

Paxlovid™ Drug Interaction Guidance and Management for the Community Prescriber

- Care has been taken to include common clinically relevant drug interactions in this document; however, it is <u>not exhaustive</u>.
- Use this table <u>in combination</u> with other drug interaction (DI) resources (e.g. <u>Liverpool</u>
 <u>COVID-19 Drug Interactions</u>, <u>BCCDC Practice Tool Drug-Drug Interactions</u>) AND clinical
 judgement in decision making and management. See resource list at bottom of table.
- Community Prescribers should not manage interactions with transplant and oncology medications. Transplant recipients and patients receiving cancer treatment of any type must be referred to their respective specialists.
- See information at bottom of table regarding natural/herbal products.

Absolute drug interactions for ANY prescriber (including specialists) – use of Paxlovid™ is **contraindicated**. These patients may be eligible for remdesivir.

Drug interactions that **require more complex management** and clinical judgement by the community prescriber. Careful consideration required. If interaction deemed not manageable by prescriber, these patients may be eligible for remdesivir.

Drug interactions that **require intervention by the specialist** and are **out of scope** for management by a community prescriber. Refer for additional assessment for Paxlovid™ or remdesivir.

Drug interactions that are considered manageable and require intervention by the community prescriber. Refer to DI resources for management strategies.

Drug interactions that may flag and are deemed manageable by community prescribers. In most cases no modification is necessary. Patients may be required to monitor.

Paxlovid™ Drug Interaction Guidance for the Community Prescriber		
Drug	Symbol	Comments
Acarbose	*	Hypoglycemia has been observed – advise patient to monitor.
Acetaminophen	*	
Acetylsalicylic acid	*	
Alfuzosin	_	Listed as contraindicated in Paxlovid™ Product Monograph but management possible.

Allopurinol	*	
Almotriptan	<u> </u>	Contraindicated in impaired renal or hepatic function. Triptans that do not interact: frovatriptan, naratriptan, rizatriptan, sumatriptan, zolmitriptan. Pharmacists are able to prescribe alternative triptan under Minor Ailment guidelines if an appropriate option for the patient.
Alprazolam	•	Benzodiazepines that do not interact: bromazepam, chlordiazepoxide, clobazam, clorazepate, lorazepam, oxazepam, temazepam
Amiodarone	*	
Amitriptyline	*	
Amlodipine	_	
Apixaban	•	For potential management strategies: • <u>UWaterloo: Paxlovid™ for Patient on a DOAC</u> • <u>BCCDC: Drug-Drug Interactions (see notes in document)</u>
Aripiprazole (long acting injectable)	*	
Aripiprazole (oral)	•	No effect on injectable aripiprazole.
Atorvastatin	_	In patients with recent CV event/CVA (within last year) this is an absolute contraindication. Statins that do not interact: fluvastatin, pravastatin
Azathioprine	*	
Betamethasone	*	Little systemic absorption would be expected with an inhaled corticosteroid.
Budesonide	*	Little systemic absorption would be expected with an inhaled corticosteroid.
Buprenorphine		
Bupropion	*	
Buspirone	•	
Canagliflozin	*	Hypoglycemia has been observed – advise patient to monitor.
Cancer treatment of any type	♦	Patients with active cancer must be referred to their specialist.

Cannabis	-	
Carbamazepine	*	Even if the patient is willing to discontinue the use of carbamazepine, this remains an absolute contraindication as Paxlovid™ must not be started within 14 days after taking the interacting medication.
Chlorthalidone	*	
Citalopram	*	
Clarithromycin	<u> </u>	No dose adjustment required in patients with normal renal function. Impaired renal function (CrCl ≥ 30mL/min to <60mL/min) reduce dose by 50%.
Clomipramine	*	Contraindicated * if clomipramine dose >150 mg.
Clonazepam	•	Liverpool recommends avoiding combination. Benzodiazepines that do not interact: bromazepam, chlordiazepoxide, clobazam, clorazepate, lorazepam, oxazepam, temazepam
Clopidogrel	•	Reduced effect of clopidogrel. Contraindicated in patients at high risk of thrombosis.
Clozapine	*	Very narrow therapeutic index.
Cobicistat	*	Treatment regimens for HIV and Hepatitis C may already contain either of these medications. These regimens do not need to be adjusted; patients should maintain their regular regimens unless advised otherwise by their specialist.
Codeine	*	Limit use if possible. Possible reduced analgesia or increased adverse effects.
Colestid	*	
Colchicine	•	Contraindicated in patients with renal or hepatic impairment. Liverpool recommends avoiding combination. Listed as contraindicated in Paxlovid™ Product Monograph but management may be possible.
Cyclosporine (systemic)	•	If this medication is being used for a transplant patient of any type, the patient must be referred to their specialist. Other indications: Liverpool recommends avoiding combination.
Dabigatran	•	For potential management strategies: • <u>UWaterloo: Paxlovid™ for Patient on a DOAC</u> • <u>BCCDC: Drug-Drug Interactions (see notes in document)</u>

Dapagliflozin	*	Hypoglycemia has been observed – advise patient to monitor.
Dexamethasone	*	No dose adjustment required if doses ≤ 12mg / day. Contraindicated in doses >12 mg/ day.
Dexlansoprazole	*	
Dextroamphetamine	<u> </u>	Possible increase in dextroamphetamine levels (monitor for signs/symptoms of adverse effects). Caution if high dose and/or concomitant serotonergic agents.
Dextromethorphan	*	
Diazepam	•	Liverpool recommends avoiding combination. Benzodiazepines that do not interact: bromazepam, chlordiazepoxide, clobazam, clorazepate, lorazepam, oxazepam, temazepam
Digoxin	•	Increased digoxin concentration, narrow therapeutic index. Management may be possible and may require therapeutic drug monitoring.
Diltiazem	•	
Divalproex	*	
Domperidone	*	"PRN" use of medication only: Hold x 7 days if this is an appropriate option for the patient. Contraindicated if unable to hold.
Dulaglutide	*	Hypoglycemia has been observed.
Dutasteride	*	
Edoxaban	•	For potential management strategies: • <u>UWaterloo: Paxlovid™ for Patient on a DOAC</u> • <u>BCCDC: Drug-Drug Interactions (see notes in document)</u>
Eletriptan	<u> </u>	Triptans that do not interact: frovatriptan, naratriptan, rizatriptan, sumatriptan, zolmitriptan. Pharmacists are able to prescribe alternative triptan under Minor Ailment guidelines if an appropriate option for the patient.
Empagliflozin	*	Hypoglycemia has been observed.

Ergots	<u> </u>	Listed as contraindicated in Paxlovid™ Product Monograph but management may be possible. Pharmacists are able to prescribe for triptans under minor ailment guidelines if an appropriate option for the patient. Triptans that do not interact: frovatriptan, naratriptan, rizatriptan, sumatriptan, zolmitriptan.
Estradiol (Oral, Transdermal, Vaginal)	*	Serum concentrations of estrogen derivatives may be increased or decreased (less so with vaginal). No action needed given the short duration of nirmatrelvir/ ritonavir treatment.
Ethinyl Estradiol (Hormonal contraceptives)	*	No dose adjustment. Recommend backup method(s) for treatment duration and one full cycle after. Advise may increase irregular bleeding.
Exenatide	*	Hypoglycemia has been observed – advise patient to monitor.
Ezetimibe	*	
Felodipine	•	
Fentanyl	*	
Flecainide	*	
Fluoxetine	*	
Flurazepam	•	Liverpool recommends avoiding combination. Benzodiazepines that do not interact: bromazepam, chlordiazepoxide, clobazam, clorazepate, lorazepam, oxazepam, temazepam
Fluticasone	*	Little systemic absorption would be expected with an inhaled corticosteroid.
Folic acid/Folate	*	
Gabapentin	*	
Gliclazide	*	Hypoglycemia has been observed – advise patient to monitor.
Glimepiride	*	Hypoglycemia has been observed – advise patient to monitor.
Glipizide	*	Hypoglycemia has been observed – advise patient to monitor.
Glyburide	*	Hypoglycemia has been observed – advise patient to monitor.
Guaifenesin	*	
Hydrocodone	•	May increase hydrocodone concentrations; risk of respiratory depression.

Hydroxychloroquine	Contraindicated if patient at high risk of QT prolongation. Risk depends on other medications and medical conditions. Consider MedSafety Scan calculator (requires free registration)
Imipramine	No dose adjustment. Advise patient to monitor for increased drowsiness.
Indapamide	Indapamide levels could potentially increase. Monitor for signs/ symptoms of hypotension — if symptomatic, consider stopping indapamide for remainder of Paxlovid™ treatment.
Insulin	Hypoglycemia has been observed – advise patient to monitor.
Itraconazole	Contraindicated in doses >200mg/ day. No dose adjustment required if doses ≤ 200mg / day.
Ketoconazole	Contraindicated in doses >200mg/ day. No dose adjustment required if doses ≤ 200mg / day.
Lamotrigine	*
Linagliptin	Hypoglycemia has been observed – advise patient to monitor.
Liraglutide	Hypoglycemia has been observed – advise patient to monitor.
Lisinopril	★
Lithium	★
Lovastatin	Listed as contraindicated in Paxlovid™ Product Monograph but management may be possible. In patients with recent CV event/CVA (within last year) this is an absolute contraindication. Statins that do not interact: fluvastatin, pravastatin
Lurasidone	*
Meperidine	Liverpool recommends avoiding combination. Other opioid therapy preferred; management may be possible if necessary.
Metformin	Hypoglycemia has been observed – advise patient to monitor.
Methadone	May decrease methadone concentrations; consult methadone prescriber.
Methamphetamine	
Metoprolol	*
Midazolam (oral)	Listed as contraindicated in Paxlovid™ Product Monograph. Liverpool recommends avoiding combination. Benzodiazepines that do not interact: bromazepam, chlordiazepoxide, clobazam, clorazepate, lorazepam, oxazepam, temazepam
Mirtazapine	No dose adjustment required if < 15mg/ day.

Modafinil	*	Contraindicated ★ if dose > 200 mg/ day.
Mometasone	*	
Montelukast	*	
Morphine	-	Mixed interaction – monitor for toxicity/efficacy.
Nateglinide	*	Hypoglycemia has been observed – advise patient to monitor.
Nifedipine	•	
Nitrazepam	•	Benzodiazepines that do not interact: bromazepam, chlordiazepoxide, clobazam, clorazepate, lorazepam, oxazepam, temazepam
Nortriptyline	*	Advise patient to monitor for increased drowsiness.
Omeprazole	*	
Oxcarbazepine	•	
Oxycodone	•	May increase oxycodone concentration; risk of respiratory depression.
Oxybutynin (Oral, Transdermal)	_	May be less significant with use of transdermal patch.
Pantoprazole	*	
Paroxetine	*	
Perindopril	*	
Phenobarbital	*	Even if the patient is willing to discontinue the use of phenobarbital, this remains an absolute contraindication as Paxlovid™ must not be started within 14 days after taking the interacting medication.
Phenytoin	*	Even if the patient is willing to discontinue the use of phenytoin, this remains an absolute contraindication as Paxlovid™ must not be started within 14 days after taking the interacting medication.
Pimozide	*	
Pioglitazone	*	Hypoglycemia has been observed – advise patient to monitor.

Pravastatin	*	
Prednisolone/ Prednisone	*	
Primidone	*	
Propafenone	*	
Pseudoephedrine	*	
Quetiapine	•	Liverpool recommends avoiding combination but management may be possible.
Quinidine	*	
Quinine	_	Hold x 7 days if being used for leg cramps. Contraindicated in all other indications e.g. malaria
Ramipril	*	
Repaglinide	*	Hypoglycemia has been observed – advise patient to monitor.
Rifampin	*	Even if the patient is willing to discontinue the use of rifampin, this remains an absolute contraindication as Paxlovid™ must not be started within 14 days after taking the interacting medication.
Risperidone LA injection (e.g. Risperdal Consta®)	*	For oral risperidone, see row immediately below.
Risperidone (oral)	•	For LA injectable risperidone, see row immediately above.
Ritonavir	*	Treatment regimens for HIV and Hepatitis C may already contain either of these medications. These regimens do not need to be adjusted; patients should maintain their regular regimens unless advised otherwise by their specialist.
Rivaroxaban	•	Liverpool, IDSA recommend avoiding combination. Listed as contraindicated in Paxlovid™ Product Monograph. If alternative antiviral not possible: UWaterloo: Paxlovid™ for Patient on a DOAC BCCDC: Drug-Drug Interactions (see notes in document)
Rosiglitazone	*	Hypoglycemia has been observed – advise patient to monitor.
Rosuvastatin	A	In patients with recent CV event/CVA (within last year) this is an absolute contraindication. Statins that do not interact: fluvastatin, pravastatin

Salbutamol	*	
Salmeterol (e.g. in Serevent® and Advair®)	*	Liverpool, IDSA recommend avoiding combination. Listed as contraindicated in Paxlovid™ Product Monograph.
Saxagliptin	*	Hypoglycemia has been observed – advise patient to monitor.
Sertraline	*	
Sildenafil (Viagra®) used for ED	_	For sildenafil used for PAH, see the row immediately below.
Sildenafil (Revatio®) used for PAH	*	For sildenafil used for ED, see the row immediately above.
		Listed as contraindicated in Paxlovid™ Product Monograph but management may be possible.
Simvastatin	_	In patients with recent CV event/CVA (within last year) this is an absolute contraindication.
		Statins that do not interact: fluvastatin, pravastatin
Sirolimus	•	Transplant patients of any type, whether they are currently receiving treatment or have in the past, must be referred to their specialist.
		All other indications *
Sitagliptin	*	Hypoglycemia has been observed – advise patient to monitor.
Sotalol	*	
St John's Wort	*	Even if the patient is willing to discontinue the use of St John's wort, this remains an absolute contraindication as Paxlovid™ must not be started within 14 days after taking the interacting medication.
Sulfasalazine	A	
Tacrolimus	*	Transplant patients of any type, whether they are currently receiving treatment or have in the past, must be referred to their specialist. All other indications

Tadalafil (Cialis®) used for ED	<u> </u>	For tadalafil used for PAH, see the row immediately below.
Tadalafil (Adcirca®) used for PAH	*	For tadalafil used for ED, see the row immediately above.
Tamsulosin	A	Hold, especially in patients where low blood pressure (BP) could be problematic. For patients on 0.4 mg doses, it may be reasonable to continue, so long as patient is able to monitor BP, or is aware of symptoms of low BP.
Theophylline	*	
Ticagrelor	•	Liverpool recommends avoiding combination.
Timolol	*	
Tiotropium (Spiriva)	*	
Tofacitinib	•	
Tolbutamide	*	Hypoglycemia has been observed – advise patient to monitor.
Tolterodine	_	
Tramadol	•	
Transplant treatment or therapy of any type (e.g. sirolimus, tacrolimus, etc.)	♦	Transplant patients of any type, whether they are currently receiving treatment or have in the past, must be referred to their specialist.
Trazodone	•	
Triazolam	•	Liverpool recommends avoiding combination. Listed as contraindicated in Paxlovid™ Product Monograph. Benzodiazepines that do not interact: bromazepam, chlordiazepoxide, clobazam, clorazepate, lorazepam, oxazepam, temazepam
Trimipramine	*	
Valproate	*	
Vardenafil (Levitra®, Staxyn®) used for ED	_	For vardenafil used for PAH, see the row immediately below.
Vardenafil (Levitra®) used for PAH	*	For vardenafil used for ED, see the row immediately above.

Vedolizumab (Entyvio)	*	
Venlafaxine	*	Potential increase in venlafaxine concentration - monitor.
Verapamil	•	
Vildagliptin	*	Hypoglycemia has been observed – advise patient to monitor.
Voriconazole	•	Listed as contraindicated in Paxlovid™ Product Monograph.
Vortioxetine	*	
Warfarin	•	
Ziprasidone	•	
Zolpidem	_	
Zopiclone	_	

Natural Medicines and Herbal Products

- Many products contain multiple ingredients; ensure each ingredient is assessed for a potential drug interaction.
- Pay particular attention to any that involve the CYP pathway.
- Prescribers will have to decide whether the interaction is significant and/or manageable.
- Natural Medicines (available through SHIRP) is a suggested resource.

Drug Interaction Resources:

- Prescriber and dispensing software
- Lexi-Interact (directly through Lexicomp or via eCPS [available through <u>SHIRP]</u>)
- <u>University of Liverpool: COVID-19 drug interaction checker</u>
- University of Waterloo: Paxlovid™ What Prescribers and Pharmacists Need to Know
- <u>BC CDC: Practice Tool #3 Drug-Drug Interactions and Contraindications</u>
- Natural Medicines (available through SHIRP)
- IDSA Management of Drug Interactions With Nirmatrelvir/Ritonavir (Paxlovid®): Resource for Clinicians
- <u>University of Waterloo: Paxlovid™ for a Patient on a DOAC</u>
- Paxlovid™ Product Monograph

