Please note that if a drug is not listed it cannot automatically be assumed it is safe to coadminister.
Please check www.covid19-druginteractions.org for updates.

Anti-coagulant, Anti-platelet and Fibrinolytic

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Acenocoumarol	↔	↓	↔	↔	↑	↔
Apixaban	↑	↑	↔	↑	↔	↔
Argatroban	↔	↔	↔	↔	↔	↔
Aspirin (anti-platelet)	↔	↔	↔	↔	↔	↔
Betrixaban	↑	↑♥	↔	↑	↔	↔
Clopidogrel	↓	↓	↔	↔	↔	↔
Dabigatran	↑	↔ or ↓	↔	↑	↔	↔
Dalteparin	↔	↔	↔	↔	↔	↔
Dipyridamole	↔	↓	↔	↔	↔	↔
Edoxaban	↑	↑	↔	↑	↔	↔
Eltrombopag	↔	↓ 17%	↔	↔	↔	↔
Enoxaparin	↔	↔	↔	↔	↔	↔
Fondaparinux	↔	↔	↔	↔	↔	↔
Heparin	↔	↔	↔	↔	↔	↔
Phenprocoumon	↑	↑↓	↔	↔	↑	↔
Prasugrel	↔	↔	↔	↔	↔	↔
Rivaroxaban	↑	↑	↔	↑	↔	↔
Streptokinase	↔	↔	↔	↔	↔	↔
Ticagrelor	↑	↑	↔	↔	↔	↔
Warfarin	↑	↓	↔	↔	↑	↓

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

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Notes:

Apixaban + DRV/c or LPV/r
The US product label for apixaban suggests to use apixaban at a reduced dose (2.5 mg twice daily) if needed.

Betrixaban + DRV/c or LPV/r
The US product label for betrixaban recommends for patients receiving or starting a strong P-gp inhibitor to reduce betrixaban dose and use an initial dose of 80 mg followed by 40 mg once daily.

Clopidogrel + DRV/c or LPV/r
Decreased conversion to active metabolite leading to non-responsiveness to clopidogrel. Prasugrel should be preferred to clopidogrel with ritonavir- or cobicistat-boosted regimens.

Edoxaban + DRV/c or LPV/r
The European product label for edoxaban states to consider a dose reduction of edoxaban from 60 mg to 30 mg with strong P-gp inhibitors, however, the US product label recommends no dose modification.

Edoxaban + DRV/c or LPV/r
Concentrations of active metabolite are reduced but without a significant reduction in prasugrel activity.

Vitamin K antagonists + DRV/c, LPV/r or NITAZ
Monitor INR with vitamin K antagonists (e.g., acenocoumarol, phenprocoumon, warfarin)

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

These drugs should not be coadministered
Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
No clinically significant interaction expected

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Anti-diabetics

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Acarbose	↔	↔	↔	↔	↔	↔
Canagliflozin	↔	↓	↔	↔	↔	↔
Dapagliflozin	↔	↔	↔	↔	↔	↔
Dulaglutide	↔	↔	↔	↔	↔	↔
Empagliflozin	↔	↔	↔	↔	↔	↔
Exanatide	↔	↔	↔	↔	↔	↔
Glibenclamide (Glyburide)	↑	↑	↔	↔	↔	↔
Gliclazide	↔	↓	↔	↔	↔	↔
Glimepiride	↔	↓	↔	↔	↔	↔
Glipizide	↔	↓	↔	↔	↔	↔
Insulin	↔	↔	↔	↔	↔	↔
Linagliptin	↑	↑	↔	↔	↔	↔
Liraglutide	↔	↔	↔	↔	↔	↔
Metformin	↑	↔	↔	↔	↔	↔
Nateglinide	↑	↑↓	↔	↔	↔	↔
Pioglitazone	↑	↑	↑	↔	↔	↔
Repaglinide	↑	↑	↑	↔	↔	↔
Rosiglitazone	↔	↓	↑	↔	↔	↔
Saxagliptin	↑	↑	↔	↔	↔	↔
Sitagliptin	↑	↑	↔	↔	↔	↔
Tolbutamide	↔	↓	↔	↔	↔	↔
Vildagliptin	↔	↔	↔	↔	↔	↔

Text Legend

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⇑ Potential increased exposure of COVID drug
⇓ Potential decreased exposure of COVID drug
↔ No significant effect

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Notes:

Canagliflozin +LPV/r
If coadministration is deemed necessary, increasing canagliflozin to 300 mg once daily may be considered if patients are currently tolerating canagliflozin 100 mg once daily, have an eGFR ≥60 mL/min/1.73m^2 or CrCl ≥60 mL/min, and require additional glycaemic control. Other glucose-lowering therapies should be considered for patients with an eGFR 45 mL/min/1.73m^2 to <60 mL/min/1.73m^2 or CrCl 45 mL/min to <60 mL/min taking canagliflozin 100 mg who are receiving concurrent therapy with a UGT enzyme inducer and who require additional glycaemic control.

Linagliptin + DRV/c or LPV/r
The increase in anti-diabetic drug exposure is not considered as clinically significant as the drug is mainly eliminated unchanged and has a large safety window.

Metformin + DRV/c
Close monitoring is recommended when starting or stopping DRV/c and metformin as a dose adjustment of metformin may be necessary.

Saxagliptin + DRV/c or LPV/r:
The US product label for saxagliptin states the recommended dose of saxagliptin to be 2.5 mg once daily when coadministered with strong cytochrome P450 3A4/5 (CYP3A4/5) inhibitors.

Sitagliptin + DRV/c or LPV/r
The increase in anti-diabetic drug exposure is not considered as clinically significant as the drug is mainly eliminated unchanged and has a large safety window.

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

These drugs should not be coadministered
Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
No clinically significant interaction expected

Interactions with Experimental COVID-19 Therapies

Please note that if a drug is not listed it cannot automatically be assumed it is safe to coadminister.
Please check www.covid19-druginteractions.org for updates.

Anti-hypertensives – ACE inhibitors

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Benazepril	↔	↔	↔	↔	↔	↔
Captopril	↔	↔	↔	↔	↔	↔
Cilazapril	↔	↔	↔	↔	↔	↔
Enalapril	↔	↔	↔	↔	↔	↔
Fosinopril	↔	↑	↔	↔	↔	↔
Lisinopril	↔	↔	↔	↔	↔	↔
Perindopril	↔	↔	↔	↔	↔	↔
Quinapril	↔	↔	↔	↔	↔	↔
Ramipril	↔	↔	↔	↔	↔	↔
Trandolapril	↔	↔	↔	↔	↔	↔

Anti-hypertensives – Angiotensin Antagonists

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Candesartan	↔	↔	↔	↔	↔	↔
Eprosartan	↔	↔	↔	↔	↔	↔
Irbesartan	↔	↓	↔	↔	↔	↔
Losartan	↔	↓	↔	↔	↔	↔
Olmesartan	↔	↔	↔	↔	↔	↔
Telmisartan	↔	↔	↔	↔	↔	↔
Valsartan	↑	↑	↔	↔	↔	↔

Anti-hypertensives – Diuretics

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	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

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

	These drugs should not be coadministered
	Potential interaction which may require a dose adjustment or close monitoring.
	Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
	No clinically significant interaction expected

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Anti-hypertensives – Other agents

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Aliskiren	↑	↑	↔	↔	↔	↔
Captopril	↔	↔	↔	↔	↔	↔
Clonidine	↔	↔	↔	↔	↔	↔
Digoxin	↑	↑♥	↔	↑	↔	↔
Dopamine	↔	↔	↔	↔	↔	↔
Doxazosin	↑	↑	↔	↔	↔	↔
Eplerenone	↑	↑	↔	↔	↔	↔
Hydralazine	↔	↔	↔	↔	↔	↔
Isosorbide dinitrate	↑	↑	↔	↔	↔	↔
Ivabradine	↑	↑	↔	↔ ♥	↔	↔
Labetalol	↔	↓	↔	↔	↔	↔
Lacidipine	↑	↑♥	↔	↔	↔	↔
Lercanidipine	↑	↑	↔	↔	↔	↔
Methyldopa	↔	↔	↔	↔	↔	↔
Moxonidine	↔	↔	↑	↔	↔	↔
Prazosin	↑	↑	↔	↔	↔	↔
Ranolazine	↑	↑	↔	↔ ♥	↔	↔
Sacubitril	↑	↑	↔	↔	↔	↔
Sodium nitroprusside	↔	↔	↔	↔	↔	↔
Spironolactone	↔	↔	↔	↔	↔	↔
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

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Notes:

Doxazosin + DRV/c or LPV/r
For patients already taking doxazosin, monitor blood pressure and reduce doxazosin dose as needed if hypotension occurs on starting DRV/c or LPV/r.

Isosorbide nitrate + DRV/c or LPV/r
Decreased active metabolite.

Sacubitril + DRV/c or LPV/r
Increased active metabolite

Terazosin + DRV/c or LPV/r
For patients already taking terazosin, monitor blood pressure and reduce terazosin dose as needed if hypotension occurs on starting DRV/c or LPV/r.

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

These drugs should not be coadministered
Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
No clinically significant interaction expected

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Anti-hypertensives – Pulmonary hypertension

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Ambrisentan	↑	↑	↔	↔	↔	↔
Bosentan	↑	↑	↔	↔	↔	↔
Epoprostenol	↔	↔	↔	↔	↔	↔
Iloprost	↔	↔	↔	↔	↔	↔
Macitentan	↑	↑	↔	↔	↔	↔
Riociguat	↑	↑	↔	↔	↔	↔
Selexipag	↔	↔	↔	↔	↔	↔
Sildenafil	↑	↑	↔	↔	↔	↔
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

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Notes:

Ambrisentan +DRV/c or LPV/r
Start ambrisentan at 5 mg and closely monitor the patient for tolerability.

Bosentan + DRV/c
The European product label for DRV/c does not recommended coadministration as it may lead to decreased cobicistat concentrations and consequently those of darunavir being boosted, leading to loss of therapeutic effect and possible development of resistance. However, the US product label suggests when starting DRV/c in patients stable on bosentan, discontinue bosentan at least 36 h prior to starting cobicistat and resume bosentan at 62.5 mg once daily or every other day based on individual tolerability after at least 10 days following starting darunavir/cobicistat.

Bosentan +LPV/r
When coadministered patients should be closely observed for bosentan toxicity, especially during the first week of co-administration. For patients on bosentan, the US product label for LPV/r suggests to discontinue bosentan at least 36 hours prior to initiation of LPV/r and after at least 10 days of LPV/r, to resume bosentan at 62.5 mg once daily or every other day based upon individual tolerability.

Riociguat + DRV/c or LPV/r
The European product label for riociguat does not recommend its use in presence of strong inhibitors of CYPs, P-gp and BCRP; the US product label recommends to start riociguat at a dose of 0.5 mg three times daily and to monitor for signs and symptoms of hypotension.

Tadalafil + DRV/c
The European product label for DRV/c does not recommend coadministration, however, the US product label for DRV/c recommends for patients on tadalafil and starting DRV/c, to avoid the use of tadalafil during the initiation of darunavir/cobicistat and to stop tadalafil at least 24 hours prior to starting DRV/c. After at least one week following the initiation of DRV/c, resume tadalafil at 20 mg once daily. Increase to 40 mg once daily based upon individual tolerability.

Tadalafil + LPV/r
The European product label for LPV/r does not recommend tadalafil for the treatment of pulmonary arterial hypertension, but the US product label suggests for patients on tadalafil, to avoid use of tadalafil during the initiation of LPV/r and to stop tadalafil at least 24 hours prior to starting LPV/r. After at least one week following the initiation of LPV/r, resume tadalafil at 20 mg once daily. Increase to 40 mg once daily based upon individual tolerability.

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

These drugs should not be coadministered
Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
No clinically significant interaction expected

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Antivirals

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Darunavir/cobicistat		✕	↔	⇑	↔	↔
Lopinavir/ritonavir	✕		↔	⇑ ♥	↔	↔
Favipiravir	↔	↔		↔	↔	↔
Chloroquine	↑	↑ ♥	↔		↔	↔
Nitazoxanide	↔	↔	↔	↔		↔
Ribavirin	↔	↔	↔	↔	↔	
Oseltamivir	↔	↔	↑ 14%	↔	↔	↔

Text Legend

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

Notes:

DRV/c + LPV/r
Darunavir/c and lopinavir/r should not be coadministered due to similar effects of cobicistat and ritonavir on CYP3A4.

Chloroquine + DRV/c or LPV/r
DRV/c or LPV/r may increase chloroquine concentrations, but to a moderate extent.
There is an additive QT risk with LPV/r and chloroquine.

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

	These drugs should not be coadministered
	Potential interaction which may require a dose adjustment or close monitoring.
	Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
	No clinically significant interaction expected

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Anxiolytics/Hypnotics/Sedatives

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	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

↑ 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

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

These drugs should not be coadministered
Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
No clinically significant interaction expected

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Beta Blockers

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	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

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

These drugs should not be coadministered
Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
No clinically significant interaction expected

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Bronchodilators

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Aclidinium bromide	↔	↔	↔	↔	↔	↔
Aminophylline	↔	↓	↔	↔	↔	↔
Formoterol	↔	↔♥	↔	↔	↔	↔
Glycopyrronium bromide	↔	↔	↔	↔	↔	↔
Indacaterol	↑	↑	↔	↔	↔	↔
Ipratropium bromide	↔	↔	↔	↔	↔	↔
Montelukast	↑	↑	↑	↔	↔	↔
Olodaterol	↑	↑	↔	↔	↔	↔
Roflumilast	↑	↑	↔	↔	↔	↔
Salbutamol	↔	↔	↔	↔	↔	↔
Salmeterol	↑	↑	↔	↔♥	↔	↔
Theophylline	↔	↓	⇑ 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

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Notes:

Indacaterol +DRV/c or LPV/r
Exposure can be increased by up to 2-fold with ritonavir (and may be similar with cobicistat), however, this increase does not raise any concerns based on indacaterol's safety data.

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

These drugs should not be coadministered
Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
No clinically significant interaction expected

Please note that if a drug is not listed it cannot automatically be assumed it is safe to coadminister.
Please check www.covid19-druginteractions.org for updates.

Calcium Channel Blockers

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	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

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Notes:
Amlodipine + DRV/c or LPV/r
If coadministration is indicated, consider a dose reduction for amlodipine of 50%.

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

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Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
No clinically significant interaction expected

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Lipid Lowering Agents

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Atorvastatin	↑ 290%	↑ 490%	↔	↔	↔	↔
Bezafibrate	↔	↔	↔	↔	↔	↔
Clofibrate	↔	↔	↔	↔	↔	↔
Evolocumab	↔	↔	↔	↔	↔	↔
Ezetimibe	↑	↔	↔	↔	↔	↔
Fenofibrate	↔	↔	↔	↔	↔	↔
Fish oils	↔	↔	↔	↔	↔	↔
Fluvastatin	↑	↔	↔	↔	↔	↔
Gemfibrozil	↔	↓ 41%	↔	↔	↔	↔
Lovastatin	↑	↑	↔	↔	↔	↔
Pitavastatin	↑	↓ 20%	↔	↔	↔	↔
Pravastatin	↑	↑ 33%	↔	↔	↔	↔
Rosuvastatin	↑93%	↑ 108%	↔	↔	↔	↔
Simvastatin	↑	↑	↔	↔	↔	↔

Text Legend

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↓ Potential decreased exposure of the comedication
⇑ Potential increased exposure of COVID drug
⇓ Potential decreased exposure of COVID drug
↔ No significant effect

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Notes:

Atorvastatin + DRV/c
A daily dose of 40 mg atorvastatin should not be exceeded with careful safety monitoring. (Note, the US product label for DRV/c states not to exceed atorvastatin 20 mg/day.)

Atorvastatin + LPV/r
Do not exceed a daily dose of 20 mg with careful safety monitoring.

Rosuvastatin + DRV/c
The US product label for DRV/c states not to exceed rosuvastatin 20 mg/day.

Rosuvastatin + LPV/r
Do not exceed rosuvastatin 10 mg/day.

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

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Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
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Steroids

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Beclometasone	↔	↑	↔	↔	↔	↔
Betamethasone	↑* ⇓	↑* ⇓	↔	↔	↔	↔
Budesonide	↑*	↑*	↔	↔	↔	↔
Ciclesonide	↑	↑	↔	↔	↔	↔
Clobetasol	↑*	↑*	↔	↔	↔	↔
Dexamethasone	↑* ⇓	↑* ⇓	↔	↔	↔	↔
Fludrocortisone	↑*	↑*	↔	↔	↔	↔
Flunisolide	↑	↑	↔	↔	↔	↔
Fluocinolone	↑*	↑*	↔	↔	↔	↔
Fluticasone	↑*	↑*	↔	↔	↔	↔
Hydrocortisone (oral)	↑*	↑*	↔	↔	↔	↔
Hydrocortisone (topical)	↔	↔	↔	↔	↔	↔
Megestrol acetate	↔	↔	↔	↔	↔	↔
Methylprednisolone	↑*	↑*	↔	↔	↔	↔
Mometasone	↑*	↑*	↔	↔	↔	↔
Nandrolone	↔	↔	↔	↔	↔	↔
Oxandrolone	↔	↔	↔	↔	↔	↔
Prednisolone	↑*	↑*	↔	↔	↔	↔
Prednisone	↑*	↑*	↔	↔	↔	↔
Stanazolol	↑	↑	↔	↔	↔	↔
Testosterone	↑	↑	↔	↔	↔	↔
Triamcinolone	↑*	↑*	↔	↔	↔	↔

Text Legend

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↓ Potential decreased exposure of the comedication
⇑ Potential increased exposure of COVID drug
⇓ Potential decreased exposure of COVID drug
↔ No significant effect

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Notes:

* Risk of elevated corticosteroid levels, Cushing's syndrome and adrenal suppression.
This risk is present for oral and injected administration, and also for topical, inhaled or eye drops corticosteroids

Beclometasone + DRV/c
DRV/r decreased the AUC of the active metabolite (beclometasone-17-monopropionate) by 11%, but no significant effect on adrenal function was seen. A similar effect may occur with DRV/c.

Beclometasone + LPV/r
Ritonavir (100 mg twice daily) increased the AUC of the active metabolite by 108% but no significant effect on adrenal function was seen. Caution is still warranted, use the lowest possible corticosteroid dose and monitor for corticosteroid side effects.

Betamethasone or Dexamethasone + DRV/c or LPV/r
Betamethasone and dexamethasone are moderate inducers of CYP3A4 and could decrease exposure and efficacy of DRV/c or LPV/r particularly when administered orally or intravenously at high doses or for a long duration.

Ciclesonide + DRV/c or LPV/r
No dose adjustment required but monitor closely, especially for Cushing's syndrome, when using a high dose or prolonged administration.

Flunisolide + DRV/c or LPV/r
Use the lowest possible flunisolide dose with monitoring for corticosteroid side effects.

Prednisolone or Prednisone + DRV/c or LPV/r
Based on DDI study with LPV/r, exposure of prednisolone (obtained also after conversion from prednisone) is increased modestly (+30%). A 30% dose reduction of the corticosteroid might be considered during concomitant treatment.

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

Colour Legend

These drugs should not be coadministered
Potential interaction which may require a dose adjustment or close monitoring.
Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.
No clinically significant interaction expected

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Other Drugs

	DRV/c	LPV/r	FAVI	CLQ	NITAZ	RBV
Ethinylestradiol Norethindrone	↓ 30% ↑	↓ 42% ↓ 17%	↑ 43% ↑ 47%	↔ ↔	↔ ↔	↔ ↔
Paracetamol (Acetaminophen)	↔	↔	↑ 14-16%	↔	↔	↔
Pyrazinamide	↔	↔	↔	↔	↔	↔

Text Legend

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↓ Potential decreased exposure of the comedication
⇑ Potential increased exposure of COVID drug
⇓ Potential decreased exposure of COVID drug
↔ No significant effect

♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if coadministered.

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

Notes:

Ethinylestradiol/Norethindrone + DRV/c
Alternative or additional contraceptive measures are recommended.

Ethinylestradiol/Norethindrone + LPV/r
A reliable method of barrier contraception must be used in addition to oral contraception.

Ethinylestradiol/Norethindrone + FAVI
The ethinylestradiol dose should not exceed 30 µg.

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

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

Key to abbreviations

DRV/c	Darunavir/cobicistat	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin

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Potential interaction which may require a dose adjustment or close monitoring.
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