate	◆	◆	◆	◆	◆	◆	◆
Ivabradine	◆	◆	◆	◆	◆	◆	◆
Labetalol	◆	◆	◆	◆	◆	◆	◆
Lacidipine	◆	◆	◆	◆	◆	◆	◆
Lercanidipine	◆	◆	◆	◆	◆	◆	◆
Lisinopril	◆	◆	◆	◆	◆	◆	◆
Losartan	◆	◆	◆	◆	◆	◆	◆
Macitentan	◆	◆	◆	◆	◆	◆	◆
Methyldopa	◆	◆	◆	◆	◆	◆	■
Metolazone	◆	◆	◆	◆	◆	◆	◆
Midodrine	◆	◆	◆	◆	◆	◆	◆
Moxonidine	◆	◆	▲	◆	◆	▲	◆
Olmesartan	◆	◆	◆	◆	◆	◆	◆
Perindopril	◆	◆	◆	◆	◆	◆	◆
Prazosin	◆	◆	◆	◆	◆	◆	◆
Quinapril	◆	◆	◆	◆	◆	◆	◆
Ramipril	◆	◆	◆	◆	◆	◆	◆
Ranolazine	◆	◆	■	■	◆	■	◆
Riociguat	◆	◆	◆	◆	◆	◆	◆
Sacubitril	◆	◆	▲	◆	◆	▲	◆
Selexipag	◆	◆	◆	◆	◆	◆	◆
Sildenafil (PAH)	◆	◆	◆	◆	◆	◆	◆
Sodium nitroprusside	◆	◆	◆	◆	◆	◆	◆
Spironolactone	◆	◆	◆	◆	◆	◆	◆
Tadalafil (PAH)	◆	◆	◆	◆	◆	◆	◆
Telmisartan	◆	◆	◆	◆	◆	◆	◆
Terazosin	◆	◆	◆	◆	◆	◆	◆
Torasemide	◆	◆	◆	◆	◆	◆	◆
Trandolapril	◆	◆	◆	◆	◆	◆	◆
Treprostinil	◆	◆	◆	◆	◆	◆	◆
Triamterene	◆	◆	◆	◆	◆	◆	◆
Valsartan	◆	◆	◆	◆	◆	◆	◆
Xipamide	◆	◆	◆	◆	◆	◆	◆
Illicit/Recreational							
Alcohol	◆	◆	◆	◆	◆	◆	◆
Amphetamine	◆	◆	◆	◆	◆	◆	◆
Cannabis	◆	◆	◆	◆	◆	◆	◆
Cocaine	◆	◆	◆	◆	◆	◆	◆
Ecstasy (MDMA)	◆	◆	◆	◆	◆	◆	◆
GHB (Gamma-hydroxybutyrate)	◆	◆	◆	◆	◆	◆	◆
Heroin	◆	◆	◆	◆	◆	◆	◆
LSD (Lysergic acid diethylamide)	◆	◆	◆	◆	◆	◆	◆
Mephedrone	◆	◆	◆	◆	◆	◆	◆
Methamphetamine	◆	◆	◆	◆	◆	◆	◆
Phencyclidine (PCP)	◆	◆	◆	◆	◆	◆	◆
Poppers (Amyl nitrate)	◆	◆	◆	◆	◆	◆	◆
Immune Modulators							
Interferon alpha	■	■	■	■	■	■	■
Interleukin 2 (Aldesleukin)	◆	◆	◆	◆	◆	◆	◆
Peginterferon alfa-2a	■	■	■	■	■	■	●
Peginterferon alfa-2b	■	■	■	■	■	■	●

Key to abbreviations

ABC	Abacavir (Ziagen [®])	3TC	Lamivudine (Epivir [®])
FTC	Emtricitabine (Emtriva [®])	TDF	Tenofovir disoproxil fumarate (Viread [®])
F/TAF	Emtricitabine + Tenofovir alafenamide (Descovy [®])	ZDV	Zidovudine (Retrovir [®])
F/TDF	Emtricitabine + Tenofovir-DF (Truvada [®])		

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.

© Liverpool Drug Interaction Group, University of Liverpool, 3rd Floor William Henry Duncan Building, 6 West Derby Street, Liverpool, L7 8TX.

We aim to ensure that information is accurate and consistent with current knowledge and practice. However, the University of Liverpool and its servants or agents shall not be responsible or in any way liable for the continued currency of information in this publication whether arising from negligence or otherwise howsoever or for any consequences arising therefrom. The University of Liverpool expressly exclude liability for errors, omissions or inaccuracies to the fullest extent permitted by law.

Interactions with NRTIs

Charts revised 31 May 2023. Full information available at www.hiv-druginteractions.org

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

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Immunosuppressants							
Abrocitinib	◆	◆	◆	◆	◆	◆	◆
Adalimumab	◆	◆	◆	◆	◆	◆	◆
Anti-thymocyte globulin	◆	◆	◆	◆	◆	◆	◆
Apremilast	◆	◆	◆	◆	◆	◆	◆
Azathioprine	◆	◆	◆	◆	◆	◆	▲
Basiliximab	◆	◆	◆	◆	◆	◆	◆
Belatacept	◆	◆	◆	◆	◆	◆	◆
Ciclosporin	◆	◆	■	■	◆	■	◆
Infliximab	◆	◆	◆	◆	◆	◆	■
Leflunomide	◆	◆	◆	◆	◆	◆	■
Mycophenolate	▲	◆	◆	■	◆	■	▲
Risankizumab	◆	◆	◆	◆	◆	◆	◆
Sirolimus	◆	◆	◆	▲	◆	▲	◆
Tacrolimus	◆	◆	◆	◆	◆	▲	◆
Tocilizumab	◆	◆	◆	◆	◆	◆	◆
Ustekinumab	◆	◆	◆	◆	◆	◆	◆
Lipid Lowering Agents							
Alirocumab	◆	◆	◆	◆	◆	◆	◆
Atorvastatin	◆	◆	◆	◆	◆	◆	◆
Bempedoic acid	◆	◆	◆	◆	◆	◆	■
Bezafibrate	◆	◆	◆	◆	◆	◆	◆
Clofibrate	◆	◆	◆	◆	◆	◆	◆
Evolocumab	◆	◆	◆	◆	◆	◆	◆
Ezetimibe	◆	◆	◆	◆	◆	◆	◆
Fenofibrate	◆	◆	◆	◆	◆	◆	◆
Fish oils	◆	◆	◆	◆	◆	◆	◆
Fluvastatin	◆	◆	◆	◆	◆	◆	◆
Gemfibrozil	◆	◆	◆	◆	◆	◆	◆
Icosapent ethyl	◆	◆	◆	◆	◆	◆	◆
Lovastatin	◆	◆	◆	◆	◆	◆	◆
Omega-3 fatty acids	◆	◆	◆	◆	◆	◆	◆
Pitavastatin	◆	◆	◆	◆	◆	◆	◆
Pravastatin	◆	◆	◆	◆	◆	◆	◆
Rosuvastatin	◆	◆	◆	◆	◆	◆	◆
Simvastatin	◆	◆	◆	◆	◆	◆	◆
Overactive Bladder Agents							
Darifenacin	◆	◆	◆	◆	◆	◆	◆
Fesoterodine	◆	◆	◆	◆	◆	◆	◆
Mirabegron	◆	◆	◆	◆	◆	◆	◆
Oxybutynin	◆	◆	◆	◆	◆	◆	◆
Silodosin	◆	◆	◆	◆	◆	◆	◆
Solifenacin	◆	◆	◆	◆	◆	◆	◆
Tolterodine	◆	◆	◆	◆	◆	◆	◆
Trospium	◆	◆	◆	◆	▲	◆	◆
Oxytocics							
Ergometrine (Ergonovine)	◆	◆	◆	◆	◆	◆	◆
Mifepristone	◆	◆	◆	◆	◆	◆	◆
Misoprostol	◆	◆	◆	◆	◆	◆	◆
Oxytocin	◆	◆	◆	◆	◆	◆	◆
Parkinsonism Agents							
Apomorphine	◆	◆	◆	◆	◆	◆	◆
Benserazide	◆	◆	◆	◆	◆	◆	◆
Cabergoline (Parkinson's)	◆	◆	◆	◆	◆	◆	◆
Carbidopa	◆	◆	◆	◆	◆	◆	◆
Levodopa	◆	◆	◆	◆	◆	◆	◆
Pramipexole	◆	◆	◆	◆	▲	◆	◆
Rasagiline	◆	◆	◆	◆	◆	◆	◆
Ropinirole	◆	◆	◆	◆	◆	◆	◆
Steroids							
Beclometasone	◆	◆	◆	◆	◆	◆	◆
Betamethasone	◆	◆	◆	◆	◆	◆	◆
Budesonide	◆	◆	◆	◆	◆	◆	◆
Ciclesonide	◆	◆	◆	◆	◆	◆	◆
Clobetasol	◆	◆	◆	◆	◆	◆	◆
Dexamethasone (doses >16 mg)	◆	◆	◆	◆	◆	◆	◆
Dexamethasone (low dose; ≤16 mg)	◆	◆	◆	◆	◆	◆	◆
Fludrocortisone	◆	◆	◆	◆	◆	◆	◆
Flunisolide	◆	◆	◆	◆	◆	◆	◆
Fluocinolone	◆	◆	◆	◆	◆	◆	◆
Fluticasone	◆	◆	◆	◆	◆	◆	◆
Hydrocortisone (oral)	◆	◆	◆	◆	◆	◆	◆
Hydrocortisone (topical)	◆	◆	◆	◆	◆	◆	◆
Megestrol acetate	◆	◆	◆	◆	◆	◆	◆
Methylprednisolone	◆	◆	◆	◆	◆	◆	◆
Mometasone	◆	◆	◆	◆	◆	◆	◆
Nandrolone	◆	◆	◆	◆	◆	◆	◆
Oxandrolone	◆	◆	◆	◆	◆	◆	◆
Prednisolone	◆	◆	◆	◆	◆	◆	◆
Prednisone	◆	◆	◆	◆	◆	◆	◆
Stanozolol	◆	◆	◆	◆	◆	◆	◆
Testosterone	◆	◆	◆	◆	◆	◆	◆
Triamcinolone	◆	◆	◆	◆	◆	◆	◆

For personal use only. Not for distribution.

	ABC	FTC	F/TAF	F/TDF	3TC	TDF	ZDV
Other							
Acamprosate	◆	▲	▲	▲	◆	◆	▲
Acetazolamide	◆	◆	◆	■	◆	■	■
Acitretin	◆	◆	◆	◆	◆	◆	◆
Adrenaline (Epinephrine)	◆	◆	◆	◆	◆	◆	◆
Alfuzosin	◆	◆	◆	◆	◆	◆	◆
Allopurinol	◆	◆	◆	◆	◆	◆	◆
Atomoxetine	◆	◆	◆	◆	◆	◆	◆
Atropine	◆	◆	◆	◆	◆	◆	◆
Baclofen	◆	◆	◆	◆	◆	◆	◆
Bethahistine	◆	◆	◆	◆	◆	◆	◆
Biperiden	◆	◆	◆	◆	◆	◆	◆
Brimonidine	◆	◆	◆	◆	◆	◆	◆
Cabergoline (lactation suppression)	◆	◆	◆	◆	◆	◆	◆
Caffeine citrate	◆	◆	◆	◆	◆	◆	◆
Calcitonin	◆	◆	◆	◆	◆	◆	◆
Calcium folinate	◆	◆	◆	◆	◆	◆	◆
Cannabidiol (CBD)	◆	◆	◆	◆	◆	◆	◆
Carbimazole	◆	◆	◆	◆	◆	◆	■
Cinacalcet	◆	◆	◆	◆	◆	◆	◆
Clomifene	◆	◆	◆	◆	◆	◆	◆
Colchicine	◆	◆	◆	◆	◆	◆	◆
Colestyramine (Cholestyramine)	▲	▲	▲	▲	▲	▲	▲
Cyproterone acetate	◆	◆	◆	◆	◆	◆	◆
Dapoxetine	◆	◆	◆	◆	◆	◆	◆
Denosumab	◆	◆	◆	◆	◆	◆	◆
Disulfiram	▲	◆	◆	◆	◆	◆	◆
Donepezil	◆	◆	◆	◆	◆	◆	◆
Dutasteride	◆	◆	◆	◆	◆	◆	◆
Eltrombopag	◆	◆	◆	◆	◆	◆	◆
Fampridine (Dalfampridine)	◆	◆	◆	◆	▲	◆	◆
Filgrastim	◆	◆	◆	◆	◆	◆	◆
Finasteride	◆	◆	◆	◆	◆	◆	◆
Flibanserin	◆	◆	◆	◆	◆	◆	◆
Glycerol trinitrate (Nitroglycerin)	◆	◆	◆	◆	◆	◆	◆
Goserelin	◆	◆	◆	◆	◆	◆	◆
Isotretinoin	▲	◆	◆	◆	◆	◆	◆
Leuprorelin	◆	◆	◆	◆	◆	◆	◆
Levothyroxine	◆	◆	◆	◆	◆	◆	◆
Mannitol	◆	◆	◆	◆	▲	◆	◆
Medroxyprogesterone	◆	◆	◆	◆	◆	◆	◆
Memantine	◆	◆	◆	◆	◆	◆	◆
Methylphenidate	◆	◆	◆	◆	◆	◆	◆
Modafinil	◆	◆	◆	◆	◆	◆	◆
Nafidrofuryl	◆	◆	◆	◆	◆	◆	◆
Naloxone	◆	◆	◆	◆	◆	◆	◆
Naltrexone	◆	◆	◆	◆	◆	◆	◆
Neostigmine	◆	◆	◆	◆	◆	◆	◆
Nicorandil	◆	◆	◆	◆	◆	◆	◆
Nicotine	◆	◆	◆	◆	◆	◆	◆
Octreotide	◆	◆	◆	◆	◆	◆	◆
Orlistat	▲	▲	▲	▲	▲	▲	▲
Penicillamine	◆	◆	◆	■	◆	■	■
Pentoxifylline	◆	◆	◆	◆	◆	◆	◆
Pilocarpine	◆	◆	◆	◆	◆	◆	◆
Potassium	◆	◆	◆	◆	◆	◆	◆
Probenecid	▲	◆	◆	■	▲	■	■
Propylthiouracil	◆	◆	◆	◆	◆	◆	■
Protamine sulphate	◆	◆	◆	◆	◆	◆	◆
Pyridostigmine	▲	▲	▲	▲	▲	▲	▲
Sevelamer	◆	◆	◆	◆	◆	◆	◆
Strontium ranelate	▲	▲	▲	▲	▲	▲	▲
Sulfasalazine	◆	◆	◆	◆	◆	◆	■
Tamsulosin	◆	◆	◆	◆	◆	◆	◆
Terlipressin	◆	◆	◆	◆	◆	◆	◆
Tesamorelin	◆	◆	◆	◆	◆	◆	◆
Thalidomide	◆	◆	◆	◆	◆	◆	◆
Tranexamic acid	◆	◆	◆	◆	◆	◆	◆
Triptorelin	◆	◆	◆	◆	◆	◆	◆
Ursodeoxycholic acid	◆	◆	◆	◆	◆	◆	◆
Varenicline	◆	◆	◆	◆	◆	◆	◆

Key to abbreviations

ABC	Abacavir (Ziagen®)	3TC	Lamivudine (EpiVir®)
FTC	Emtricitabine (Emtriva®)	TDF	Tenofovir disoproxil fumarate (Viread®)
F/TAF	Emtricitabine + Tenofovir alafenamide (Descovy®)	ZDV	Zidovudine (Retrovir®)
F/TDF	Emtricitabine + Tenofovir-Df (Truvada®)		

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.

© Liverpool Drug Interaction Group, University of Liverpool, 3rd Floor William Henry Duncan Building, 6 West Derby Street, Liverpool, L7 8TX.

We aim to ensure that information is accurate and consistent with current knowledge and practice. However, the University of Liverpool and its servants or agents shall not be responsible or in any way liable for the continued currency of information in this publication whether arising from negligence or otherwise howsoever or for any consequences arising therefrom. The University of Liverpool expressly exclude liability for errors, omissions or inaccuracies to the fullest extent permitted by law.