

Interactions with PBC Agents

Charts created August 2019. Full information available at www.hep-druginteractions.org

Page 1 of 4

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	◆	◆
Isoflurane	◆	◆
Ketamine	◆	◆
Nitrous oxide	◆	◆
Propofol	◆	◆
Thiopental	◆	◆
Tizanidine	■	▲
Analgesics		
Acetofenac	◆	◆
Alfentanil	◆	◆
Aspirin	◆	◆
Buprenorphine	◆	◆
Celecoxib	◆	◆
Codeine	◆	▲
Dextketoprofen	◆	◆
Dextropropoxyphene	◆	▲
Diamorphine	◆	▲
Diclofenac	◆	◆
Diffunisal	◆	◆
Dihydrocodeine	◆	▲
Etoricoxib	▲	◆
Fentanyl	◆	◆
Flurbiprofen	◆	◆
Hydrocodone	◆	▲
Hydromorphone	◆	▲
Ibuprofen	◆	◆
Indometacin	▲	◆
Ketoprofen	◆	◆
Mefenamic acid	◆	◆
Meloxicam	▲	◆
Metamizole (Dipyrone)	◆	◆
Methadone	■	▲
Morphine	◆	◆
Naproxen	◆	◆
Oxycodone	◆	▲
Paracetamol	◆	◆
Pethidine (Meperidine)	◆	▲
Piroxicam	◆	◆
Tapentadol	◆	▲
Tramadol	◆	▲
Anthelmintics		
Albendazole	◆	◆
Ivermectin	◆	◆
Oxamniquine	◆	◆
Praziquantel	▲	◆
Pyrantel	◆	◆
Antiarrhythmics		
Amiodarone	▲	▲
Bepridil	◆	◆
Digoxin	◆	◆
Disopyramide	◆	◆
Dofetilide	◆	▲
Dronedarone	▲	▲
Flecainide	◆	▲
Lidocaine (Lignocaine)	◆	◆
Mexiletine	■	▲
Propafenone	■	▲
Quinidine	◆	▲
Vernakalant	◆	◆
Antibacterials		
Amikacin	◆	◆
Amoxicillin	◆	◆
Ampicillin	◆	◆
Azithromycin	◆	◆
Aztreonam	◆	◆
Bedaquiline	◆	◆
Benzylpenicillin	◆	◆
Capreomycin	◆	◆
Cefaclor	◆	◆
Cefadroxil	◆	◆
Cefalexin	◆	◆
Cefazolin	◆	◆
Cefixime	◆	◆
Cefotaxime	◆	◆
Cefradine	◆	◆
Ceftaroline	◆	◆
Ceftazidime	◆	◆
Ceftriazone	◆	◆
Cefuroxime	◆	◆
Chloramphenicol	◆	◆
Ciprofloxacin	◆	■
Clarithromycin	◆	◆
Clavulanic acid	◆	◆
Clindamycin	◆	▲
Cloxacillin	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Antibacterials (continued)		
Dapsone	◆	■
Delamanid	◆	◆
Ertapenem	◆	◆
Erythromycin	■	◆
Ethambutol	◆	◆
Flucloxacillin	◆	◆
Gentamicin	◆	◆
Imipenem	◆	◆
Isoniazid	▲	◆
Levofloxacin	◆	◆
Linezolid	◆	▲
Lymecycline	◆	◆
Meropenem	◆	◆
Methenamine	◆	◆
Metronidazole	◆	◆
Moxifloxacin	◆	◆
Nitrofurantoin	◆	◆
Norfloxacin	◆	◆
Ofloxacin	◆	◆
Penicillin V	◆	◆
Piperacillin	◆	◆
Pivmecillinam	◆	◆
Pyrazinamide	◆	◆
Rifabutin	▲	▲
Rifampicin	▲	▲
Rifapentine	■	▲
Rifaximin	▲	◆
Spectinomycin	◆	◆
Streptomycin	◆	◆
Sulfadiazine	◆	◆
Tazobactam	◆	◆
Telithromycin	■	◆
Temocillin	◆	◆
Tetracyclines	◆	◆
Ticarcillin	◆	◆
Trimethoprim/Sulfamethoxazole	◆	◆
Troleandomycin	◆	◆
Vancomycin	◆	◆
Anticoagulant, Antiplatelet & Fibrinolytic		
Acenocoumarol	▲	▲
Anagrelide	▲	▲
Apixaban	◆	▲
Clopidogrel	▲	▲
Dabigatran	◆	▲
Dalteparin	◆	◆
Danaparoid	◆	◆
Dipyridamole	■	◆
Edoxaban	◆	▲
Eltrombopag	◆	◆
Enoxaparin	◆	◆
Fluidione	▲	▲
Fondaparinux	◆	◆
Heparin	◆	◆
Phenprocoumon	◆	▲
Prasugrel	◆	◆
Rivaroxaban	◆	▲
Streptokinase	◆	◆
Ticagrelor	◆	◆
Ticlopidine	◆	◆
Tinazaparin	◆	◆
Warfarin	■	▲
Anticonvulsants		
Carbamazepine	◆	▲
Clonazepam	◆	◆
Eslicarbazepine	◆	◆
Ethosuximide	◆	◆
Gabapentin	◆	◆
Lacosamide	◆	◆
Lamotrigine	◆	◆
Levetiracetam	◆	◆
Oxcarbazepine	◆	◆
Perampanel	◆	◆
Phenobarbital	◆	▲
Phenytoin	◆	▲
Pregabalin	◆	◆
Primidone	◆	◆
Retigabine	◆	◆
Rufinamide	◆	◆
Sultiame	◆	◆
Tiagabine	◆	◆
Topiramate	◆	◆
Valproate (Divalproex)	◆	◆
Vigabatrin	◆	◆
Zonisamide	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Antidepressants		
Agomelatine	▲	◆
Amitriptyline	◆	▲
Bupropion	◆	◆
Citalopram	◆	◆
Clomipramine	◆	▲
Desipramine	◆	▲
Desvenlafaxine	◆	◆
Dosulepin	◆	▲
Doxepin	◆	▲
Duloxetine	◆	◆
Escitalopram	◆	◆
Fluoxetine	◆	◆
Fluvoxamine	◆	◆
Imipramine	◆	▲
Lithium	◆	◆
Maprotiline	◆	▲
Mianserin	◆	◆
Milnacipran	◆	◆
Mirtazapine	◆	▲
Moclobemide	◆	◆
Nefazodone	■	◆
Nortriptyline	◆	▲
Paroxetine	◆	◆
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	◆	◆
Sitagliptin	◆	◆
Tolbutamide	◆	▲
Vildagliptin	◆	◆
Antifungals		
Amphotericin B	◆	◆
Anidulafungin	◆	◆
Caspofungin	◆	◆
Fluconazole	◆	◆
Flucytosine	◆	◆
Griseofulvin	◆	◆
Isavuconazole	◆	◆
Itraconazole	■	▲
Ketoconazole	■	▲
Miconazole	◆	◆
Nystatin	◆	◆
Posaconazole	■	▲
Terbinafine	◆	◆
Voriconazole	◆	▲

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,
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 PBC Agents

Charts created August 2019. Full information available at www.hep-druginteractions.org

Page 2 of 4

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

	Obeticholic Acid	Ursodeoxycholic Acid
Antihistamines		
Astemizole	▲	▲
Bilastine	◆	◆
Cetirizine	◆	◆
Chlorphenamine	◆	▲
Desloratadine	◆	◆
Diphenhydramine	◆	◆
Doxylamine	◆	◆
Ebastine	◆	◆
Fexofenadine	◆	◆
Hydroxyzine	■	◆
Levocetirizine	◆	◆
Loratadine	■	◆
Promethazine	◆	◆
Terfenadine	◆	▲
Antimigraine Agents		
Almotriptan	◆	◆
Dihydroergotamine	◆	◆
Eletriptan	◆	◆
Ergotamine	◆	▲
Frovatriptan	◆	◆
Methylergonovine	◆	▲
Naratriptan	◆	◆
Pizotifen	◆	◆
Rizatriptan	◆	◆
Sumatriptan	◆	◆
Zolmitriptan	■	◆
Antiprotozoals		
Amodiaquine	◆	▲
Artemether	◆	◆
Artemisinin	◆	◆
Artesunate	◆	◆
Atovaquone	◆	▲
Chloroquine	◆	▲
Dihydroartemisinin	◆	◆
Doxycycline	◆	◆
Halofantrine	◆	▲
Hydroxychloroquine	◆	◆
Lumefantrine	◆	◆
Mefloquine	◆	◆
Pentamidine	◆	◆
Primaquine	▲	◆
Proguanil	◆	◆
Pyrimethamine	◆	▲
Quinine	◆	▲
Sodium stibogluconate	◆	◆
Sulfadoxine	◆	◆
Antipsychotics/Neuroleptics		
Amisulpride	◆	◆
Aripiprazole	◆	◆
Asenapine	▲	◆
Chlorpromazine	◆	◆
Chlorprothixene	◆	▲
Clozapine	■	◆
Flupentixol	◆	▲
Fluphenazine	▲	◆
Haloperidol	◆	▲
Iliperidone	▲	▲
Levomopromazine	◆	◆
Olanzapine	■	◆
Paliperidone	◆	▲
Perazine	◆	◆
Pericazine	◆	◆
Perphenazine	◆	◆
Pimozide	◆	▲
Pipotiazine	◆	◆
Prochlorperazine	◆	◆
Quetiapine	◆	◆
Risperidone	◆	▲
Sulpride	◆	◆
Thioridazine	◆	▲
Tiapride	◆	◆
Trifluoperazine	◆	◆
Ziprasidone	◆	◆
Zuclopentixol	◆	▲

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Antivirals		
Aciclovir	◆	◆
Amantadine	◆	◆
Brivudine	◆	◆
Cidofovir	◆	◆
Foscarnet	◆	◆
Oseltamivir	◆	◆
Rimantadine	◆	◆
Valaciclovir	◆	◆
Zanamivir	◆	◆
Anxiolytics/Hypnotics/Sedatives		
Alprazolam	◆	◆
Amobarbital	◆	▲
Bromazepam	◆	◆
Bromperidol	◆	◆
Buspirone	◆	◆
Clobazam	◆	◆
Clorazepate	◆	◆
Clozapine	◆	◆
Diazepam	◆	◆
Estazolam	◆	◆
Flurazepam	◆	◆
Lorazepam	◆	◆
Lormetazepam	◆	◆
Midazolam (oral)	▲	◆
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	◆	◆
Bronchodilators		
Formoterol	◆	◆
Indacaterol	◆	◆
Ipratropium bromide	◆	◆
Montelukast	◆	◆
Omalizumab	◆	◆
Salbutamol	◆	◆
Salmeterol	◆	◆
Theophylline	■	◆
Tiotropium	◆	◆
Calcium Channel Blockers		
Amlodipine	◆	▲
Diltiazem	◆	▲
Felodipine	▲	▲
Nicardipine	■	▲
Nifedipine	▲	▲
Nisoldipine	▲	▲
Nitrendipine	▲	■
Verapamil	◆	▲

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Cancer Therapies		
Abiraterone	◆	◆
Acalabrutinib	◆	▲
Anastrozole	◆	◆
Avelumab	◆	◆
Axitinib	◆	◆
Bevacizumab	◆	◆
Blinatumomab	◆	◆
Bortezomib	◆	◆
Bosutinib	◆	◆
Brentuximab vedotin	◆	◆
Capecitabine	◆	◆
Carboplatin	◆	◆
Cetuximab	◆	◆
Chlorambucil	◆	▲
Cisplatin	◆	◆
Daratumumab	◆	◆
Dasatinib	■	◆
Doxorubicin	◆	◆
Erlotinib	◆	▲
Estramustine	◆	▲
Etoposide	◆	◆
Everolimus	■	▲
Exemestane	▲	◆
Fludarabine	◆	◆
Gefitinib	■	◆
Gemcitabine	◆	◆
Idarubicin	◆	▲
Imatinib	▲	◆
Ipilimumab	◆	◆
Irinotecan	◆	◆
Ixazomib	◆	◆
Lapatinib	■	◆
Letrozole	◆	◆
Mercaptopurine	◆	◆
Methotrexate	◆	◆
Mitoxantrone	◆	◆
Nilotinib	◆	◆
Niraparib	◆	◆
Nivolumab	◆	◆
Obinutuzumab	◆	◆
Ofatumumab	◆	◆
Olaratumab	◆	◆
Oxaliplatin	◆	◆
Paclitaxel	▲	◆
Panitumumab	◆	◆
Pembrolizumab	◆	◆
Rituximab	◆	◆
Sorafenib	◆	◆
Sunitinib	▲	▲
Tamoxifen	◆	◆
Temsirolimus	■	◆
Vinblastine	◆	◆
Vincristine	◆	◆
Vinorelbine	◆	◆
Contraceptives and Hormone Replacements		
Desogestrel	◆	■
Dienogest	◆	■
Drospirenone	■	■
Estradiol	◆	■
Ethinylestradiol	■	■
Etonogestrel (implant)	◆	■
Etonogestrel (vaginal ring)	◆	■
Levonorgestrel (COC)	■	■
Levonorgestrel (Emergency Contraception)	◆	◆
Levonorgestrel (HRT)	◆	■
Levonorgestrel (implant)	◆	■
Levonorgestrel (IUD)	◆	◆
Levonorgestrel (POP)	◆	■
Medroxyprogesterone (depot)	■	■
Medroxyprogesterone (oral)	■	■
Norethisterone (norethindrone)	▲	■

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,

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 excludes liability for errors, omissions or inaccuracies to the fullest extent permitted by law.

Interactions with PBC Agents

Charts created August 2019. Full information available at www.hep-druginteractions.org

Page 3 of 4

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

	Obeticholic Acid	Ursodeoxycholic Acid
Erectile Dysfunction Agents		
Sildenafil	◆	◆
Tadalafil	◆	◆
Vardenafil	◆	◆
Gastrointestinal Agents		
Aluminium hydroxide	◆	■
Alverine citrate	◆	◆
Antacids	◆	■
Aprepitant	◆	◆
Bisacodyl	◆	◆
Cimetidine	◆	◆
Cisapride	▲	▲
Cyclizine	◆	◆
Dantron	◆	◆
Domperidone	◆	◆
Droperidol	◆	◆
Esomeprazole	◆	◆
Famotidine	◆	◆
Granisetron	◆	◆
Hyoscine	◆	◆
Ispaghula husk	◆	◆
Lactulose	◆	◆
Lansoprazole	◆	◆
Linaclootide	◆	◆
Loperamide	◆	◆
Lubiprostone	◆	◆
Macrogol	◆	◆
Mebeverine	◆	◆
Mesalazine	◆	◆
Methylcellulose	◆	◆
Metoclopramide	◆	◆
Naloxegol	◆	◆
Omeprazole	◆	◆
Ondansetron	◆	◆
Pantoprazole	◆	◆
Prucalopride	◆	◆
Rabeprazole	▲	◆
Ranitidine	◆	◆
Senna	◆	◆
Simeticone	◆	◆
Sulfasalazine	◆	◆
Trimebutine	◆	◆
Hepatitis Drugs		
Adefovir	▲	◆
Daclatasvir	◆	◆
Elbasvir/Grazoprevir	◆	◆
Glecaprevir/Pibrentasvir	◆	◆
Entecavir	◆	◆
Lamivudine	◆	◆
Ledipasvir/Sofosbuvir	◆	◆
OBV/PTV/r	◆	◆
OBV/PTV/r + Dasabuvir	◆	◆
Peginterferon alfa-2a	◆	◆
Peginterferon alfa-2b	◆	◆
Ribavirin	◆	◆
Simeprevir	◆	◆
Sofosbuvir (SOF)	◆	◆
SOF/Velpatasvir	◆	◆
SOF/Velpatasvir/Voxilaprevir	◆	◆
Telbivudine	◆	◆
Tenofovir alafenamide (TAF)	◆	◆
Tenofovir-DP	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Herbals/Supplements/Vitamins		
Aloe vera	◆	◆
Ascorbic acid (Vitamin C)	◆	◆
Black cohosh (A. racemosa)	◆	◆
Cat's claw (U. tomentosa)	◆	◆
Colecalciferol (Vitamin D3)	◆	◆
Cyanocobalamin (B12)	◆	◆
Diosmin	◆	◆
Echinacea	◆	◆
Eucalyptus globulus	◆	◆
Folic acid	◆	◆
Garlic	◆	◆
Ginger (Z. officinale)	◆	◆
Ginkgo biloba	◆	◆
Ginseng	◆	◆
Goldenseal (H. canadensis)	◆	◆
Grape seed extract	◆	◆
Grapefruit juice	◆	◆
Green tea (C. sinensis)	◆	◆
Inula racemosa	◆	◆
Iodine	◆	◆
Iron supplements	◆	◆
Kava kava (P. methysticum)	◆	◆
Milk thistle	■	◆
Retinol (Vitamin A)	◆	◆
Riboflavin (Vitamin B2)	◆	◆
Serenoa repens	◆	◆
St John's wort	◆	◆
Thiamine (Vitamin B1)	◆	◆
Turmeric (curcumin)	◆	◆
Valerian	◆	◆
Vitamin E	◆	◆
HIV Drugs		
Entry/Integrase Inhibitors		
Bictegravir/FTC/TAF	◆	◆
Dolutegravir	◆	◆
Dolutegravir/rilpivirine	◆	◆
Elvitegravir/cobi /FTC/TAF	◆	◆
Elvitegravir/cobi/FTC/TDF	◆	◆
Ibalizumab-uiyk	◆	◆
Maraviroc	◆	◆
Raltegravir	◆	◆
NNRTIs		
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-DP	◆	◆
Zidovudine	◆	◆
Protease Inhibitors		
Atazanavir alone	■	◆
Atazanavir/cobicistat	■	◆
Atazanavir + ritonavir	■	◆
Darunavir/cobicistat	◆	◆
Darunavir/cobi/FTC/TAF	◆	◆
Darunavir + ritonavir	■	◆
Fosamprenavir	■	◆
Indinavir	■	▲
Lopinavir	■	▲
Ritonavir	■	◆
Saquinavir	■	▲
Tipranavir	■	▲

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Hypertension/Heart Failure Agents		
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	◆	◆
Omesartan	■	◆
Perindopril	◆	◆
Prazosin	◆	◆
Quinapril	▲	◆
Ramipril	◆	◆
Ranolazine	▲	▲
Rilmenidine	◆	◆
Riociguat	◆	◆
Selexipag	◆	▲
Sildenafil	◆	◆
Spironolactone	■	◆
Tadalafil	◆	◆
Telmisartan	■	◆
Torasemide	◆	◆
Trandolapril	◆	◆
Treprostinil	◆	▲
Valsartan	◆	◆
Xipamide	◆	◆
Zofenopril	◆	◆

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,
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 PBC Agents

Charts created August 2019. Full information available at www.hep-druginteractions.org

Page 4 of 4

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

	Obeticholic Acid	Ursodeoxycholic Acid
Illicit/Recreational		
Amphetamine	◆	▲
Cannabis	◆	◆
Cocaine	◆	◆
Ecstasy (MDMA)	◆	▲
GHB (Gamma-hydroxybutyrate)	◆	◆
LSD (Lysergic acid diethylamide)	◆	▲
Mephedrone	◆	▲
Methamphetamine	◆	▲
Phencyclidine (PCP)	◆	▲
Immunosuppressants		
Alemtuzumab	◆	◆
Azathioprine	◆	◆
Basiliximab	◆	◆
Brodalumab	◆	◆
Ciclosporin	■	■
Eculizumab	◆	◆
Etanercept	◆	◆
Fingolimod	◆	◆
Lenalidomide	◆	◆
Mycophenolate	▲	◆
Pirfenidone	◆	◆
Sirolimus	◆	▲
Tacrolimus	■	▲
Lipid Lowering Agents		
Atorvastatin	■	◆
Bezafibrate	◆	◆
Ezetimibe	▲	◆
Fenofibrate	■	◆
Fish oils	◆	◆
Fluvastatin	▲	◆
Gemfibrozil	◆	◆
Lovastatin	■	◆
Pitavastatin	■	◆
Pravastatin	◆	◆
Rosuvastatin	◆	◆
Simvastatin	■	◆
Oxytocics		
Ergometrine (ergonovine)	◆	◆
Mifepristone	■	◆
Misoprostol	▲	◆
Parkinsonism Agents		
Benzotropine	◆	◆
Carbidopa	◆	◆
Orphenadrine	◆	▲
Pramipexole	◆	▲
Rasagiline	◆	▲
Ropinirole	◆	▲
PBC Agents		
Obeticholic acid		◆
Ursodeoxycholic acid	◆	
Steroids		
Beclomethasone	◆	◆
Betamethasone	◆	◆
Budesonide	▲	◆
Ciclesonide	◆	◆
Clobetasol (topical)	◆	◆
Clobetasone (topical)	◆	◆
Dexamethasone	◆	◆
Fludrocortisone	◆	◆
Flunisolide	◆	◆
Fluticasone	◆	◆
Hydrocortisone (topical)	◆	◆
Methylprednisolone	◆	◆
Mometasone	◆	◆
Prednicarbate	◆	◆
Prednisone	◆	◆
Triamcinolone	◆	◆
Urological Agents		
Alfuzosin	◆	◆
Desmopressin	◆	◆
Dutasteride	▲	◆
Finasteride	▲	◆
Mirabegron	◆	◆
Silodosin	◆	◆
Solifenacin	◆	◆
Tamsulosin	◆	◆
Tolterodine	◆	◆

For personal use only. Not for distribution.

	Obeticholic Acid	Ursodeoxycholic Acid
Other Drugs		
Acamprosate	◆	◆
Acetazolamide	◆	◆
Acitretin	▲	◆
Activated charcoal		
Allopurinol	◆	◆
Atomoxetine	◆	◆
Atropine	◆	◆
Baclofen	◆	◆
Benralizumab	◆	◆
Betahistine	◆	◆
Bimatoprost	◆	◆
Biperiden	◆	▲
Brinzolamide	◆	◆
Bromocriptine	◆	◆
Calcitonin	◆	◆
Calcium carbimide	◆	◆
Calcium resonium	◆	◆
Carbamazole	◆	◆
Carisoprodol	◆	▲
Cilostazol	◆	◆
Clomifene	◆	◆
Colchicine	◆	◆
Colestyramine	▲	■
Conivaptan	◆	◆
Cyclobenzaprine	◆	▲
Cytisine	◆	◆
Darbepoetin	◆	◆
Deferiprone	◆	◆
Denosumab	◆	◆
Dexamfetamine	◆	▲
Dextromethorphan	◆	◆
Disulfiram	■	▲
Donepezil	▲	◆
Dorzolamide	◆	◆
Dupilumab	◆	◆
Eliglustat	◆	◆
Epoetin alfa	◆	◆
Etelcalcetide	◆	◆
Febuxostat	▲	◆
Filgrastim	◆	◆
Filbanserin	◆	▲
Gadopentetate (gadolinium)	◆	◆
Glycerol phenylbutyrate	◆	◆
Goserelin	◆	◆
Isosorbide mononitrate	◆	◆
Isotretinoin	▲	▲
Lanreotide	◆	◆
Levothyroxine	◆	◆
Lofexidine	◆	◆
Lumacaftor/Ivacaftor	◆	◆
Magnesium	◆	◆
Melatonin	◆	◆
Memantine	◆	▲
Methylphenidate	◆	◆
Minoxidil	◆	◆
Modafinil	◆	◆
Naftidrofuryl	◆	◆
Nalmefene	◆	◆
Naloxone	◆	◆
Naltrexone	◆	◆
Neostigmine	◆	◆
Nicorandil	◆	◆
Nusinersan	◆	◆
Ocrelizumab	◆	◆
Orlistat	▲	▲
Penicillamine	◆	◆
Pentoxifylline	◆	◆
Phenylephrine	◆	◆
Pilocarpine	◆	◆
Piracetam	◆	◆
Potassium	◆	◆
Protamine sulphate	◆	◆
Pseudoephedrine	◆	◆
Pyridostigmine	◆	◆
Raloxifene	◆	◆
Sevelamer	◆	◆
Strontium ranelate	◆	◆
Thalidomide	◆	◆
Tranexamic acid	◆	◆
Varenicline	◆	◆

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,
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.