

# 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
<b>Anaesthetics &amp; Muscle Relaxants</b>		
Bupivacaine	◆	◆
Cisatracurium	◆	◆
Desflurane	◆	◆
Dexmedetomidine	◆	◆
Ephedrine	◆	◆
Etidocaine	◆	◆
Halothane	◆	◆
Isoflurane	◆	◆
Ketamine	◆	◆
Nitrous oxide	◆	◆
Propofol	◆	◆
Remifentanyl	◆	◆
Rocuronium	◆	◆
Sevoflurane	◆	◆
Tetracaine	◆	◆
Thiopental	◆	◆
Tizanidine	■	▲
<b>Analgesics</b>		
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	◆	▲
<b>Anthelmintics</b>		
Albendazole	◆	◆
Ivermectin	◆	◆
Niclosamide	◆	◆
Oxamniquine	◆	◆
Praziquantel	▲	◆
Pyrantel	◆	◆
<b>Antiarrhythmics</b>		
Amiodarone	▲	▲
Bepidil	◆	▲
Digoxin	◆	◆
Disopyramide	◆	◆
Dofetilide	◆	◆
Dronedarone	▲	▲
Flecainide	◆	▲
Lidocaine (Lignocaine)	◆	▲
Mexiletine	■	▲
Propafenone	■	▲
Quinidine	◆	▲
Vernakalant	◆	◆
<b>Antibacterials</b>		
Amikacin	◆	◆
Amoxicillin	◆	◆
Ampicillin	◆	◆
Azithromycin	◆	◆
Aztreonam	◆	◆
Bedaquiline	◆	◆
Benzympenicillin	◆	◆
Bezlotoxumab	◆	◆
Capreomycin	◆	◆
Cefaclor	◆	◆
Cefadroxil	◆	◆
Cefalexin	◆	◆
Cefazolin	◆	◆
Cefixime	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
<b>Antibacterials (continued)</b>		
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	◆	◆
<b>Anticoagulant, Antiplatelet &amp; Fibrinolytic</b>		
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
<b>Anticonvulsants</b>		
Carbamazepine	◆	▲
Clonazepam	◆	◆
Eslicarbazepine	◆	◆
Ethosuximide	◆	◆
Gabapentin	◆	◆
Lacosamide	◆	◆
Lamotrigine	◆	◆
Levetiracetam	◆	◆
Oxcarbazepine	◆	◆
Perampanel	◆	◆
Phenobarbital	◆	▲
Phenytoin	◆	▲
Pregabalin	◆	◆
Primidone	◆	◆
Retigabine	◆	◆
Rufinamide	◆	◆
Sultiame	◆	◆
Tiagabine	◆	◆
Topiramate	◆	◆
Valproic acid (Divalproex)	◆	◆
Vigabatrin	◆	◆
Zonisamide	◆	◆
<b>Antidepressants</b>		
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	◆	◆
<b>Antidiabetics</b>		
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](http://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 March 2025. Full information available at [www.hep-druginteractions.org](http://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
<b>Antifungals</b>		
Amphotericin B	◆	◆
Anidulafungin	◆	◆
Caspofungin	◆	◆
Clotrimazole (pessary)	◆	◆
Clotrimazole (topical)	◆	◆
Fluconazole	◆	◆
Flucytosine	◆	◆
Griseofulvin	◆	◆
Isavuconazole	◆	◆
Itraconazole	■	▲
Ketoconazole	■	▲
Menthol	◆	◆
Miconazole	◆	◆
Nystatin	◆	◆
Posaconazole	■	▲
Terbinafine	◆	◆
Voriconazole	◆	▲
<b>Antihemorrhagics</b>		
Avatrombopag	◆	▲
Eltrombopag	◆	▲
Tranexamic acid	◆	◆
<b>Antihistamines</b>		
Astemizole	▲	▲
Bilastine	◆	◆
Cetirizine	◆	◆
Chlorphenamine	◆	▲
Desloratadine	◆	◆
Diphenhydramine	◆	◆
Doxylamine	■	◆
Ebastine	◆	◆
Fexofenadine	◆	◆
Hydroxyzine	■	◆
Levocetirizine	◆	◆
Loratadine	■	◆
Promethazine	◆	◆
Terfenadine	◆	▲
<b>Antimigraine Agents</b>		
Almotriptan	◆	◆
Dihydroergotamine	◆	◆
Eletriptan	◆	◆
Ergotamine	◆	▲
Eptinezumab	◆	◆
Frovatriptan	◆	◆
Galcanezumab	◆	◆
Methylethergonovine	◆	▲
Naratriptan	◆	◆
Pizotifen	◆	◆
Rizatriptan	◆	◆
Sumatriptan	◆	◆
Zolmitriptan	■	◆
<b>Antiprotozoals</b>		
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
<b>Antipsychotics/Neuroleptics</b>		
Amisulpride	◆	◆
Aripiprazole	◆	◆
Asenapine	▲	◆
Brexpiprazole	◆	▲
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	◆	▲
<b>Antivirals</b>		
Aciclovir	◆	◆
Amantadine	◆	◆
Ansuvimab	◆	◆
Brincidofovir	◆	◆
Brivudine	◆	◆
Cidofovir	◆	◆
Favipiravir	◆	◆
Foscarnet	◆	◆
Molnupiravir	◆	◆
Nirmatrelvir/ritonavir	◆	◆
Oseltamivir	◆	◆
Remdesivir	◆	◆
Rimantadine	◆	◆
Sotrovimab	◆	◆
Tecovirimat	◆	◆
Tixagevimab/cilgavimab	◆	◆
Valaciclovir	◆	◆
Zanamivir	◆	◆
<b>Anxiolytics/Hypnotics/Sedatives</b>		
Alprazolam	◆	◆
Amobarbital	◆	▲
Bromazepam	◆	◆
Bromperidol	◆	◆
Buspiron	◆	◆
Clobazam	◆	◆
Clorazepate	◆	◆
Clotiapine	◆	◆
Diazepam	◆	◆
Estazolam	◆	◆
Flurazepam	◆	◆
Lorazepam	◆	◆
Lormetazepam	◆	◆
Midazolam (oral)	▲	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
<b>Anxiolytics/Hypnotics/Sedatives continued</b>		
Midazolam (parenteral)	▲	◆
Oxazepam	◆	◆
Quazepam	◆	◆
Temazepam	◆	◆
Triazolam	◆	◆
Zaleplon	◆	◆
Zolpidem	◆	◆
Zopiclone	◆	◆
<b>Beta Blockers</b>		
Atenolol	◆	◆
Bisoprolol	◆	◆
Carvedilol	◆	▲
Celiprolol	◆	▲
Labetalol	◆	▲
Metoprolol	◆	◆
Nebivolol	◆	▲
Oxprenolol	◆	◆
Pindolol	◆	◆
Propranolol	◆	▲
Sotalol	◆	◆
Timolol	◆	▲
<b>Bisphosphonates</b>		
Alendronic acid	◆	◆
Clodronate	◆	◆
Ibandronic acid	◆	◆
Pamidronate	◆	◆
Risedronate	◆	◆
Zoledronic acid	◆	◆
<b>Bronchodilators</b>		
Acidinium bromide	◆	◆
Formoterol	◆	◆
Indacaterol	◆	◆
Ipratropium bromide	◆	◆
Montelukast	◆	◆
Omalizumab	◆	◆
Reslizumab	◆	◆
Salbutamol	◆	◆
Salmeterol	◆	◆
Theophylline	■	◆
Tiotropium	◆	◆
Umeclidinium bromide	◆	◆
Vilanterol	◆	◆
<b>Calcium Channel Blockers</b>		
Amlodipine	◆	▲
Diltiazem	◆	▲
Felodipine	▲	▲
Nicardipine	■	▲
Nifedipine	◆	▲
Nisoldipine	▲	▲
Nitrendipine	▲	■
Verapamil	◆	▲

**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](http://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 March 2025. Full information available at [www.hep-druginteractions.org](http://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
<b>Cancer Therapies</b>		
Abiraterone	◆	◆
Acalabrutinib	◆	▲
Afatinib	◆	◆
Alectinib	◆	▲
Alpelisib	◆	◆
Amivantamab	◆	◆
Anastrozole	◆	◆
Apalutamide	◆	▲
Asciminib	◆	◆
Asparaginase	◆	◆
Atezolizumab	◆	◆
Avapritinib	▲	◆
Avelumab	◆	◆
Axitinib	◆	◆
Azacitidine	◆	◆
Belantamab mafodotin	◆	◆
Bendamustine	◆	◆
Bevacizumab	◆	◆
Bexarotene	◆	▲
Bicalutamide	◆	◆
Blinatumomab	◆	◆
Bortezomib	◆	◆
Bosutinib	◆	◆
Brentuximab vedotin	◆	◆
Capecitabine	◆	◆
Carboplatin	◆	◆
Carfilzomib	◆	◆
Cetuximab	◆	◆
Chlorambucil	◆	▲
Cisplatin	◆	◆
Cyclophosphamide	◆	◆
Daratumumab	◆	◆
Dasatinib	■	◆
Doxorubicin	◆	◆
Elranatamab	◆	◆
Enzalutamide	◆	▲
Epcoritamab	◆	◆
Epirubicin	◆	◆
Erlotinib	◆	▲
Estramustine	◆	▲
Etoposide	◆	◆
Everolimus	■	▲
Exemestane	▲	◆
Fluorouracil (5-FU)	◆	◆
Fludarabine	◆	◆
Gefitinib	■	◆
Gemcitabine	◆	◆
Gemtuzumab ozogamicin	◆	◆
Glofitamab	◆	◆
Hydroxyurea (Hydroxycarbamide)	◆	◆
Ibrutinib	◆	▲

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
<b>Cancer Therapies continued</b>		
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	◆	◆
Osimertinib	◆	▲
Oxaliplatin	◆	◆
Paclitaxel	▲	◆
Panitumumab	◆	◆
Panobinostat	◆	▲
Pembrolizumab	◆	◆
Pertuzumab	◆	◆
Pomalidomide	◆	◆
Ponatinib	◆	◆
Retifanlimab	◆	◆
Rituximab	◆	◆
Ruxolitinib	◆	◆
Sacituzumab govitecan	◆	◆
Sunitinib	▲	▲
Talazoparib	◆	◆
Tamoxifen	◆	◆
Tegafur/Gimeracil/Oteracil	◆	◆
Temsirolimus	■	◆
Teptotinib	◆	◆
Flisotumab vedotin	◆	◆
Tivozanib	◆	◆
Topotecan (IV)	◆	◆
Topotecan (oral)	◆	◆
Trametinib	◆	◆
Trastuzumab	◆	◆
Trastuzumab deruxtecan	◆	◆
Trastuzumab emtansine	◆	◆
Trifludine/tipiracil	◆	◆
Vinblastine	◆	◆
Vincristine	◆	◆
Vinorelbine	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
<b>Contraceptives and Hormone Replacements</b>		
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	◆	■

**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](http://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 March 2025. Full information available at [www.hep-druginteractions.org](http://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
<b>Contraceptives and Hormone Replacements cont.</b>		
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	◆	◆
<b>Erectile Dysfunction Agents</b>		
Sildenafil	◆	◆
Tadalafil	◆	◆
Vardenafil	◆	◆
Yohimbine	◆	◆

For personal use only. Not for distribution.

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

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
<b>Herbals/Supplements/Vitamins</b>		
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	◆	◆
THC capsules	◆	◆
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](http://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 March 2025. Full information available at [www.hep-druginteractions.org](http://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
<b>HIV Drugs</b>		
<b>Entry/Integrase Inhibitors</b>		
Albuvirtide	◆	◆
Bictegravir/FTC/TAF	◆	◆
Cabotegravir (oral)	◆	◆
Cabotegravir/rilpivirine (LA)	◆	■
Dolutegravir	◆	◆
Dolutegravir/3TC	◆	◆
Dolutegravir/ABC/3TC	◆	◆
Dolutegravir/rilpivirine	◆	■
Elvitegravir/cobi /FTC/TAF	◆	◆
Elvitegravir/cobi/FTC/TDF	◆	◆
Enfuvirtide	◆	◆
Fostemsavir	◆	◆
Ibalizumab-uiyk	◆	◆
Lenacapavir	◆	●
Maraviroc	◆	◆
Raltegravir	◆	◆
<b>NNRTIs</b>		
Dapivirine	◆	◆
Doravirine	◆	◆
Doravirine/3TC/TDF	◆	◆
Efavirenz	◆	▲
Etravirine	◆	◆
Nevirapine	◆	▲
Rilpivirine	◆	■
Rilpivirine/dolutegravir	◆	■
Rilpivirine/FTC/TAF	◆	■
<b>NRTIs</b>		
Abacavir	◆	◆
Didanosine	◆	◆
Emtricitabine (FTC)	◆	◆
Emtricitabine + TAF	◆	◆
Emtricitabine + TDF	◆	◆
Lamivudine	◆	◆
Stavudine	◆	◆
Tenofovir-DF	◆	◆
Zidovudine	◆	◆
<b>Protease Inhibitors</b>		
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
<b>Hypertension/Heart Failure Agents</b>		
Acebutolol	◆	◆
Aliskiren	◆	◆
Ambrisentan	◆	◆
Amiloride	◆	◆
Azilsartan	◆	◆
Benazepril	◆	◆
Bendroflumethiazide	◆	◆
Bosentan	■	▲
Bumetanide	◆	◆
Candesartan	■	◆
Captopril	◆	◆
Chlorthalidone	◆	◆
Chlorthalidone	◆	◆
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	▲	▲
Rilmenidine	◆	◆
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
<b>Illicit/Recreational</b>		
Alcohol	◆	◆
Amphetamine	◆	▲
Bromazolam	◆	◆
Cannabis	◆	◆
Carfentanil	◆	◆
Cocaine	◆	◆
Ecstasy (MDMA)	◆	▲
Fentanyl (Recreational)	◆	◆
GHB (Gamma-hydroxybutyrate)	◆	◆
Heroin	◆	◆
LSD (Lysergic acid diethylamide)	◆	▲
Mephedrone	◆	▲
Methamphetamine	◆	▲
Nicotine	◆	◆
Nitazenes	▲	◆
Phencyclidine (PCP)	◆	▲
Xylazine	▲	◆
<b>Immunosuppressants</b>		
Abatacept	◆	◆
Adalimumab	◆	◆
Alemuzumab	◆	◆
Anakinra	◆	◆
Azathioprine	◆	◆
Baricitinib	◆	◆
Basiliximab	◆	◆
Belimumab	◆	◆
Brodalumab	◆	◆
Canakinumab	◆	◆
Ciclosporin	■	■
Cladribine (oral)	◆	◆
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](http://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 March 2025. Full information available at [www.hep-druginteractions.org](http://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
<b>Lipid Lowering Agents</b>		
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	■	◆
<b>Oxytocics</b>		
Ergometrine (ergonovine)	◆	◆
Mifepristone	■	◆
Misoprostol	▲	◆
<b>Parkinsonism Agents</b>		
Benzotropine	◆	◆
Carbidopa	◆	◆
Orphenadrine	◆	▲
Pramipexole	◆	◆
Procyclidine	◆	◆
Rasagiline	◆	▲
Ropinirole	◆	▲
<b>PBC Agents</b>		
Obeticholic acid		◆
Ursodeoxycholic acid	◆	
<b>Steroids</b>		
Beclometasone	◆	◆
Betamethasone	◆	◆
Budesonide	▲	◆
Ciclesonide	◆	◆
Clobetasol (topical)	◆	◆
Clobetasone (topical)	◆	◆
Dexamethasone ≤ 16 mg	◆	▲
Dexamethasone >16 mg	◆	▲
Fludrocortisone	◆	◆
Flunisolide	◆	◆
Fluticasone	◆	◆
Hydrocortisone (topical)	◆	◆
Methylprednisolone	◆	◆
Mometasone	◆	◆
Prednicarbate	◆	◆
Prednisone	◆	◆
Triamcinolone	◆	◆
<b>Urological Agents</b>		
Alfuzosin	◆	◆
Desmopressin	◆	◆
Dutasteride	▲	◆
Finasteride	▲	◆
Mirabegron	◆	◆
Silodosin	◆	◆
Solifenacin	◆	◆
Tamsulosin	◆	◆
Tolterodine	◆	◆
Trospium	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
<b>Other Drugs</b>		
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
<b>Other Drugs Continued</b>		
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	◆	◆
Sodium zirconium cyclosilicate	◆	◆
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](http://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.