

Interactions with PBC Agents

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

	Obeticholic Acid	Ursodeoxycholic Acid
Anaesthetics & Muscle Relaxants		
Bupivacaine	◆	◆
Cisatracurium	◆	◆
Desflurane	◆	◆
Dexmedetomidine	◆	◆
Ephedrine	◆	◆
Etidocaine	◆	◆
Halothane	◆	◆
Isoflurane	◆	◆
Ketamine	◆	◆
Nitrous oxide	◆	◆
Propofol	◆	◆
Remifentanyl	◆	◆
Rocuronium	◆	◆
Sevoflurane	◆	◆
Tetracaine	◆	◆
Thiopental	◆	◆
Tizanidine	■	▲
Analgesics		
Acetofenac	◆	◆
Alfentanil	◆	◆
Aspirin	◆	◆
Buprenorphine	◆	◆
Celecoxib	◆	◆
Codeine	◆	▲
Dexketoprofen	◆	◆
Dextropropoxyphene	◆	▲
Diamorphine	◆	▲
Diclofenac	◆	▲
Diflunisal	◆	▲
Dihydrocodeine	◆	▲
Etoricoxib	▲	◆
Fentanyl (Prescribed)	◆	◆
Flurbiprofen	◆	◆
Hydrocodone	◆	▲
Hydromorphone	◆	▲
Ibuprofen	◆	◆
Indometacin	▲	◆
Ketoprofen	◆	◆
Mefenamic acid	◆	◆
Meloxicam	▲	◆
Metamizole (Dipyrone)	◆	◆
Methadone	■	▲
Morphine	◆	◆
Naproxen	◆	◆
Nefopam	◆	◆
Oxycodone	◆	▲
Paracetamol	◆	◆
Pethidine (Meperidine)	◆	▲
Piroxicam	◆	◆
Tapentadol	◆	▲
Tramadol	◆	▲
Anthelmintics		
Albendazole	◆	◆
Ivermectin	◆	◆
Niclosamide	◆	◆
Oxamniquine	◆	◆
Praziquantel	▲	◆
Pyrantel	◆	◆
Antiarrhythmics		
Amiodarone	▲	▲
Bepidil	◆	▲
Digoxin	◆	◆
Disopyramide	◆	◆
Dofetilide	◆	◆
Dronedarone	▲	▲
Flecainide	◆	▲
Lidocaine (Lignocaine)	◆	▲
Mexiletine	■	▲
Propafenone	■	▲
Quinidine	◆	▲
Vernakalant	◆	◆
Antibacterials		
Amikacin	◆	◆
Amoxicillin	◆	◆
Ampicillin	◆	◆
Azithromycin	◆	◆
Aztreonam	◆	◆
Bedaquiline	◆	◆
Benzylpenicillin	◆	◆
Bezlotoxumab	◆	◆
Capreomycin	◆	◆
Cefaclor	◆	◆
Cefadroxil	◆	◆
Cefalexin	◆	◆
Cefazolin	◆	◆
Cefixime	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Antibacterials (continued)		
Cefotaxime	◆	◆
Cefradine	◆	◆
Ceftaroline	◆	◆
Ceftazidime	◆	◆
Ceftriaxone	◆	◆
Cefuroxime	◆	◆
Chloramphenicol	◆	◆
Ciprofloxacin	◆	■
Clarithromycin	◆	◆
Clavulanic acid	◆	◆
Clindamycin	◆	▲
Clofazimine	◆	▲
Cloxacillin	◆	◆
Cycloserine	◆	◆
Dapsone	◆	■
Daptomycin	◆	◆
Delamanid	◆	◆
Ertapenem	◆	◆
Erythromycin	■	◆
Ethambutol	◆	◆
Flucloxacillin	◆	◆
Fosfomycin	◆	◆
Gentamicin	◆	◆
Imipenem	◆	◆
Isoniazid	▲	◆
Levofloxacin	◆	◆
Linezolid	◆	◆
Lymecycline	◆	◆
Meropenem	◆	◆
Methenamine	◆	◆
Metronidazole	◆	◆
Moxifloxacin	◆	◆
Nitrofurantoin	◆	◆
Norfloxacin	◆	◆
Ofloxacin	◆	◆
Penicillin V	◆	◆
Piperacillin	◆	◆
Pivmecillinam	◆	◆
Pretomanid	◆	▲
Pyrazinamide	◆	▲
Rifabutin	▲	▲
Rifampicin	▲	▲
Rifapentine	■	▲
Rifaximin	◆	◆
Spectinomycin	◆	◆
Streptomycin	◆	◆
Sulfadiazine	◆	◆
Tazobactam	◆	◆
Telithromycin	■	◆
Temocillin	◆	◆
Tetracyclines	◆	◆
Ticarcillin	◆	◆
Trimethoprim/Sulfamethoxazole	◆	◆
Troleandomycin	◆	◆
Vancomycin	◆	◆
Anticoagulant, Antiplatelet & Fibrinolytic		
Abciximab	◆	◆
Acenocoumarol	▲	▲
Anagrelide	▲	▲
Apixaban	◆	◆
Clopidogrel	▲	◆
Dabigatran	◆	▲
Dalteparin	◆	◆
Danaparoid	◆	◆
Dipyridamole	■	◆
Edoxaban	◆	▲
Eltrombopag	◆	◆
Enoxaparin	◆	◆
Fluindione	▲	▲
Fondaparinux	◆	◆
Heparin	◆	◆
Natalizumab	◆	◆
Phenprocoumon	◆	▲
Prasugrel	◆	◆
Rivaroxaban	◆	▲
Streptokinase	◆	◆
Ticagrelor	◆	◆
Ticlopidine	◆	◆
Tinzaparin	◆	◆
Warfarin	■	▲

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Anticonvulsants		
Carbamazepine	◆	▲
Clonazepam	◆	◆
Eslicarbazepine	◆	◆
Ethosuximide	◆	◆
Gabapentin	◆	◆
Lacosamide	◆	◆
Lamotrigine	◆	◆
Levetiracetam	◆	◆
Oxcarbazepine	◆	◆
Perampanel	◆	◆
Phenobarbital	◆	▲
Phenytoin	◆	▲
Pregabalin	◆	◆
Primidone	◆	◆
Retigabine	◆	◆
Rufinamide	◆	◆
Sultiame	◆	◆
Tiagabine	◆	◆
Topiramate	◆	◆
Valproic acid (Divalproex)	◆	◆
Vigabatrin	◆	◆
Zonisamide	◆	◆
Antidepressants		
Agomelatine	▲	◆
Amisriptyline	◆	◆
Bupropion	◆	◆
Citalopram	◆	◆
Clomipramine	◆	▲
Desipramine	◆	▲
Desvenlafaxine	◆	◆
Dosulepin	◆	▲
Doxepin	◆	▲
Duloxetine	◆	◆
Escitalopram	◆	◆
Fluoxetine	◆	◆
Fluvoxamine	◆	◆
Imipramine	◆	▲
Lithium	◆	◆
Maprotiline	◆	▲
Mianserin	◆	◆
Milnacipran	◆	▲
Mirtazapine	◆	▲
Moclobemide	◆	◆
Nefazodone	■	◆
Nortriptyline	◆	▲
Paroxetine	◆	◆
Phenelzine	●	●
Reboxetine	◆	◆
Sertraline	◆	◆
Tianeptine	◆	◆
Trazodone	◆	◆
Trimipramine	◆	▲
Venlafaxine	◆	◆
Vortioxetine	◆	◆
Antidiabetics		
Acarbose	◆	◆
Albiglutide	◆	◆
Alogliptin	◆	◆
Canagliflozin	◆	◆
Dapagliflozin	◆	◆
Dulaglutide	◆	◆
Empagliflozin	◆	◆
Exenatide	◆	◆
Glibenclamide (Glyburide)	■	▲
Gliclazide	◆	◆
Glimepiride	■	▲
Glipizide	◆	▲
Insulin	◆	◆
Linagliptin	◆	◆
Liraglutide	◆	◆
Lixisenatide	◆	◆
Metformin	◆	◆
Nateglinide	◆	◆
Pioglitazone	▲	◆
Repaglinide	▲	◆
Rosiglitazone	■	◆
Saxagliptin	◆	◆
Semaglutide	◆	◆
Sitagliptin	◆	◆
Tirzepatide	◆	◆
Tolbutamide	◆	▲
Vildagliptin	◆	◆

Key to symbols

●	These drugs should not be coadministered
■	Potential clinically significant interaction that is likely to require additional 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

Notes

- Further information is available at www.hep-druginteractions.org
- Predicted interactions are based on known metabolic pathways and routes of clearance.
- Caution is required in patients with hepatic impairment as this may also increase drug levels and require dose modification.
- Where advice differs between countries, the charts reflect the more cautious option.

© Liverpool Drug Interactions Group,
 Liverpool Drug Interactions 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 PBC Agents

Charts created July 2024. Full information available at www.hep-druginteractions.org

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

	Obeticholic Acid	Ursodeoxycholic Acid
Antifungals		
Amphotericin B	◆	◆
Anidulafungin	◆	◆
Caspofungin	◆	◆
Clotrimazole (pessary)	◆	◆
Clotrimazole (topical)	◆	◆
Fluconazole	◆	◆
Flucytosine	◆	◆
Griseofulvin	◆	◆
Isavuconazole	◆	◆
Itraconazole	■	▲
Ketoconazole	■	▲
Menthol	◆	◆
Miconazole	◆	◆
Nystatin	◆	◆
Posaconazole	■	▲
Terbinafine	◆	◆
Voriconazole	◆	▲
Antihemorrhagics		
Avatrombopag	◆	▲
Eltrombopag	◆	▲
Tranexamic acid	◆	◆
Antihistamines		
Astemizole	▲	▲
Bilastine	◆	◆
Cetirizine	◆	◆
Chlorphenamine	◆	▲
Desloratadine	◆	◆
Diphenhydramine	◆	◆
Doxylamine	◆	◆
Ebastine	◆	◆
Fexofenadine	◆	◆
Hydroxyzine	■	◆
Levocetirizine	◆	◆
Loratadine	■	◆
Promethazine	◆	◆
Terfenadine	◆	▲
Antimigraine Agents		
Almotriptan	◆	◆
Dihydroergotamine	◆	◆
Eletriptan	◆	◆
Ergotamine	◆	▲
Eptinezumab	◆	◆
Frovatriptan	◆	◆
Galcanezumab	◆	◆
Methylethergonovine	◆	▲
Naratriptan	◆	◆
Pizotifen	◆	◆
Rizatriptan	◆	◆
Sumatriptan	◆	◆
Zolmitriptan	■	◆
Antiprotozoals		
Amodiaquine	◆	▲
Artemether	◆	◆
Artemisinin	◆	◆
Artesunate	◆	◆
Atovaquone	◆	▲
Chloroquine	◆	▲
Dihydroartemisinin	◆	◆
Doxycycline	◆	◆
Halofantrine	◆	▲
Hydroxychloroquine	◆	◆
Lumefantrine	◆	◆
Mefloquine	◆	◆
Nitazoxanide	◆	◆
Pentamidine	◆	◆
Primaquine	▲	◆
Proguanil	◆	◆
Pyrimethamine	◆	▲
Quinine	◆	▲
Sodium stibogluconate	◆	◆
Sulfadoxine	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Antipsychotics/Neuroleptics		
Amisulpride	◆	◆
Anidulaprazole	◆	◆
Asenapine	▲	◆
Cariprazine	◆	▲
Chlorpromazine	◆	◆
Chlorprothixene	◆	▲
Clozapine	■	◆
Flupentixol	◆	▲
Fluphenazine	▲	◆
Haloperidol	◆	▲
Iloperidone	▲	▲
Levomopromazine	◆	◆
Lurasidone	◆	◆
Olanzapine	■	◆
Paliperidone	◆	▲
Perazine	◆	◆
Periciazine	◆	◆
Perphenazine	◆	◆
Pimozide	◆	▲
Pipotiazine	◆	◆
Prochlorperazine	◆	◆
Promazine	◆	▲
Quetiapine	◆	◆
Risperidone	◆	◆
Sulpiride	◆	◆
Tiapride	◆	◆
Trifluoperazine	◆	◆
Ziprasidone	◆	◆
Zuclopentixol	◆	▲
Antivirals		
Aciclovir	◆	◆
Amantadine	◆	◆
Ansuvimab	◆	◆
Briciclovir	◆	◆
Brivudine	◆	◆
Cidofovir	◆	◆
Favipiravir	◆	◆
Foscarnet	◆	◆
Molnupiravir	◆	◆
Nirmatrelvir/ritonavir	◆	◆
Osetamivir	◆	◆
Remdesivir	◆	◆
Rimantadine	◆	◆
Sotrovimab	◆	◆
Tecovirimat	◆	◆
Tixagevimab/cilgavimab	◆	◆
Valaciclovir	◆	◆
Zanamivir	◆	◆
Anxiolytics/Hypnotics/Sedatives		
Alprazolam	◆	◆
Amobarbital	◆	▲
Bromazepam	◆	◆
Bromperidol	◆	◆
Buspirone	◆	◆
Clobazam	◆	◆
Clorazepate	◆	◆
Clotiapine	◆	◆
Diazepam	◆	◆
Estazolam	◆	◆
Flurazepam	◆	◆
Lorazepam	◆	◆
Lormetazepam	◆	◆
Midazolam (oral)	▲	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Anxiolytics/Hypnotics/Sedatives continued		
Midazolam (parenteral)	▲	◆
Oxazepam	◆	◆
Quazepam	◆	◆
Temazepam	◆	◆
Triazolam	◆	◆
Zaleplon	◆	◆
Zolpidem	◆	◆
Zopiclone	◆	◆
Beta Blockers		
Atenolol	◆	◆
Bisoprolol	◆	◆
Carvedilol	◆	▲
Celiprolol	◆	▲
Labetalol	◆	▲
Metoprolol	◆	◆
Nebivolol	◆	▲
Oxprenolol	◆	◆
Pindolol	◆	◆
Propranolol	◆	▲
Sotalol	◆	◆
Timolol	◆	▲
Bisphosphonates		
Alendronic acid	◆	◆
Clodronate	◆	◆
Ibandronic acid	◆	◆
Pamidronate	◆	◆
Risedronate	◆	◆
Zoledronic acid	◆	◆
Bronchodilators		
Acidinium bromide	◆	◆
Formoterol	◆	◆
Indacaterol	◆	◆
Ipratropium bromide	◆	◆
Montelukast	◆	◆
Omalizumab	◆	◆
Reslizumab	◆	◆
Salbutamol	◆	◆
Salmeterol	◆	◆
Theophylline	■	◆
Tiotropium	◆	◆
Umeclidinium bromide	◆	◆
Vilanterol	◆	◆
Calcium Channel Blockers		
Amlodipine	◆	▲
Diltiazem	◆	▲
Felodipine	▲	▲
Nicardipine	■	▲
Nifedipine	◆	▲
Nisoldipine	▲	▲
Nitrendipine	▲	■
Verapamil	◆	▲
Cancer Therapies		
Abiraterone	◆	◆
Acalabrutinib	◆	▲
Afatinib	◆	◆
Alectinib	◆	▲
Alpelisib	◆	◆
Amivantamab	◆	◆
Anastrozole	◆	◆
Apalutamide	◆	▲
Asciminib	◆	◆
Atezolizumab	◆	◆
Avlumab	◆	◆
Axitinib	◆	◆
Belantamab mafodotin	◆	◆
Bendamustine	◆	◆
Bevacizumab	◆	◆
Bicalutamide	◆	◆
Blinatumomab	◆	◆
Bortezomib	◆	◆
Bosutinib	◆	◆
Brentuximab vedotin	◆	◆
Capecitabine	◆	◆
Carboplatin	◆	◆
Carfilzomib	◆	◆
Cetuximab	◆	◆
Chlorambucil	◆	▲
Cisplatin	◆	◆

Key to symbols

●	These drugs should not be coadministered
■	Potential clinically significant interaction that is likely to require additional 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

Notes

- Further information is available at www.hep-druginteractions.org
- Predicted interactions are based on known metabolic pathways and routes of clearance.
- Caution is required in patients with hepatic impairment as this may also increase drug levels and require dose modification.
- Where advice differs between countries, the charts reflect the more cautious option.

© Liverpool Drug Interactions Group,
 Liverpool Drug Interactions 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 PBC Agents

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

	Obeticholic Acid	Ursodeoxycholic Acid
Cancer Therapies continued		
Cyclophosphamide	◆	◆
Daratumumab	◆	◆
Dasatinib	■	◆
Doxorubicin	◆	◆
Elranatamab	◆	◆
Enzalutamide	◆	▲
Eporitamab	◆	◆
Epirubicin	◆	◆
Erlotinib	◆	▲
Estramustine	◆	▲
Etoposide	◆	◆
Everolimus	■	▲
Exemestane	▲	◆
Fludarabine	◆	◆
Gefitinib	■	◆
Gemcitabine	◆	◆
Gemtuzumab ozogamicin	◆	◆
Glofitamab	◆	◆
Hydroxyurea (Hydroxycarbamide)	◆	◆
Ibrutinib	◆	▲
Idarubicin	◆	▲
Idelalisib	◆	▲
Imatinib	▲	◆
Inotuzumab ozogamicin	◆	◆
Ipilimumab	◆	◆
Irinotecan	◆	◆
Isatuximab	◆	◆
Ixazomib	◆	◆
Lapatinib	■	◆
Letrozole	◆	◆
Loncastuximab tesirine	◆	◆
Medroxyprogesterone (oncology)	■	■
Mercaptopurine	◆	◆
Mesna	◆	◆
Methotrexate	◆	◆
Mitoxantrone	◆	◆
Mogamulizumab	◆	◆
Nilotinib	◆	◆
Niraparib	◆	◆
Nivolumab	◆	◆
Obinutuzumab	◆	◆
Ofatumumab	◆	◆
Olaparib	◆	◆
Olaratumab	◆	◆
Oxaliplatin	◆	◆
Paclitaxel	▲	◆
Panitumumab	◆	◆
Panobinostat	◆	▲
Pembrolizumab	◆	◆
Pertuzumab	◆	◆
Pomalidomide	◆	◆
Ponatinib	◆	◆
Retifanlimab	◆	◆
Rituximab	◆	◆
Ruxolitinib	◆	◆
Sacituzumab govitecan	◆	◆
Sunitinib	▲	▲
Tamoxifen	◆	◆
Temsirolimus	■	◆
Trastuzumab	◆	◆
Trastuzumab deruxtecan	◆	◆
Trastuzumab emtansine	◆	◆
Vinblastine	◆	◆
Vincristine	◆	◆
Vinorelbine	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Contraceptives and Hormone Replacements		
Conjugated estrogens (HRT)	■	■
Desogestrel (POP)	◆	■
Desogestrel/ethinylestradiol (COC) (>20 µg)	■	■
Desogestrel/ethinylestradiol (COC) (≤20 µg)	■	■
Dienogest	◆	■
Drospirenone (POP)	■	■
Drospirenone/estradiol (HRT)	■	■
Drospirenone/ethinylestradiol (COC) (>20 µg)	■	■
Drospirenone/ethinylestradiol (COC) (≤20 µg)	■	■
Dydrogesterone/estradiol (HRT)	■	■
Estradiol	◆	■

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Contraceptives and Hormone Replacements cont.		
Ethinylestradiol (>20 µg)	■	■
Ethinylestradiol (≤20 µg)	■	■
Etonogestrel (implant)	◆	■
Etonogestrel (vaginal ring)	◆	■
Gestodene/ethinylestradiol (COC) (>20 µg)	■	■
Gestodene/ethinylestradiol (COC) (≤20 µg)	■	■
Levonorgestrel (Emergency Contraception)	◆	◆
Levonorgestrel (HRT)	◆	■
Levonorgestrel (implant)	◆	■
Levonorgestrel (IUD)	◆	◆
Levonorgestrel (POP)	◆	◆
Levonorgestrel/ethinylestradiol (COC) (>20 µg)	■	■
Levonorgestrel/ethinylestradiol (COC) (≤20 µg)	■	■
Medroxyprogesterone (depot)	■	■
Medroxyprogesterone (oral)	■	■
Medroxyprogesterone/conjugated estrogens (HRT)	■	■
Medroxyprogesterone/estradiol (HRT)	■	■
Micronized progesterone (HRT)	◆	◆
Norelgestromin/ethinylestradiol (patch)	■	■
Norethisterone (Norethindrone) (depot injection)	▲	■
Norethisterone (Norethindrone) (POP)	▲	■
Norethisterone (Norethindrone)/estradiol (HRT)	▲	■
Norethisterone (Norethindrone) ethinylestradiol (COC)	■	■
Norethisterone (Norethindrone)/mestranol (COC)	■	■
Norgestimate/ethinylestradiol (COC)	■	■
Norgestrel/conjugated estrogens (HRT)	■	■
Norgestrel/ethinylestradiol (COC)	■	■
Testosterone	◆	◆
Erectile Dysfunction Agents		
Sildenafil	◆	◆
Tadalafil	◆	◆
Vardenafil	◆	◆

For personal use only. Not for distribution.

Key to symbols

●	These drugs should not be coadministered
■	Potential clinically significant interaction that is likely to require additional 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

Notes

- Further information is available at www.hep-druginteractions.org
- Predicted interactions are based on known metabolic pathways and routes of clearance.
- Caution is required in patients with hepatic impairment as this may also increase drug levels and require dose modification.
- Where advice differs between countries, the charts reflect the more cautious option.

© Liverpool Drug Interactions Group, Liverpool Drug Interactions 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 PBC Agents

Charts created July 2024. Full information available at www.hep-druginteractions.org

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

	Obeticholic Acid	Ursodeoxycholic Acid
Gastrointestinal Agents		
Aluminium hydroxide	◆	■
Alverine citrate	◆	◆
Antacids	◆	■
Aprepitant	◆	◆
Bisacodyl	◆	◆
Bismuth subsalicylate	◆	◆
Cimetidine	◆	◆
Cisapride	▲	▲
Cyclizine	◆	◆
Dantron	◆	◆
Docusate sodium	◆	◆
Domperidone	◆	◆
Droperidol	◆	◆
Esomeprazole	◆	◆
Famotidine	◆	◆
Granisetron	◆	◆
Hyoscine (Scopolamine)	◆	◆
Hyoscine butylbromide	◆	◆
Hyoscine hydrobromide (Scopolamine hydrobromide)	◆	◆
Ispaghula husk	◆	◆
Lactulose	◆	◆
Lafutidine	◆	◆
Lansoprazole	◆	◆
Linaclotide	◆	◆
Loperamide	◆	◆
Lubiprostone	◆	◆
Macrogol	▲	▲
Mebeverine	◆	◆
Mesalazine	◆	◆
Methylcellulose	◆	◆
Metoclopramide	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Gastrointestinal Agents continued		
Naloxegol	◆	◆
Nizatidine	◆	◆
Omeprazole	◆	◆
Ondansetron	◆	◆
Pantoprazole	◆	◆
Prucalopride	◆	◆
Rabeprazole	▲	◆
Ranitidine	◆	◆
Roxatidine	◆	◆
Senna	◆	◆
Simeticone	◆	◆
Sulfasalazine	◆	◆
Trimebutine	◆	◆
Vonoprazan	◆	◆
HCC Therapies		
Atezolizumab + bevacizumab	◆	◆
Lenvatinib	◆	◆
Pembrolizumab	◆	◆
Regorafenib	◆	◆
Sorafenib	◆	◆
Hepatitis B Drugs		
Adefovir	▲	◆
Entecavir	◆	◆
Lamivudine	◆	◆
Peginterferon alfa-2a	◆	◆
Peginterferon alfa-2b	◆	◆
Ribavirin	◆	◆
Hepatitis C Drugs		
Daclatasvir	◆	◆
Elbasvir/Grazoprevir	◆	◆
Glecaprevir/Pibrentasvir	◆	◆
Ledipasvir/Sofosbuvir	◆	◆
OBV/PTV/r	◆	◆
OBV/PTV/r + Dasabuvir	◆	◆
Ravidasvir	◆	◆
Ribavirin	◆	◆
Sofosbuvir (SOF)	◆	◆
SOF/Velpatasvir	◆	◆
SOF/Velpatasvir/Voxilaprevir	◆	◆
Hepatitis D Entry Inhibitors		
Bulevirtide	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Herbals/Supplements/Vitamins		
Aloe vera	◆	◆
Ascorbic acid (Vitamin C)	◆	◆
Ashwagandha (Withania somnifera)	◆	◆
Black cohosh (A. racemosa)	◆	◆
Cat's claw (U. tomentosa)	◆	◆
Colecalciferol (Vitamin D3)	◆	◆
Cyanocobalamin (B12)	◆	◆
Diosmin	◆	◆
Echinacea	◆	◆
Enteral feeds	◆	◆
Eucalyptus globulus	◆	◆
Ferrous sulphate	◆	◆
Folic acid	◆	◆
Garlic	◆	◆
Ginger (Z. officinale)	◆	◆
Ginkgo biloba	◆	◆
Ginseng	◆	◆
Goldenseal (H. canadensis)	◆	◆
Grape seed extract	◆	◆
Grapefruit juice	◆	◆
Green tea (C. sinensis)	◆	◆
Homeopathic remedies	◆	◆
Inula racemosa	◆	◆
Iodine	◆	◆
Kava kava (P. methysticum)	◆	◆
L-lysine	◆	◆
Milk thistle	■	◆
Mucuna pruriens	◆	◆
Niacin (Vitamin B3)	◆	◆
Oral nutritional supplements	◆	◆
Oregano oil	◆	◆
Pyridoxine (Vitamin B6)	◆	◆
Retinol (Vitamin A)	◆	◆
Riboflavin (Vitamin B2)	◆	◆
Saw palmetto (S. repens)	◆	◆
St John's wort	◆	◆
Thiamine (Vitamin B1)	◆	◆
Turmeric (curcumin)	◆	◆
Valerian	◆	◆
Vitamin E	◆	◆
Zinc	◆	◆

Key to symbols

●	These drugs should not be coadministered
■	Potential clinically significant interaction that is likely to require additional 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

Notes

- Further information is available at www.hep-druginteractions.org
- Predicted interactions are based on known metabolic pathways and routes of clearance.
- Caution is required in patients with hepatic impairment as this may also increase drug levels and require dose modification.
- Where advice differs between countries, the charts reflect the more cautious option.

© Liverpool Drug Interactions Group, Liverpool Drug Interactions 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 PBC Agents

Charts created July 2024. Full information available at www.hep-druginteractions.org

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

	Obeticholic Acid	Ursodeoxycholic Acid
HIV Drugs		
Entry/Integrase Inhibitors		
Albuvirtide	◆	◆
Bictegravir/FTC/TAF	◆	◆
Cabotegravir (oral)	◆	◆
Cabotegravir/rilpivirine (LA)	◆	■
Dolutegravir	◆	◆
Dolutegravir/rilpivirine	◆	■
Elvitegravir/cobi /FTC/TAF	◆	◆
Elvitegravir/cobi/FTC/TDF	◆	◆
Enfuvirtide	◆	◆
Fostemsavir	◆	◆
Ibalizumab-uiyk	◆	◆
Lenacapavir	◆	●
Maraviroc	◆	◆
Raltegravir	◆	◆
NNRTIs		
Dapivirine	◆	◆
Doravirine	◆	◆
Doravirine/3TC/TDF	◆	◆
Efavirenz	◆	▲
Etravirine	◆	◆
Nevirapine	◆	▲
Rilpivirine	◆	■
Rilpivirine/dolutegravir	◆	■
Rilpivirine/FTC/TAF	◆	■
NRTIs		
Abacavir	◆	◆
Didanosine	◆	◆
Emtricitabine (FTC)	◆	◆
Emtricitabine + TAF	◆	◆
Emtricitabine + TDF	◆	◆
Lamivudine	◆	◆
Stavudine	◆	◆
Tenofovir-DF	◆	◆
Zidovudine	◆	◆
Protease Inhibitors		
Atazanavir alone	■	◆
Atazanavir/cobicistat	■	◆
Atazanavir + ritonavir	■	◆
Darunavir/cobicistat	◆	◆
Darunavir/cobi/FTC/TAF	◆	◆
Darunavir + ritonavir	■	◆
Fosamprenavir	◆	◆
Indinavir	■	▲
Lopinavir	■	▲
Ritonavir	■	◆
Tipranavir	■	▲

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Hypertension/Heart Failure Agents		
Acebutolol	◆	◆
Aliskiren	◆	◆
Ambrisentan	◆	◆
Amiloride	◆	◆
Azilsartan	◆	◆
Benazepril	◆	◆
Bosentan	■	▲
Bumetanide	◆	◆
Candesartan	■	◆
Captopril	◆	◆
Chlorthalidone	◆	◆
Chlortalidone	◆	◆
Cilazapril	◆	◆
Clevidipine	◆	◆
Clonidine	◆	◆
Doxazosin	▲	◆
Enalapril	◆	◆
Eplerenone	◆	◆
Epoprostenol	◆	◆
Eprosartan	◆	◆
Fosinopril	◆	◆
Furosemide	◆	◆
Hydralazine	◆	◆
Hydrochlorothiazide	◆	◆
Iloprost	◆	◆
Indapamide	◆	◆
Irbesartan	■	◆
Isradipine	▲	▲
Ivabradine	◆	◆
Lacidipine	◆	▲
Lercanidipine	◆	▲
Lisinopril	◆	◆
Losartan	■	◆
Macitentan	◆	◆
Methyldopa	◆	◆
Metolazone	◆	◆
Moxonidine	◆	◆
Olmesartan	■	◆
Perindopril	◆	◆
Prazosin	◆	◆
Quinapril	▲	◆
Ramipril	◆	◆
Ranolazine	▲	▲
Rilmendine	◆	◆
Riociguat	◆	◆
Sacubitril/valsartan	◆	◆
Selexipag	◆	▲
Sildenafil	◆	◆
Sodium nitroprusside	◆	◆
Spirolactone	■	◆
Tadalafil	◆	◆
Telmisartan	■	◆
Torsemide	◆	◆
Trandolapril	◆	◆
Treprostinil	◆	▲
Valsartan	◆	◆
Xipamide	◆	◆
Zofenopril	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Illicit/Recreational		
Alcohol	◆	◆
Amphetamine	◆	▲
Cannabis	◆	◆
Carfentanil	◆	◆
Cocaine	◆	◆
Ecstasy (MDMA)	◆	▲
Fentanyl (Recreational)	◆	◆
GHB (Gamma-hydroxybutyrate)	◆	◆
Heroin	◆	◆
LSD (Lysergic acid diethylamide)	◆	▲
Mephedrone	◆	◆
Methamphetamine	◆	▲
Nicotine	◆	◆
Nitazenes	▲	◆
Phencyclidine (PCP)	◆	▲
Immunosuppressants		
Abatacept	◆	◆
Adalimumab	◆	◆
Alemtuzumab	◆	◆
Anakinra	◆	◆
Azathioprine	◆	◆
Baricitinib	◆	◆
Basiliximab	◆	◆
Belimumab	◆	◆
Brodalumab	◆	◆
Canakinumab	◆	◆
Ciclosporin	■	■
Eculizumab	◆	◆
Etanercept	◆	◆
Fingolimod	◆	◆
Golimumab	◆	◆
Guselkumab	◆	◆
Infliximab	◆	◆
Ixekizumab	◆	◆
Lenalidomide	◆	◆
Mirikizumab	◆	◆
Mycophenolate	▲	◆
Pirfenidone	◆	◆
Ravulizumab	◆	◆
Risankizumab	◆	◆
Sarilumab	◆	◆
Secukinumab	◆	◆
Siltuximab	◆	◆
Sirolimus	◆	▲
Toclizumab	◆	◆
Tacrolimus	■	▲
Tildrakizumab	◆	◆
Tralokinumab	◆	◆
Ublituximab	◆	◆
Upadacitinib	◆	◆
Ustekinumab	◆	◆
Vedolizumab	◆	◆

Key to symbols

●	These drugs should not be coadministered
■	Potential clinically significant interaction that is likely to require additional 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

Notes

- Further information is available at www.hep-druginteractions.org
- Predicted interactions are based on known metabolic pathways and routes of clearance.
- Caution is required in patients with hepatic impairment as this may also increase drug levels and require dose modification.
- Where advice differs between countries, the charts reflect the more cautious option.

© Liverpool Drug Interactions Group,
 Liverpool Drug Interactions 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 PBC Agents

Charts created July 2024. Full information available at www.hep-druginteractions.org

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

	Obeticholic Acid	Ursodeoxycholic Acid
Lipid Lowering Agents		
Alirocumab	◆	◆
Atorvastatin	■	◆
Bempedoic acid	◆	▲
Bezafibrate	◆	◆
Evolocumab	◆	◆
Ezetimibe	▲	◆
Fenofibrate	■	◆
Fish oils	◆	◆
Fluvastatin	▲	◆
Gemfibrozil	◆	◆
Icosapent ethyl	◆	▲
Lovastatin	■	◆
Omega-3-6-9 fatty acids	◆	◆
Pitavastatin	■	◆
Pravastatin	◆	◆
Rosuvastatin	◆	◆
Simvastatin	■	◆
Oxytocics		
Ergometrine (ergonovine)	◆	◆
Mifepristone	■	◆
Misoprostol	▲	◆
Parkinsonism Agents		
Benzotropine	◆	◆
Carbidopa	◆	◆
Orphenadrine	◆	▲
Pramipexole	◆	◆
Procyclidine	◆	◆
Rasagiline	◆	▲
Ropinirole	◆	▲
PBC Agents		
Obeticholic acid		◆
Ursodeoxycholic acid	◆	
Steroids		
Beclometasone	◆	◆
Betamethasone	◆	◆
Budesonide	▲	◆
Ciclesonide	◆	◆
Clobetasol (topical)	◆	◆
Clobetasone (topical)	◆	◆
Dexamethasone ≤ 16 mg	◆	▲
Dexamethasone >16 mg	◆	▲
Fludrocortisone	◆	◆
Flunisolide	◆	◆
Fluticasone	◆	◆
Hydrocortisone (topical)	◆	◆
Methylprednisolone	◆	◆
Mometasone	◆	◆
Prednicarbate	◆	◆
Prednisone	◆	◆
Triamcinolone	◆	◆
Urological Agents		
Alfuzosin	◆	◆
Desmopressin	◆	◆
Dutasteride	▲	◆
Finasteride	▲	◆
Mirabegron	◆	◆
Silodosin	◆	◆
Solifenacin	◆	◆
Tamsulosin	◆	◆
Tolterodine	◆	◆
Trospium	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Other Drugs		
Acamprosate	◆	◆
Acetazolamide	◆	◆
Acitretin	▲	◆
Activated charcoal	▲	▲
Allopurinol	◆	◆
Atomoxetine	◆	◆
Atropine	◆	◆
Baclofen	◆	◆
Bamlanivimab	◆	◆
Benralizumab	◆	◆
Bethahistine	◆	◆
Bimatoprost	◆	◆
Biperiden	◆	▲
Brimonidine	◆	◆
Brinzolamide	◆	◆
Bromocriptine	◆	◆
Burosumab	◆	◆
Calcitonin	◆	◆
Calcium carbimide	◆	◆
Calcium resonium	◆	◆
Cannabidiol (CBD)	◆	◆
Carbamazole	◆	◆
Carisoprodol	◆	▲
Casirivimab/imdevimab	◆	◆
Cilostazol	◆	◆
Clomifene	◆	◆
Colchicine	◆	◆
Colestyramine	▲	■
Conivaptan	◆	◆
Convalescent plasma (COVID-19)	◆	◆
COVID-19 vaccines	◆	◆
Cyclobenzaprine	◆	▲
Cyproterone acetate	◆	◆
Cytisine	◆	◆
Darbepoetin	◆	◆
Deferiprone	◆	◆
Denosumab	◆	◆
Dexamfetamine	◆	▲
Dextromethorphan	◆	◆
Disulfiram	■	▲
Donepezil	▲	◆
Dorzolamide	◆	◆
Dupilumab	◆	◆
Eliglustat	◆	◆
Emicizumab	◆	◆
Epoetin alfa	◆	◆
Etelcalcetide	◆	◆
Faricimab	◆	◆
Febuxostat	▲	◆
Filgrastim	◆	◆
Filbanserin	◆	▲
Gadopentetate (gadolinium)	◆	◆
Glucose monohydrate (IV)	◆	◆
Glycerol phenylbutyrate	◆	◆
Goserelin acetate	◆	◆
Guanfacine	◆	◆
Idarucizumab	◆	◆
Influenza vaccine	◆	◆
Interferon beta	◆	◆
Isosorbide mononitrate	◆	◆
Isotretinoin	▲	▲
Lanadelumab	◆	◆
Lanreotide	◆	◆
Lisdexamfetamine	◆	◆
Lebrikizumab	◆	◆
Leuprorelin acetate	◆	◆
Levothyroxine	◆	◆
Lofexidine	◆	◆
Lumacaftor/Ivacaftor	◆	◆
Magnesium	◆	◆
Melatonin	◆	◆
Memantine	◆	▲

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Other Drugs Continued		
Mepolizumab	◆	◆
Methimazole (Thiamazole)	◆	◆
Methylphenidate	◆	◆
Minoxidil	◆	◆
Modafinil	◆	◆
Naftidrofuryl	◆	◆
Nalmefene	◆	◆
Naloxone	◆	◆
Naltrexone	◆	◆
Neostigmine	◆	◆
Nicorandil	◆	◆
Nusinersen	◆	◆
Ocrelizumab	◆	◆
Orlistat	▲	▲
Penicillamine	◆	◆
Pentoxifylline	◆	◆
Phenylephrine	◆	◆
Pilocarpine	◆	◆
Piracetam	◆	◆
Potassium	◆	◆
Propylthiouracil	◆	◆
Protamine sulphate	◆	◆
Pseudoephedrine	◆	◆
Pyridostigmine	◆	◆
Raloxifene	◆	◆
Romosozumab	◆	◆
Rozanolixizumab	◆	◆
Sevelamer	◆	◆
Strontium ranelate	◆	◆
Thalidomide	◆	◆
Triptorelin	◆	◆
Tranexamic acid	◆	◆
Varenicline	◆	◆

Key to symbols

●	These drugs should not be coadministered
■	Potential clinically significant interaction that is likely to require additional 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

Notes

- Further information is available at www.hep-druginteractions.org
- Predicted interactions are based on known metabolic pathways and routes of clearance.
- Caution is required in patients with hepatic impairment as this may also increase drug levels and require dose modification.
- Where advice differs between countries, the charts reflect the more cautious option.

© Liverpool Drug Interactions Group, Liverpool Drug Interactions 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.