

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 1 of 31

Please check www.covid19-druginteractions.org for updates.

Please note that if a drug is not listed it cannot automatically be assumed it is safe to coadminister. No recommendation to use experimental therapy for COVID-19 is made. Drug interaction data for many agents are limited or absent; therefore, risk-benefit assessment for any individual patient rests with prescribers.

Contents

Anaesthetics & Muscle Relaxants.....	2
Analgesics	3
Antiarrhythmics.....	4
Antibacterials.....	5
Anti-coagulant, Anti-platelet and Fibrinolytic.....	6
Anticonvulsants	7
Antidepressants.....	8
Anti-diabetics.....	9
Antifungals.....	10
Antipsychotics/Neuroleptics	11
Anxiolytics/Hypnotics/Sedatives.....	12
Beta Blockers	13
Bronchodilators	14
Calcium Channel Blockers	15
Contraceptives/HRT - Contraceptives	16
Contraceptives/HRT - Hormone Replacement Therapy.....	17
Covid-19 Adjunct Therapies	18
Covid-19 Antiviral Therapies	18
Covid-19 Immune Therapies	19
Gastrointestinal Agents	20
Gastrointestinal Agents – Anti-emetics.....	21
HCV DDAs	22
HIV Antiretroviral Therapies.....	23
Hypertensives – ACE inhibitors	24
Hypertensives – Angiotensin antagonists	24
Hypertensives – Diuretics.....	24
Hypertensives – Other agents	25
Hypertensives – Pulmonary hypertension	26
Immunosuppressants	27
Inotropes & Vasopressors	28
Lipid Lowering Agents	29
Others.....	30
Steroids.....	31

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

■	These drugs should not be coadministered
■	Potential interaction which may require a dose adjustment or close monitoring.
■	Potential interaction likely to be of weak intensity.
■	Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

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Page 2 of 31

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Anaesthetics & Muscle Relaxants

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Alcuronium	↔	↔	↔	↑	↔	↔	↔	↔	↔
Bupivacaine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Cisatracurium	↔	↔	↔	↔	↔	↔	↔	↔	↔
Desflurane	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dexmedetomidine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Enflurane	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ephedrine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Etidocaine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Halothane	↔	↔	↔	↔	↔	↔	↔	↔	↔
Isoflurane	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ketamine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Minaxolone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nitrous oxide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Propofol	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Rocuronium	↑	↔	↔	↔	↔	↔	↔	↔	↔
Sevoflurane	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Sufentanil	↔	↔	↔	↔	↔	↔	↔	↔	↔
Suxamethonium (succinylcholine)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tetracaine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Thiopental	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tizanidine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Vecuronium	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

- Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.
- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Key to abbreviations

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Analgesics

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Alfentanil	↔	↔	↔	↔	↔	↔	↔	↔	↔
Aspirin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Buprenorphine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Celecoxib	↔	↔	↔	↔	↔	↔	↔	↔	↔
Codeine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dextropropoxyphene	↔	↔	↔	↔	↔	↔	↔	↔	↔
Diamorphine (diacetylmorphine)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Diclofenac	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dihydrocodeine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fentanyl	↔	↔	↔	↔	↔	↔	↔	↔	↔
Hydrocodone	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Hydromorphone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ibuprofen	↔	↔	↔	↔	↔	↔	↔	↔	↔
Mefenamic acid	↔	↔	↔	↔	↔	↔	↔	↔	↔
Metamizole	↔	↔	↔	↔	↔	↓	↔	↔	↔
Methadone	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Morphine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Naproxen	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nimesulide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Oxycodone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Paracetamol (Acetaminophen)	↔	↔	↔	↑14-16%	↔	↔	↔	↔	↔
Pethidine (Meperidine)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Piroxicam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Remifentanyl	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tapentadol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tramadol	↔♥	↔	↔	↔	↔	↔	↔	↔	↔

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Notes:

Diamorphine and Morphine + AZM

No effect on systemic exposure but inhibition of P-gp by azithromycin at the blood-brain barrier could potentiate the opiate effect in the CNS.

Metamizole + IFN-β or RBV

Coadministration should be avoided due to the increased risk of haematological toxicity.

Paracetamol + FAVI

The daily dose of paracetamol in adults should be no more than 3000 mg/day (rather than 4000 mg/day).

Key to abbreviations

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Colour Legend

Red	These drugs should not be coadministered
Orange	Potential interaction which may require a dose adjustment or close monitoring.
Yellow	Potential interaction likely to be of weak intensity.
Light Green	Additional action/monitoring or dosage adjustment unlikely to be required.
White	No clinically significant interaction expected

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Page 4 of 31

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Antiarrhythmics

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Amiodarone	↔♥	↔	↔	↔	↔	↑	↔	↔	↔
Bepridil	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Digoxin	↑	↔	↔	↔	↔	↔	↔	↔	↔
Disopyramide	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Dofetilide	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Flecainide	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Lidocaine (Lignocaine)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Mexiletine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Propafenone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Quinidine	↔♥	↔	↔	↔	↔	↑	↔	↔	↔

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Notes:

Amiodarone or Quinidine + IVM

Inhibition of P-gp by amiodarone or quinidine may increase ivermectin transfer across the blood-brain barrier leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

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Page 5 of 31

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Antibacterials

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Bedaquiline	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Ciprofloxacin	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Clarithromycin	↔♥	↔	↔	↔	↔	↑	↔	↔	↔
Clofazimine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Delamanid	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Erythromycin	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Levofloxacin	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Linezolid	↔	↔	↔	↔	↔	↔	↔	↔	↔
Moxifloxacin	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Ofloxacin	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Pyrazinamide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Rifabutin	↔	↔	↔	↔	↔	↓	↔	↔	↔
Rifampicin	↓	↔	↔	↔	↔	↓	↔	↓	↔
Rifapentine	↓	↔	↔	↔	↔	↓	↔	↓	↔
Telithromycin	↔♥	↔	↔	↔	↔	↑	↔	↔	↔

Text Legend

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Notes:

No interactions are expected with the COVID-19 therapies listed and the following antibacterials:

amikacin, amoxicillin, ampicillin, capreomycin, cefalexin, cefazolin, cefepime, cefixime, cefotaxime, ceftazidime, ceftriaxone, chloramphenicol, clavulanic acid, clindamycin, cloxacillin, cycloserine, dapsone, doxycycline, ertapenem, ethambutol, ethionamide, flucloxacillin, gentamicin, imipenem/cilastatin, isoniazid, kanamycin, meropenem, metronidazole, nitrofurantoin, para-aminosalicylic acid, penicillins, piperacillin, rifaximin, spectinomycin, streptomycin, sulfadiazine, tazobactam, tetracyclines, tinidazole, trimethoprim/sulfamethoxazole, vancomycin.

Clarithromycin + IVM

Clarithromycin may increase plasma concentrations of ivermectin (inhibition of CYP3A4) and may also increase ivermectin transfer across the blood-brain barrier (inhibition of P-gp) leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

Linezolid + RBV

Myelosuppression has been reported with both linezolid and ribavirin. Close monitoring of blood counts is recommended.

Linezolid + IFN-β

Caution is required due to potential additive haematological toxicity.

Pyrazinamide + FAVI

No effect on pyrazinamide concentrations but coadministration increased blood uric acid concentrations. Monitor uric acid.

Rifabutin + AZM

Neutropenia was observed in subjects receiving azithromycin and rifabutin and the combination was poorly tolerated in clinical studies.

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Page 6 of 31

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Anti-coagulant, Anti-platelet and Fibrinolytic

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Acenocoumarol	↔	↔	↔	↔	↔	↔	↑	↔	↔
Apixaban	↑	↔	↔	↔	↔	↔	↔	↔	↔
Argatroban	↔	↔	↔	↔	↔	↔	↔	↔	↔
Aspirin (anti-platelet)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Betrixaban	↑♥	↔	↔	↔	↔	↔	↔	↔	↔
Clopidogrel	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dabigatran	↑	↔	↔	↔	↔	↔	↔	↔	↔
Dalteparin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dipyridamole	↔	↔	↔	↔	↔	↔	↔	↔	↔
Edoxaban	↑	↔	↔	↔	↔	↔	↔	↔	↔
Enoxaparin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fondaparinux	↔	↔	↔	↔	↔	↔	↔	↔	↔
Heparin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Phenprocoumon	↔	↔	↔	↔	↔	↔	↑	↔	↔
Prasugrel	↔	↔	↔	↔	↔	↔	↔	↔	↔
Rivaroxaban	↑	↔	↔	↔	↔	↔	↔	↔	↔
Streptokinase	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ticagrelor	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tinzaparin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Warfarin	↔	↔	↔	↔	↔	↔	↑	↔	↓

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Notes:

Argatroban, Dipyridamole, Fondaparinux, Heparin + IVM
Monitor INR.

Vitamin K antagonists + AZM or IVM

Monitor INR with vitamin K antagonists (e.g., acenocoumarol, phenprocoumon, warfarin).

Vitamin K antagonists + NTZ

Nitazoxanide may increase the effect of vitamin K antagonists (acenocoumarol, phenprocoumon, warfarin) due to protein binding displacement. Monitor INR.

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Anticonvulsants

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Brivaracetam	↔	↔	↔	↑	↔	↔	↔	↔	↔
Carbamazepine	↓	↔	↔	↔	↔	↓	↔	↓	↔
Clonazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Eslicarbazepine	↓	↔	↔	↔	↔	↓	↔	↔	↔
Ethosuximide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Gabapentin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lacosamide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lamotrigine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Levetiracetam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Oxcarbazepine	↓	↔	↔	↔	↔	↓	↔	↔	↔
Perampanel	↔	↔	↔	↔	↔	↔	↔	↔	↔
Phenobarbital (Phenobarbitone)	↓	↔	↔	↔	↔	↓	↔	↓	↔
Phenytoin	↓	↔	↔	↔	↔	↓	↑	↓	↔
Pregabalin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Primidone	↓	↔	↔	↔	↔	↓	↔	↓	↔
Retigabine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Rufinamide	↔	↔	↔	↔	↔	↓	↔	↔	↔
Sultiame	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tiagabine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Topiramate	↔	↔	↔	↔	↔	↔	↔	↔	↔
Valproate (Divalproex)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Vigabatrin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Zonisamide	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

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Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

■	These drugs should not be coadministered
■	Potential interaction which may require a dose adjustment or close monitoring.
■	Potential interaction likely to be of weak intensity.
■	Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 8 of 31

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Antidepressants

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Agomelatine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Amitriptyline	↔♥	↔	↔	?↑	↔	↔	↔	↔	↔
Bupropion	↔	↔	↔	↔	↔	↔	↔	↔	↔
Citalopram	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Clomipramine	↔♥	↔	↔	?↑	↔	↔	↔	↔	↔
Desipramine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Doxepin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Duloxetine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Escitalopram	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Fluoxetine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fluvoxamine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Imipramine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Lithium	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Maprotiline	↔♥	↔	↔	?↑	↔	↔	↔	↔	↔
Mianserin	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Milnacipran	↔	↔	↔	↔	↔	↔	↔	↔	↔
Mirtazapine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Nefazodone	↔	↔	↔	↔	↔	↑	↔	↔	↔
Nortriptyline	↔♥	↔	↔	?↑	↔	↔	↔	↔	↔
Paroxetine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Phenelzine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Reboxetine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Sertraline	↔	↔	↔	↔	↔	↔	↔	↔	↔
St John's wort	↓	↔	↔	↔	↔	↓	↔	↓	↔
Tranlycypromine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Trazodone	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Trimipramine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Venlafaxine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Vortioxetine	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

- Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.
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Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
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Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 9 of 31

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Anti-diabetics

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Acarbose	↔	↔	↔	↔	↔	↔	↔	↔	↔
Canagliflozin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dapagliflozin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dulaglutide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Empagliflozin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Exenatide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Glibenclamide (Glyburide)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Gliclazide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Glimepiride	↔	↔	↔	↔	↔	↔	↔	↔	↔
Glipizide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Insulin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Linagliptin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Liraglutide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Metformin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nateglinide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pioglitazone	↔	↔	↔	↑	↔	↔	↔	↔	↔
Repaglinide	↔	↔	↔	↑ 52%	↔	↔	↔	↔	↔
Rosiglitazone	↔	↔	↔	↑	↔	↔	↔	↔	↔
Saxagliptin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Sitagliptin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tolbutamide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Vildagliptin	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
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Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 10 of 31

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Antifungals

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Amphotericin B	↔	↔	↔	↔	↔	↔	↔	↔	↔
Anidulafungin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Caspofungin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fluconazole	↑ 7% ♥	↔	↔	↔	↔	↔	↔	↔	↔
Flucytosine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Griseofulvin	↔	↔	↔	↔	↔	↓	↔	↔	↔
Isavuconazole	↔	↔	↔	↔	↔	↔	↔	↔	↔
Itraconazole	↔	↔	↔	↔	↔	↑	↔	↔	↔
Ketoconazole	↔	↔	↔	↔	↔	↑	↔	↔	↔
Micafungin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Miconazole	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nystatin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Posaconazole	↔	↔	↔	↔	↔	↑	↔	↔	↔
Terbinafine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Voriconazole	↔	↔	↔	↔	↔	↑	↔	↔	↔

Text Legend

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- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
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Notes:

Itraconazole or Ketoconazole + IVM

Itraconazole and ketoconazole may increase plasma concentrations of ivermectin (inhibition of CYP3A4) and may also increase ivermectin transfer across the blood-brain barrier (inhibition of P-gp) leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

Key to abbreviations

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Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 11 of 31

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Antipsychotics/Neuroleptics

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Amisulpride	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Aripiprazole	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Asenapine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Chlorpromazine	↔♥	↔	↔	?↑	↔	↔	↔	↔	↔
Clozapine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Fluphenazine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Haloperidol	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Iloperidone	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Levomepromazine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Olanzapine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Paliperidone	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Perazine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Periciazine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Perphenazine	↔♥	↔	↔	?↑	↔	↔	↔	↔	↔
Pimozide	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Pipotiazine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Quetiapine	↔♥	↔	↔	?↑	↔	↔	↔	↔	↔
Risperidone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Sulpiride	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Thioridazine	↔♥	↔	↔	?↑	↔	↓	↔	↔	↔
Tiapride	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Ziprasidone	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Zotepine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Zuclopenthixol	↔♥	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

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Notes:

Clozapine + RBV

The risk of haematological toxicity may be potentially increased as clozapine and ribavirin can cause myelosuppression. Closely monitor haematological parameters.

Clozapine + IFN-β

Caution is required due to potential additive haematological toxicity.

Key to abbreviations

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Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 12 of 31

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Anxiolytics/Hypnotics/Sedatives

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Alprazolam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Bromazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Buspirone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Chlordiazepoxide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Clobazam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Clorazepate	↔	↔	↔	↔	↔	↔	↔	↔	↔
Diazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Estazolam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Flunitrazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Flurazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Hydroxyzine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Lorazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lormetazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Midazolam (oral)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Midazolam (parenteral)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Oxazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Temazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Triazolam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Zaleplon	↔	↔	↔	↑	↔	↔	↔	↔	↔
Zolpidem	↔	↔	↔	↔	↔	↔	↔	↔	↔
Zopiclone	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

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- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
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Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
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Charts updated 17 June 2021

Page 13 of 31

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Beta Blockers

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Atenolol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Bisoprolol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Carvedilol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Metoprolol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nebivolol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Oxprenolol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pindolol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Propranolol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Timolol	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

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Notes:

Beta blockers + AZM

Caution and monitoring is advised as beta blockers can prolong the PR interval and azithromycin has been shown to prolong the QT interval.

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Page 14 of 31

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Bronchodilators

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Acidinium bromide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Aminophylline	↔	↔	↔	↑	↑	↔	↔	↔	↔
Formoterol	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Glycopyrronium bromide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Indacaterol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ipratropium bromide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Montelukast	↔	↔	↔	↑	↔	↔	↔	↔	↔
Olodaterol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Roflumilast	↔	↔	↔	↔	↔	↔	↔	↔	↔
Salbutamol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Salmeterol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Theophylline	↑ 2-8%	↔	↔	↑17-27%	↑	↔	↔	↔	↔
Tiotropium bromide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Umeclidinium bromide	↑	↔	↔	↔	↔	↔	↔	↔	↔
Vilanterol	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

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Notes:

Aminophylline or theophylline + IFN-β

Coadministration may increase theophylline concentrations but this is unlikely to be clinically significant. (Aminophylline is a complex of theophylline and ethylenediamine and is given for its theophylline activity.)

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

■	These drugs should not be coadministered
■	Potential interaction which may require a dose adjustment or close monitoring.
■	Potential interaction likely to be of weak intensity.
■	Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 15 of 31

Please check www.covid19-druginteractions.org for updates.

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Calcium Channel Blockers

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Amlodipine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Diltiazem	↔	↔	↔	↔	↔	↔	↔	↔	↔
Felodipine	↔	↔	↔	? ↑	↔	↔	↔	↔	↔
Nicardipine	↔ ♥	↔	↔	↔	↔	↔	↔	↔	↔
Nifedipine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nisoldipine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nitrendipine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Verapamil	↔	↔	↔	↔	↔	↑	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Notes:

Calcium channel blockers + AZM

Caution and monitoring is advised as calcium channel blockers can prolong the PR interval and azithromycin has been shown to prolong the QT interval.

Verapamil + IVM

Inhibition of P-gp by verapamil may increase ivermectin transfer across the blood-brain barrier leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

■	These drugs should not be coadministered
■	Potential interaction which may require a dose adjustment or close monitoring.
■	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 16 of 31

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Contraceptives/HRT - Contraceptives

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Desogestrel (COC)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Desogestrel (POP)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Drospirenone (COC)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Ethinylestradiol	↔	↔	↔	?↑↑ 43%	↔	↔	↔	↔	↔
Etonogestrel (implant)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Etonogestrel (vaginal ring)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Gestodene (COC)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Levonorgestrel (COC)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Levonorgestrel (emergency con.)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Levonorgestrel (implant)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Levonorgestrel (IUD)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Levonorgestrel (POP)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Medroxyprogesterone (depot inj)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Norelgestromin (patch)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Norethisterone (COC)	↔	↔	↔	↑ 47%	↔	↔	↔	↔	↔
Norethisterone (IM depot)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Norethisterone (POP)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Norgestimate (COC)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Norgestrel (COC)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Ulipristal	↔	↔	↔	↑	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Notes:

COC – Combined oral contraceptive; POP – Progestogen only pill; IUD – Intra-uterine device

Contraceptives + RBV

Extreme care must be taken to avoid pregnancy in female patients and in female partners of male patients taking ribavirin. The European product labels for ribavirin state that effective contraception must be used during ribavirin treatment and for 4 months after treatment has been concluded in female patients and for 7 months in female partners of male patients. The US product labels for ribavirin state that effective contraception must be used during ribavirin treatment and for 6 months after treatment has been concluded in female patients and female partners of male patients.

Ethinylestradiol and/or progestins + FAVI

Concentrations of ethinylestradiol and progestins may be affected but no action is needed due to the short treatment duration of the COVID-19 therapy.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

Red	These drugs should not be coadministered
Orange	Potential interaction which may require a dose adjustment or close monitoring.
Yellow	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment unlikely to be required.
Green	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 17 of 31

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Contraceptives/HRT - Hormone Replacement Therapy

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Drospirenone (HRT)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Dydrogesterone (HRT)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Estradiol	↔	↔	↔	?↑↑	↔	↔	↔	↔	↔
Levonorgestrel (HRT)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Medroxyprogesterone (oral)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Norethisterone (HRT)	↔	↔	↔	↑	↔	↔	↔	↔	↔
Norgestrel (HRT)	↔	↔	↔	↑	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑↑ Potential increased exposure of COVID drug
- ↓↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Notes:

Estradiol and + FAVI

Concentrations of estradiol may alter but no action is needed due to the short treatment duration of the COVID-19 therapy.

Progestins + FAVI

Concentrations of progestins may increase but no action is needed due to the short treatment duration of the COVID-19 therapy.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

■	These drugs should not be coadministered
■	Potential interaction which may require a dose adjustment or close monitoring.
■	Potential interaction likely to be of weak intensity.
■	Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 18 of 31

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Covid-19 Adjunct Therapies

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Aspirin (Covid-19 adjunct)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dalteparin (Covid-19 adjunct)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Enoxaparin (Covid-19 adjunct)	↔	↔	↔	↔	↔	↔	↔	↔	↔

Covid-19 Antiviral Therapies

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Atazanavir	↔ ♥	↔	↔	↔	↔	↑	↔	↔	↔
Azithromycin		↔	↔	↔	↔	↔	↔	↔	↔
Bamlanivimab/Etesevimab	↔		↔	↔	↔	↔	↔	↔	↔
Casirivimab/Imdevimab	↔	↔		↔	↔	↔	↔	↔	↔
Chloroquine	↔ ♥	↔	↔	↔	↔	↑	↔	↓	↔
Favipiravir	↔	↔	↔		↔	↔	↔	↔	↔
Hydroxychloroquine	↔ ♥	↔	↔	↔	↔	↑	↔	↓	↔
Interferon beta	↔	↔	↔	↔		↔	↔	↔	↔
Ivermectin	↔	↔	↔	↔	↔		↔	↔	↔
Lopinavir/ritonavir	↔ ♥	↔	↔	↔	↔	↑	↔	↔	↔
Nitazoxanide	↔	↔	↔	↔	↔	↔		↔	↔
Remdesivir	↔	↔	↔	↔	↔	↔	↔		↔
Ribavirin	↔	↔	↔	↔	↔	↔	↔	↔	

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

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Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

Red	These drugs should not be coadministered
Orange	Potential interaction which may require a dose adjustment or close monitoring.
Yellow	Potential interaction likely to be of weak intensity.
Light Green	Additional action/monitoring or dosage adjustment unlikely to be required.
White	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 19 of 31

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Covid-19 Immune Therapies

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Anakinra	↔	↔	↔	↔	↔	↔	↔	↔	↔
Baricitinib	↔	↔	↔	↑	↔	↔	↔	↔	↔
Budesonide (inhaled)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Canakinumab	↔	↔	↔	↔	↔	↔	↔	↔	↔
Colchicine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Covid-19 convalescent plasma	↔	↔	↔	↔	↔	↔	↔	↔	↔
Covid-19 vaccines	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dexamethasone (low dose)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Hydrocortisone (oral or IV)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Methylprednisolone (oral or IV)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ruxolitinib	↔	↔	↔	↔	↔	↑	↔	↔	↔
Sarilumab	↔	↔	↔	↔	↔	↔	↔	↔	↔
Tocilizumab	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

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Notes:

Anakinra, baricitinib, canakinumab, ruxolitinib, sarilumab or tocilizumab + IFN-β

There may be a risk of additive haematological toxicity and additional monitoring should be considered.

Anakinra, baricitinib, canakinumab, ruxolitinib, sarilumab or tocilizumab + RBV

Caution is required due to potential additive haematological toxicity.

Covid-19 Vaccines + B/E or C/I

The American Centers for Disease Control and Prevention advises delaying COVID-19 vaccination until 90 days after administration of monoclonal antibodies as part of COVID-19 treatment, to avoid potential interference with the immune response to the COVID-19 vaccination. Check local guidelines for region-specific recommendations.

Ruxolitinib + IVM

Inhibition of P-gp by ruxolitinib may increase ivermectin transfer across the blood-brain barrier leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

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■	Potential interaction likely to be of weak intensity.
■	Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 20 of 31

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Gastrointestinal Agents

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Alosetron	↔	↔	↔	↔	↔	↔	↔	↔	↔
Antacids	↓	↔	↔	↔	↔	↔	↔	↔	↔
Bisacodyl	↔	↔	↔	↔	↔	↔	↔	↔	↔
Cimetidine	↔	↔	↔	↑	↔	↔	↔	↔	↔
Cisapride	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Esomeprazole	↔	↔	↔	↔	↔	↔	↔	↔	↔
Famotidine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lactulose	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lansoprazole	↔	↔	↔	↔	↔	↔	↔	↔	↔
Loperamide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Magnesium salts (oral)	↓	↔	↔	↔	↔	↔	↔	↔	↔
Mesalazine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Omeprazole	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pantoprazole	↔	↔	↔	↔	↔	↔	↔	↔	↔
Prucalopride	↔	↔	↔	↔	↔	↔	↔	↔	↔
Rabeprazole	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ranitidine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Senna	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

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Notes:

Antacids or magnesium salts+ AZM

Antacids and magnesium salts can reduce absorption of azithromycin and should not be taken simultaneously but well separated in time from azithromycin administration.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

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Orange	Potential interaction which may require a dose adjustment or close monitoring.
Yellow	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment unlikely to be required.
Green	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 21 of 31

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Gastrointestinal Agents – Anti-emetics

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Aprepitant	↔	↔	↔	↔	↔	↔	↔	↔	↔
Cyclizine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dolasetron	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Domperidone	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Dronabinol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Granisetron	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Metoclopramide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ondansetron	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Prochlorperazine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

♥	These drugs should not be coadministered
↔♥	Potential interaction which may require a dose adjustment or close monitoring.
↔	Potential interaction likely to be of weak intensity.
↔	Additional action/monitoring or dosage adjustment unlikely to be required.
↔	No clinically significant interaction expected

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Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 22 of 31

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HCV DDAs

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Elbasvir/Grazoprevir	↑	↔	↔	↔	↔	↔	↔	↔	↔
Glecaprevir/Pibrentasvir	↔	↔	↔	↔	↔	↑	↔	↔	↔
Ledipasvir/Sofosbuvir	↑	↔	↔	↔	↔	↔	↔	↔	↔
Ombitasvir/Paritaprevir/r	↔	↔	↔	↔	↔	↑	↔	↔	↔
Ombitasvir/Paritaprevir/r + Dasabuvir	↔	↔	↔	↑	↔	↑	↔	↔	↔
Sofosbuvir	↔	↔	↔	↔	↔	↔	↔	↔	↔
Sofosbuvir/Velpatasvir	↔	↔	↔	↑	↔	↔	↔	↔	↔
Sofosbuvir/Velpatasvir/Voxilaprevir	↔	↔	↔	↑	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Notes:

Glecaprevir/Pibrentasvir + IVM

Inhibition of P-gp may increase ivermectin transfer across the blood-brain barrier leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

Ombitasvir/Paritaprevir/r + Dasabuvir + FAVI

Coadministration may increase dasabuvir concentrations. However, due to dasabuvir's large therapeutic index, a clinically relevant effect is not anticipated.

Ombitasvir/Paritaprevir/r ± Dasabuvir + IVM

Inhibition of CYP3A4 may increase ivermectin plasma concentrations. Inhibition of P-gp may increase ivermectin transfer across the blood-brain barrier leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

Sofosbuvir/Velpatasvir + FAVI

Coadministration may increase velpatasvir concentrations. However, due to velpatasvir's large therapeutic index, a clinically relevant effect is not anticipated.

Sofosbuvir/Velpatasvir/Voxilaprevir + FAVI

Coadministration may increase velpatasvir concentrations. However, due to velpatasvir's large therapeutic index, a clinically relevant effect is not anticipated.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

■	These drugs should not be coadministered
■	Potential interaction which may require a dose adjustment or close monitoring.
■	Potential interaction likely to be of weak intensity.
■	Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 23 of 31

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HIV Antiretroviral Therapies

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Abacavir	↔	↔	↔	↔	↔	↔	↔	↔	↔
Albuvirtide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Atazanavir + ritonavir	↔♥	↔	↔	↔	↔	↑	↔	↔	↔
Atazanavir/cobicistat	↔♥	↔	↔	↔	↔	↑	↔	↔	↔
Bictegravir/Emtricitabine/TAF	↔	↔	↔	↔	↔	↔	↔	↔	↔
Cabotegravir (oral)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Cabotegravir/rilpivirine (long acting)	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Darunavir + ritonavir	↔	↔	↔	↔	↔	↑	↔	↔	↔
Darunavir/cobicistat	↔	↔	↔	↔	↔	↑	↔	↔	↔
Darunavir/cobi/Emtricitabine/TAF	↔	↔	↔	↔	↔	↑	↔	↔	↔
Dolutegravir	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dolutegravir/Lamivudine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dolutegravir/Rilpivirine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Dolutegravir/Abacavir/Lamivudine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Doravirine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Doravirine/Lamivudine/TDF	↔	↔	↔	↑	↔	↔	↔	↔	↔
Efavirenz	↔	↔	↔	↔	↔	↓	↔	↔	↔
Elvitegravir/cobi/Emtricitabine/TAF	↔	↔	↔	↔	↔	↑	↔	↔	↔
Elvitegravir/cobi/Emtricitabine/TDF	↔	↔	↔	↑	↔	↑	↔	↔	↔
Emtricitabine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Emtricitabine/Tenofovir alafenamide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Emtricitabine/Tenofovir-DF	↔	↔	↔	↑	↔	↔	↔	↔	↔
Etravirine	↔	↔	↔	↔	↔	↓	↔	↔	↔
Fostemsavir	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Ibalizumab-uiyk	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lamivudine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Maraviroc	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nevirapine	↔	↔	↔	↔	↔	↓	↔	↔	↔
Raltegravir	↔	↔	↔	↔	↔	↔	↔	↔	↔
Rilpivirine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Rilpivirine/Emtricitabine/TAF	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Tenofovir-DF	↔	↔	↔	↑	↔	↔	↔	↔	↔
Zidovudine	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Notes:

Atazanavir/ritonavir or atazanavir/cobicistat + RBV

A substantial proportion of patients receiving atazanavir experienced significant hyperbilirubinemia and jaundice following initiation of RBV and peg-IFN for HCV treatment. RBV-related haemolysis resulted in increased production of bilirubin; this is normally cleared by UGT1A1, which is inhibited by atazanavir.

Cobicistat- or ritonavir-containing combinations + IVM

Plasma concentrations of ivermectin may increase (inhibition of CYP3A4) and ivermectin transfer across the blood-brain barrier may also increase (inhibition of P-gp) leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

Tenofovir-DF (TDF) + FAVI

Coadministration is expected to increase the risk of renal toxicity. Close monitoring of renal function is advised.

Zidovudine + IFN-β

There may be a risk of additive haematological toxicity with coadministration. Additional monitoring should be considered.

Zidovudine + RBV

Coadministration is not recommended due to an increased risk of anaemia.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

Red	These drugs should not be coadministered
Orange	Potential interaction which may require a dose adjustment or close monitoring.
Yellow	Potential interaction likely to be of weak intensity.
Light Green	Additional action/monitoring or dosage adjustment unlikely to be required.
Green	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 24 of 31

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Hypertensives – ACE inhibitors

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Benazepril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Captopril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Cilazapril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Enalapril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fosinopril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lisinopril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Perindopril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Quinapril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ramipril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Trandolapril	↔	↔	↔	↔	↔	↔	↔	↔	↔

Hypertensives – Angiotensin antagonists

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Candesartan	↔	↔	↔	↔	↔	↔	↔	↔	↔
Eprosartan	↔	↔	↔	↔	↔	↔	↔	↔	↔
Irbesartan	↔	↔	↔	↔	↔	↔	↔	↔	↔
Losartan	↔	↔	↔	↔	↔	↔	↔	↔	↔
Olmесartan	↔	↔	↔	↔	↔	↔	↔	↔	↔
Telmisartan	↔	↔	↔	↔	↔	↔	↔	↔	↔
Valsartan	↔	↔	↔	↔	↔	↔	↔	↔	↔

Hypertensives – Diuretics

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Amiloride	↔	↔	↔	↔	↔	↔	↔	↔	↔
Bendroflumethiazide	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Chlortalidone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Furosemide	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Hydrochlorothiazide	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Indapamide	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Metolazone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Torasemide	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Xipamide	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Notes:

Bendroflumethiazide, furosemide, hydrochlorothiazide, torasemide + AZM

These diuretics can cause electrolyte disturbances and thereby increase the risk of QT prolongation. Caution and electrolyte monitoring is needed if administering with azithromycin.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

■	These drugs should not be coadministered
■	Potential interaction which may require a dose adjustment or close monitoring.
■	Potential interaction likely to be of weak intensity.
■	Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 25 of 31

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Hypertensives – Other agents

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Aliskiren	↑	↔	↔	↔	↔	↔	↔	↔	↔
Clonidine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dopamine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Doxazosin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Eplerenone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Hydralazine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Isosorbide dinitrate	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ivabradine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Labetalol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lacidipine	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Lercanidipine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Methyldopa	↔	↔	↔	↔	↔	↔	↔	↔	↔
Moxonidine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Prazosin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ranolazine	↔♥	↔	↔	↔	↔	↑	↔	↔	↔
Sacubitril	↔	↔	↔	↔	↔	↔	↔	↔	↔
Sodium nitroprusside	↔	↔	↔	↔	↔	↔	↔	↔	↔
Spirolactone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Terazosin	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Notes:

Ranolazine+ IVM

Inhibition of P-gp by ranolazine may increase ivermectin transfer across the blood-brain barrier leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

Red	These drugs should not be coadministered
Orange	Potential interaction which may require a dose adjustment or close monitoring.
Yellow	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment unlikely to be required.
Green	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 26 of 31

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Hypertensives – Pulmonary hypertension

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Ambrisentan	↑	↔	↔	↔	↔	↔	↔	↔	↔
Bosentan	↔	↔	↔	↔	↔	↓	↔	↔	↔
Epoprostenol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Iloprost	↔	↔	↔	↔	↔	↔	↔	↔	↔
Macitentan	↔	↔	↔	↔	↔	↔	↔	↔	↔
Riociguat	↔	↔	↔	↔	↔	↔	↔	↔	↔
Selexipag	↔	↔	↔	↔	↔	↔	↔	↔	↔
Sildenafil	↓ 8%	↔	↔	↔	↔	↔	↔	↔	↔
Tadalafil	↔	↔	↔	↔	↔	↔	↔	↔	↔
Treprostinil	↔	↔	↔	↑	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

■	These drugs should not be coadministered
■	Potential interaction which may require a dose adjustment or close monitoring.
■	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 27 of 31

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Immunosuppressants

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Adalimumab	↔	↔	↔	↔	↔	↔	↔	↔	↔
Anti-thymocyte globulin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Azathioprine	↔	↔	↔	↔	↔	↔	↔	↔	↑
Basiliximab	↔	↔	↔	↔	↔	↔	↔	↔	↔
Belatacept	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ciclosporin	↑	↔	↔	↔	↔	↑	↔	↔	↔
Everolimus	↔	↔	↔	↔	↔	↔	↔	↔	↔
Methotrexate	↑	↔	↔	↑	↔	↔	↔	↔	↔
Mycophenolate	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pirfenidone	↔	↔	↔	↔	↑	↔	↔	↔	↔
Sirolimus	↑	↔	↔	↔	↔	↔	↔	↔	↔
Tacrolimus	↑♥	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Notes:

Adalimumab + RBV

The risk of haematological toxicity may be potentially increased as adalimumab and ribavirin can cause myelosuppression. Closely monitor haematological parameters.

Adalimumab + IFN-β

Caution is required due to potential additive haematological toxicity.

Azathioprine + RBV

Ribavirin may interfere with azathioprine metabolism possibly leading to an accumulation of 6-methylthioinosine monophosphate, which has been associated with myelotoxicity.

Azathioprine + IFN-β

Caution is required due to potential additive haematological toxicity.

Belatacept + RBV

Caution is required due to potential additive haematological toxicity.

Ciclosporin + IVM

Inhibition of P-gp by ciclosporin may increase ivermectin transfer across the blood-brain barrier leading to higher concentrations in the brain and increased risk of neurotoxicity. Use with caution and monitor for neurotoxicity.

Methotrexate + IFN

Caution is required due to potential additive haematological toxicity. Additional monitoring should be considered.

Methotrexate + RBV

Methotrexate can cause anaemia. Monitoring is recommended.

Pirfenidone + IFN-β

Any increase in pirfenidone is unlikely to be clinically relevant, except in the presence of hepatic impairment as moderate hepatic impairment also increases pirfenidone exposure (by 60%). No a priori dosage adjustment is recommended in patients with hepatic impairment but monitor for increased toxicity.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

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Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 28 of 31

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Inotropes & Vasopressors

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Adrenaline (Epinephrine)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dobutamine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Noradrenaline	↔	↔	↔	↔	↔	↔	↔	↔	↔
Vasopressin	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

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Notes:

Remdesivir

Pressor requirement to maintain blood pressure is a key exclusion criteria to eligibility for remdesivir use.

See <https://rdvcu.gilead.com/> for further details.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

	These drugs should not be coadministered
	Potential interaction which may require a dose adjustment or close monitoring.
	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment unlikely to be required.
	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 29 of 31

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Lipid Lowering Agents

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Atorvastatin	↑ 1%	↔	↔	↔	↔	↔	↔	↔	↔
Bezafibrate	↔	↔	↔	↔	↔	↔	↔	↔	↔
Clofibrate	↔	↔	↔	↔	↔	↔	↔	↔	↔
Evolocumab	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ezetimibe	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fenofibrate	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fish oils	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fluvastatin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Gemfibrozil	↔	↔	↔	↔	↔	↔	↔	↔	↔
Lovastatin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pitavastatin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pravastatin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Rosuvastatin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Simvastatin	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
- ↔ No significant effect

Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

- ♥ This interaction involves drugs identified by www.crediblemeds.org as having a known, possible or conditional risk of QT prolongation and/or TdP. Risk may be related to dose or concentration (due to DDIs) and/or additive if two or more such drugs are combined. Note, please check product labels for any additional cardiac warnings.

Key to abbreviations

AZM	Azithromycin	FAVI	Favipiravir	NTZ	Nitazoxanide
B/E	Bamlanivimab/Etesevimab	IFN-β	Interferon beta	RDV	Remdesivir
C/I	Casirivimab/Imdevimab	IVM	Ivermectin	RBV	Ribavirin

Colour Legend

■	These drugs should not be coadministered
■	Potential interaction which may require a dose adjustment or close monitoring.
■	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment unlikely to be required.
■	No clinically significant interaction expected

Interactions with Experimental COVID-19 Antiviral Therapies

Charts updated 17 June 2021

Page 30 of 31

Please check www.covid19-druginteractions.org for updates.

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Others

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Acetylcysteine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Aciclovir	↔	↔	↔	↔	↔	↔	↔	↔	↔
Alendronic acid	↔	↔	↔	↔	↔	↔	↔	↔	↔
Alfuzozin	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Allopurinol	↔	↔	↔	↑	↔	↔	↔	↔	↔
Calcium supplements	↔	↔	↔	↔	↔	↔	↔	↔	↔
Carbocisteine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Dextromethorphan	↔	↔	↔	↔	↔	↔	↔	↔	↔
Donepezil	↔♥	↔	↔	↔	↔	↔	↔	↔	↔
Eltrombopag	↔	↔	↔	↔	↔	↔	↔	↔	↔
Entecavir	↔	↔	↔	↔	↔	↔	↔	↔	↔
Finasteride	↔	↔	↔	↔	↔	↔	↔	↔	↔
Folic acid	↔	↔	↔	↔	↔	↔	↔	↔	↔
Guaifenesin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Levothyroxine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Magnesium sulphate (IV)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Melatonin	↔	↔	↔	↔	↔	↔	↔	↔	↔
Memantine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Mirabegron	↑♥	↔	↔	↔	↔	↔	↔	↔	↔
Potassium	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pramipexole	↔	↔	↔	↔	↔	↔	↔	↔	↔
Pyridostigmine	↔	↔	↔	↔	↔	↔	↔	↔	↔
Oseltamivir	↔	↔	↔	↑ 14%	↔	↔	↔	↔	↔
Tamsulosin	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

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Page 31 of 31

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Steroids

	AZM	B/E	C/I	FAVI	IFN-β	IVM	NTZ	RDV	RBV
Beclometasone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Betamethasone	↔	↔	↔	↔	↔	↓	↔	↔	↔
Budesonide (oral/rectal)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Ciclesonide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Clobetasol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fludrocortisone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Flunisolide	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fluocinolone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Fluticasone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Hydrocortisone (topical)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Megestrol acetate	↔	↔	↔	↔	↔	↔	↔	↔	↔
Methylprednisolone (topical)	↔	↔	↔	↔	↔	↔	↔	↔	↔
Mometasone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Nandrolone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Oxandrolone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Prednisolone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Prednisone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Stanozolol	↔	↔	↔	↔	↔	↔	↔	↔	↔
Testosterone	↔	↔	↔	↔	↔	↔	↔	↔	↔
Triamcinolone	↔	↔	↔	↔	↔	↔	↔	↔	↔

Text Legend

- ↑ Potential increased exposure of the comedication
- ↓ Potential decreased exposure of the comedication
- ↑ Potential increased exposure of COVID drug
- ↓ Potential decreased exposure of COVID drug
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