

Interactions with Integrase Inhibitors

Charts revised October 2020. 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.

	BIC/ FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/ FTC/TAF	EVG/C/ FTC/TDF	RAL
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	◆	◆	◆	◆	◆	◆	◆	◆	■	◆
Mefenamic acid	◆	◆	◆	◆	◆	◆	◆	◆	■	◆
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	◆	◆	■	◆	◆	◆	■	■	■	◆
Disopyramide	■	◆	■	■	■	■	■	■	■	◆
Dofetilide	●	◆	■	●	●	●	●	●	●	◆
Flecainide	◆	◆	■	◆	◆	◆	■	■	■	◆
Lidocaine (Lignocaine)	◆	◆	◆	◆	◆	◆	◆	■	■	◆
Mexiletine	◆	◆	◆	◆	◆	◆	◆	■	■	◆
Propafenone	◆	◆	◆	◆	◆	◆	◆	■	■	◆
Quinidine	■	◆	■	◆	◆	◆	■	●	●	◆

	BIC/ FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/ FTC/TAF	EVG/C/ FTC/TDF	RAL
Antibacterials										
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	◆	◆	◆	◆	◆	◆	◆	◆	■	◆
Anti-coagulant, Anti-platelet and Fibrinolytic										
Acenocoumarol	◆	◆	◆	◆	◆	◆	◆	◆	■	■
Apixaban	◆	◆	◆	◆	◆	◆	◆	◆	●	●
Argatroban	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Aspirin (anti-platelet)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Betrixaban	◆	◆	▲	◆	◆	◆	▲	◆	◆	◆
Clopidogrel	◆	◆	◆	■	◆	◆	◆	●	●	◆
Dabigatran	◆	◆	◆	◆	◆	◆	◆	▲	◆	◆
Dalteparin	◆	◆	◆	◆	◆	◆	◆	◆	●	●
Dipyridamole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Edoxaban	◆	◆	◆	◆	◆	◆	◆	◆	■	◆
Eltrombopag	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Enoxaparin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fondaparinux	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Heparin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Phenprocoumon	◆	◆	◆	◆	◆	◆	◆	◆	■	■
Prasugrel	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Rivaroxaban	◆	◆	◆	◆	◆	◆	◆	◆	●	●
Streptokinase	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ticagrelor	◆	◆	◆	◆	◆	◆	◆	◆	●	●
Warfarin	◆	◆	◆	◆	◆	◆	◆	◆	■	■

For personal use only. Not for distribution.

Key to abbreviations

BIC/FTC/TAF	Bictegravir + Emtricitabine + Tenofovir alafenamide (Biktarvy®)	DTG/3TC	Dolutegravir + Lamivudine (Dovato®)
CAB (oral)	Cabotegravir (oral, Vocabria®)	DTG/RPV	Dolutegravir + Rilpivirine (Juluca®)
CAB/RPV	Cabotegravir/rilpivirine (long acting, Cabenuva®)	EVG/C/FTC/TAF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir alafenamide (Genvoya®)
DTG	Dolutegravir (Tivicay®)	EVG/C/FTC/TDF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir disoproxil fumarate (Stribild®)
DTG/ABC/3TC	Dolutegravir + Abacavir + Lamivudine (Triumeq®)	RAL	Raltegravir (Isentress®)

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, Pharmacology Research Labs, 1st Floor Block H, 70 Pembroke Place, LIVERPOOL, L69 3GF

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 Integrase Inhibitors

Charts revised October 2020. 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.

	BIC/ FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/ FTC/TAF	EVG/C/ FTC/TDF	RAL
Anticonvulsants										
Carbamazepine	●	●	●	■	■	■	●	●	●	■
Clonazepam	●	●	●	■	■	■	●	●	●	■
Eslicarbazepine	●	●	●	■	■	■	●	●	●	■
Ethosuximide	●	●	●	■	■	■	●	●	●	■
Gabapentin	●	●	●	■	■	■	●	●	●	■
Lacosamide	●	●	●	■	■	■	●	●	●	■
Lamotrigine	●	●	●	■	■	■	●	●	●	■
Levetiracetam	●	●	●	■	■	■	●	●	●	■
Oxcarbazepine	●	●	●	■	■	■	●	●	●	■
Phenobarbital (Phenobarbitone)	●	●	●	■	■	■	●	●	●	■
Phenytoin	●	●	●	■	■	■	●	●	●	■
Pregabalin	●	●	●	■	■	■	●	●	●	■
Primidone	●	●	●	■	■	■	●	●	●	■
Tiagabine	●	●	●	■	■	■	●	●	●	■
Topiramate	●	●	●	■	■	■	●	●	●	■
Valproate (Divalproex)	●	●	●	■	■	■	●	●	●	■
Vigabatrin	●	●	●	■	■	■	●	●	●	■
Zonisamide	●	●	●	■	■	■	●	●	●	■
Antidepressants										
Agomelatine	●	●	●	■	■	■	●	●	●	■
Amitriptyline	●	●	●	■	■	■	●	●	●	■
Bupropion	●	●	●	■	■	■	●	●	●	■
Citalopram	●	●	●	■	■	■	●	●	●	■
Clomipramine	●	●	●	■	■	■	●	●	●	■
Desipramine	●	●	●	■	■	■	●	●	●	■
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)	●	●	●	■	■	■	●	●	●	■
Gliclazide	●	●	●	■	■	■	●	●	●	■
Glimepiride	●	●	●	■	■	■	●	●	●	■
Glipizide	●	●	●	■	■	■	●	●	●	■
Insulin	●	●	●	■	■	■	●	●	●	■
Linagliptin	●	●	●	■	■	■	●	●	●	■
Liraglutide	●	●	●	■	■	■	●	●	●	■
Metformin	●	●	●	■	■	■	●	●	●	■
Nateglinide	●	●	●	■	■	■	●	●	●	■
Pioglitazone	●	●	●	■	■	■	●	●	●	■
Repaglinide	●	●	●	■	■	■	●	●	●	■
Rosiglitazone	●	●	●	■	■	■	●	●	●	■
Saxagliptin	●	●	●	■	■	■	●	●	●	■
Sitagliptin	●	●	●	■	■	■	●	●	●	■
Tolbutamide	●	●	●	■	■	■	●	●	●	■
Vildagliptin	●	●	●	■	■	■	●	●	●	■

Key to abbreviations

BIC/FTC/TAF	Bictegravir + Emtricitabine + Tenofovir alafenamide (Biktarvy®)	DTG/3TC	Dolutegravir + Lamivudine (Dovato®)
CAB (oral)	Cabotegravir (oral, Vocabria®)	DTG/RPV	Dolutegravir + Rilpivirine (Juluca®)
CAB/RPV	Cabotegravir/rilpivirine (long acting, Cabenuva®)	EVG/C/FTC/TAF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir alafenamide (Genvoya®)
DTG	Dolutegravir (Tivicay®)	EVG/C/FTC/TDF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir disoproxil fumarate (Stribild®)
DTG/ABC/3TC	Dolutegravir + Abacavir + Lamivudine (Triumeq®)	RAL	Raltegravir (Isentress®)

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

	BIC/ FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/ FTC/TAF	EVG/C/ FTC/TDF	RAL
Antifungals										
Amphotericin B	●	●	●	■	■	■	●	●	●	■
Anidulafungin	●	●	●	■	■	■	●	●	●	■
Caspofungin	●	●	●	■	■	■	●	●	●	■
Fluconazole	●	●	●	■	■	■	●	●	●	■
Flucytosine	●	●	●	■	■	■	●	●	●	■
Griseofulvin	●	●	●	■	■	■	●	●	●	■
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	●	●	●	■	■	■	●	●	●	■
Piperaquine	●	●	●	■	■	■	●	●	●	■
Primaquine	●	●	●	■	■	■	●	●	●	■
Proguanil	●	●	●	■	■	■	●	●	●	■
Pyrimethamine	●	●	●	■	■	■	●	●	●	■
Quinine	●	●	●	■	■	■	●	●	●	■
Sodium stibogluconate	●	●	●	■	■	■	●	●	●	■
Sulfadoxine	●	●	●	■	■	■	●	●	●	■
Antipsychotics/Neuroleptics										
Amisulpride	●	●	●	■	■	■	●	●	●	■
Aripiprazole	●	●	●	■	■	■	●	●	●	■
Asenapine	●	●	●	■	■	■	●	●	●	■
Chlorpromazine	●	●	●	■	■	■	●	●	●	■
Clozapine	●	●	●	■	■	■	●	●	●	■
Fluphenazine	●	●	●	■	■	■	●	●	●	■
Haloperidol	●	●	●	■	■	■	●	●	●	■
Iloperidone	●	●	●	■	■	■	●	●	●	■
Levomepromazine	●	●	●	■	■	■	●	●	●	■
Olanzapine	●	●	●	■	■	■	●	●	●	■
Paliperidone	●	●	●	■	■	■	●	●	●	■
Perazine	●	●	●	■	■	■	●	●	●	■
Pericazine	●	●	●	■	■	■	●	●	●	■
Perphenazine	●	●	●	■	■	■	●	●	●	■
Pimozide	●	●	●	■	■	■	●	●	●	■
Pipotiazine	●	●	●	■	■	■	●	●	●	■
Quetiapine	●	●	●	■	■	■	●	●	●	■
Risperidone	●	●	●	■	■	■	●	●	●	■
Sulpiride	●	●	●	■	■	■	●	●	●	■
Thioridazine	●	●	●	■	■	■	●	●	●	■
Tiapride	●	●	●	■	■	■	●	●	●	■
Ziprasidone	●	●	●	■	■	■	●	●	●	■
Zotepine	●	●	●	■	■	■	●	●	●	■
Zuclopentixol	●	●	●	■	■	■	●	●	●	■

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

Interactions with Integrase Inhibitors

Charts revised October 2020. 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.

	BIC/FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/FTC/TAF	EVG/C/FTC/TDF	RAL
Antivirals										
Aciclovir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Adefovir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Amantadine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Cidofovir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Daclatasvir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Elbasvir/Grazoprevir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Entecavir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Famciclovir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Foscarnet	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ganciclovir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Glecaprevir/Pibrentasvir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ledipasvir/Sofosbuvir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ombitasvir/Paritaprevir/r	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ombitasvir/Paritaprevir/r + Dasabuvir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Oseltamivir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ribavirin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Rimantadine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Simeprevir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Sofosbuvir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Sofosbuvir/Velpatasvir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Sofosbuvir/Velpatasvir/Voxilaprevir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Telbivudine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tenofovir alafenamide (HBV)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Valaciclovir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Zanamivir	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Anxiolytics/Hypnotics/ Sedatives										
Alprazolam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bromazepam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Buspirone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Chlordiazepoxide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Clobazam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Clorazepate	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Diazepam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Estazolam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Flunitrazepam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Flurazepam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Hydroxyzine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Lorazepam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Lormetazepam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Midazolam (oral)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Midazolam (parenteral)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Oxazepam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Temazepam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Triazolam	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Zaleplon	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Zolpidem	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Zopiclone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Beta Blockers										
Atenolol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bisoprolol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Carvedilol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Metoprolol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Nebivolol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Oxprenolol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Pindolol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Propranolol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Timolol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bronchodilators										
Acclidinium bromide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Aminophylline	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Formoterol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Glycopyrronium bromide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Indacaterol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ipratropium bromide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Montelukast	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Olodaterol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Roflumilast	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Salbutamol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Salmeterol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Theophylline	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tiotropium bromide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Umeclidinium bromide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Vilanterol	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦

	BIC/FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/FTC/TAF	EVG/C/FTC/TDF	RAL
Calcium Channel Blockers										
Amlodipine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Diltiazem	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Felodipine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Nicardipine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Nifedipine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Nisoldipine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Nitrendipine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Verapamil	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Cancer Therapies										
Anastrozole	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Asparaginase	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bevacizumab	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bexarotene	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bleomycin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Bortezomib	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Brentuximab vedotin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
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	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Ifosfamide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Imatinib	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Irinotecan	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Lapatinib	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Lenalidomide	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Letrozole	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Mercaptopurine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Mesna	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Methotrexate	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Mitoxantrone	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Nilotinib	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Oxaliplatin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Paclitaxel	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Pazopanib	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Polatuzumab vedotin	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Procabazine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Rituximab	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Sorafenib	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Sunitinib	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Tamoxifen	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Temsirolimus	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Topotecan	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Toremifene	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Trastuzumab	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Trastuzumab emtansine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Vinblastine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Vincristine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Vinorelbine	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Vorinostat	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦

For personal use only. Not for distribution.

Key to abbreviations

BIC/FTC/TAF	Bictegravir + Emtricitabine + Tenofovir alafenamide (Biktarvy®)	DTG/3TC	Dolutegravir + Lamivudine (Dovato®)
CAB (oral)	Cabotegravir (oral, Vocabria®)	DTG/RPV	Dolutegravir + Rilpivirine (Juluca®)
CAB/RPV	Cabotegravir/rilpivirine (long acting, Cabenuva®)	EVG/C/FTC/TAF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir alafenamide (Genvoya®)
DTG	Dolutegravir (Tivicay®)	EVG/C/FTC/TDF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir disoproxil fumarate (Stribild®)
DTG/ABC/3TC	Dolutegravir + Abacavir + Lamivudine (Triumeq®)	RAL	Raltegravir (Isentress®)

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, Pharmacology Research Labs, 1st Floor Block H, 70 Pembroke Place, LIVERPOOL, L69 3GF

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 Integrase Inhibitors

Charts revised October 2020. 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.

	BIC/ FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/ FTC/TAF	EVG/C/ FTC/TDF	RAL
Contraceptives/HRT										
Desogestrel (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Desogestrel (POP)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Drospirenone (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Drospirenone (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
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 (oral)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norelgestromin (patch)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norethisterone [Norethindrone] (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norethisterone [Norethindrone] (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norethisterone [Norethindrone] (IM depot)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norethisterone [Norethindrone] (POP)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norgestimate (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norgestrel (COC)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Norgestrel (HRT)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ulipristal	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Erectile Dysfunctional Agents										
Avanafil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sildenafil (Erectile Dysfunction)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tadalafil (Erectile Dysfunction)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Vardenafil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Gastrointestinal Agents										
Alosetron	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Antacids	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bisacodyl	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cimetidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cisapride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dexlansoprazole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Esomeprazole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Famotidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lactulose	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lansoprazole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Loperamide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mesalazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Omeprazole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pantoprazole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Prucalopride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Rabeprazole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ranitidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Senna	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Gastrointestinal Agents (anti-emetics)										
Aprepitant	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dolasetron	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Domperidone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dronabinol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Granisetron	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Metoclopramide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ondansetron	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Prochlorperazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Herbals/Supplements/Vitamins										
African potato	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Aloe vera	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ascorbic Acid (vitamin C) [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ascorbic Acid [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
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	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Goldenseal root (Hydrastis canadensis)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Grapefruit juice	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hops (Humulus lupulus)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

Key to abbreviations

BIC/ FTC/TAF	Bictegravir + Emtricitabine + Tenofovir alafenamide (Biktarvy®)	DTG/3TC	Dolutegravir + Lamivudine (Dovato®)
CAB (oral)	Cabotegravir (oral, Vocabria®)	DTG/RPV	Dolutegravir + Rilpivirine (Juluca®)
CAB/RPV	Cabotegravir/rilpivirine (long acting, Cabenuva®)	EVG/C/ FTC/TAF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir alafenamide (Genvoya®)
DTG	Dolutegravir (Tivicay®)	EVG/C/ FTC/TDF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir disoproxil fumarate (Stribild®)
DTG/ ABC/3TC	Dolutegravir + Abacavir + Lamivudine (Triumeq®)	RAL	Raltegravir (Isentress®)

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

	BIC/ FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/ FTC/TAF	EVG/C/ FTC/TDF	RAL
Herbals/Supplements/Vitamins (continued)										
Inula racemosa	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Iodine [alone]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Iodine [in multivitamins]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Iron supplements	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Liquorice (Glycyrrhiza glabra)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Magnesium supplements	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Malabar nut tree	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Menthol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Milk thistle (silymarin)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
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	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hypertension / Heart Failure Agents										
Aliskiren	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ambrisentan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Amiloride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Benazepril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bendroflumethiazide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bosentan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Candesartan	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Captopril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Chlortalidone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cilazapril	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Clonidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Digoxin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
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	◆	◆	◆	◆</						

Interactions with Integrase Inhibitors

Charts revised October 2020. 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.

	BIC/ FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/ FTC/TAF	EVG/C/ FTC/TDF	RAL
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										
Hydroxyurea (Hydroxycarbamide)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Interferon alpha	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Interleukin 2 (Aldesleukin)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Peginterferon alfa-2a	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Peginterferon alfa-2b	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Immunosuppressants										
Adalimumab	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Anti-thymocyte globulin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Azathioprine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Basiliximab	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Belatacept	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ciclosporin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mycophenolate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sirolimus	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tacrolimus	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lipid Lowering Agents										
Atorvastatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Bezafibrate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Clofibrate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Evolocumab	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ezetimibe	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fenofibrate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fish oils	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fluvastatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Gemfibrozil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lovastatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pitavastatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pravastatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Rosuvastatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Simvastatin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Overactive Bladder Agents										
Darifenacin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fesoterodine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mirabegron	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Oxybutynin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Solifenacin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tolterodine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Trospium	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Oxytocics										
Ergometrine (Ergonovine)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mifepristone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Misoprostol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Oxytocin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Parkinsonism Agents										
Apomorphine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Benserazide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cabergoline (Parkinson's)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Carbidopa	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Levodopa	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pramipexole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Rasagiline	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ropinorel	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Steroids										
Beclometasone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Betamethasone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Budesonide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ciclesonide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Clobetasol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dexamethasone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fludrocortisone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Flunisolide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fluocinolone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fluticasone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hydrocortisone (oral)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hydrocortisone (topical)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Megestrol acetate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Methylprednisolone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mometasone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nandrolone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Oxandrolone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Prednisolone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Prednisone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Stanozolol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Testosterone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Triamcinolone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

	BIC/ FTC/TAF	CAB (oral)	CAB/RPV	DTG	DTG/ ABC/3TC	DTG/3TC	DTG/RPV	EVG/C/ FTC/TAF	EVG/C/ FTC/TDF	RAL
Other										
Acamprosate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Acetazolamide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Acitretin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Adrenaline (Epinephrine)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Alendronid Acid	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Alfuzosin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Allopurinol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Atomoxetine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Atropine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Baclofen	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Betahistine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Biperiden	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Brimonidine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cabergoline (lactation suppression)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Caffeine citrate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Calcium folinate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cannabidiol (CBD)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Carbimazole	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Clomifene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Colchicine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Colestyramine (Cholestyramine)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cyproterone acetate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Denosumab	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Disulfiram	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dutasteride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fampridine (Dalfampridine)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Filgrastim	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Finasteride	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Flibanserin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Glyceril trinitrate (Nitroglycerin)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Goserelin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ibandronic acid	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Isotretinoin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Leuporelin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Levothyroxine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mannitol	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Methylphenidate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Modafinil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Naftidrofuryl	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Naloxone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Naltrexone	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Neostigmine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Nicorandil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Orlistat	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Penicillamine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pentoxifylline	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pilocarpine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Potassium	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Probenecid	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Propylthiouracil	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Protamine sulphate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Pyridostigmine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sevelamer	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Strontium ranelate	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sulfasalazine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tamsulosin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Thalidomide	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tranexamic acid	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Triptorelin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Varencicline	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Zoledronic acid	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

For personal use only. Not for distribution.

Key to abbreviations

BIC/FTC/TAF	Bictegravir + Emtricitabine + Tenofovir alafenamide (Biktarvy®)	DTG/3TC	Dolutegravir + Lamivudine (Dovato®)
CAB (oral)	Cabotegravir (oral, Vocabria®)	DTG/RPV	Dolutegravir + Rilpivirine (Juluca®)
CAB/RPV	Cabotegravir/rilpivirine (long acting, Cabenuva®)	EVG/C/FTC/TAF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir alafenamide (Genvoya®)
DTG	Dolutegravir (Tivicay®)	EVG/C/FTC/TDF	Elvitegravir + Cobicistat + Emtricitabine + Tenofovir disoproxil fumarate (Stribild®)
DTG/ABC/3TC	Dolutegravir + Abacavir + Lamivudine (Triumeq®)	RAL	Raltegravir (Isentress®)

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, Pharmacology Research Labs, 1st Floor Block H, 70 Pembroke Place, LIVERPOOL, L69 3GF

We aim to ensure that information is accurate and consistent with current knowledge and practice. However, the University of Liverpool and its