Anti-diabetic Treatment Selector

Charts revised December 2023. Full information available at www.hiv-druginteractions.org

	ATV/c	ATV/r	DRV/c	DRV/r	LPV/r	DOR	EFV	ETV	NVP	RPV oral	FTR	LEN	MVC	BIC/ F/TAF	CAB oral	CAB/ RPV	DTG	EVG/c/ F/TAF	EVG/c/ F/TDF	RAL	FTC/ TAF	FTC/ TDF
Sulfonylureas																						
Glibenclamide	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↑	↑	↔	↔	↔	↔	↔	↑	↑	↔	↔	↔
Gliclazide	↔	↓	↔	↓	↓	↔	↑	↑	↔	↔	↑	↔	↔	↔	↔	↔	↔	↓	↓	↔	↔	↔
Glimepiride	↔	↓	↔	↓	↓	↔	↑	↑	↔	↔	↑	↔	↔	↔	↔	↔	↔	↓	↓	↔	↔	↔
Glipizide	↔	↓	↔	↓	↓	↔	↑	↑	↔	↔	↑	↔	↔	↔	↔	↔	↔	↓	↓	↔	↔	↔
Tolbutamide	↔	↓	↔	↓	↓	↔	↑	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↓	↓	↔	↔	↔
Biguanides																						
Metformin	↑a	↔	↑a	↔	↔	↓6%	↔	↔	↔	↓3%	↔	↔	↔	↑39%	↔	↔	↑79%a	↑a	↑a	↔	↔	↔
Thiazolidinediones																						
Pioglitazone	↑	↑	↑	↑	↑	↔	↑	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑	↔	↔	↔
Rosiglitazone	↑35%	↓17%	↔	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Meglitinides																						
Nateglinide	↑	↑↓	↑	↑↓	↑↓	↔	↑↓	↑↓	↓	↔	↑	↔	↔	↔	↔	↔	↔	↑↓	↑↓	↔	↔	↔
Repaglinide	↑	↑	↑	↑	↑	↔	↑↓	↓	↓	↔	↑	↔	↔	↔	↔	↔	↔	↑	↑	↔	↔	↔
GLP-1 agonists																						
Dulaglutide	↔⇓	↔⇓	↔	↔	↔	↔	↔	↔	↔	↔⇓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Exenatide	↔⇓b	↔⇓b	↔	↔	↔	↔	↔	↔	↔	↔⇓c	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Liraglutide	↔⇓b	↔⇓b	↔	↔	↔	↔	↔	↔	↔	↔⇓c	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Semaglutide	↔⇓b	↔⇓b	↔	↔	↔	↔	↔	↔	↔	↔⇓c	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
DPP-4 inhibitors																						
Alogliptin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Linagliptin	↑d	↑d	↑d	↑d	↑d	↔	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑d	↑d	↔	↔	↔
Saxagliptin	↑	↑	↑	↑	↑	↔	↓	↓	↓	↔	↔	↑	↔	↔	↔	↔	↔	↑	↑	↔	↔	↔
Sitagliptin	↑d	↑d	↑d	↑d	↑d	↔	↓	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑d	↑d	↔	↔	↔
Vildagliptin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
SGLT-2 inhibitors																						
Canagliflozin	↔	↓	↔	↓	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔e	↔	↔	↔e
Dapagliflozin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Empagliflozin	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Others																						
Acarbose	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔

Interactions with CAB/RPV long acting injections

Pharmacokinetic interactions shown are mostly with RPV.
QT interactions shown are with RPV.

Interactions with Lenacapavir

Residual LEN may affect exposure of sensitive CYP3A4 substrates initiated within 9 months after stopping subcutaneous LEN.

Interactions with Ibalizumab

None

Interactions with Abacavir (ABC), Lamivudine (3TC), Tenofovir-DF (TDF) or Zidovudine (ZDV)

ABC: No clinically relevant interactions expected.
3TC: No clinically relevant interactions expected.
TDF: Caution with canagliflozin due to potential additive bone toxicities (e).
ZDV: No clinically relevant interactions expected.

Colour Legend

- No clinically significant interaction expected.
- 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.

Text Legend

↑ Potential increased exposure of the anti-diabetic drug
↓ Potential decreased exposure of the anti-diabetic drug
↔ No significant effect
⇑ Potential increased exposure of HIV drug
⇓ Potential decreased exposure of HIV drug

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

Notes

a Close monitoring is recommended when starting or stopping the combination of these antiretrovirals and metformin as a dose adjustment of metformin may be necessary.

b Caution is needed when coadministering atazanavir and GLP-1 agonists due to their potential to inhibit gastric secretion (and in some cases to slow gastric emptying), thereby reducing the absorption of atazanavir. Consider taking atazanavir 2-4 hours before the GLP-1 agonist.

c Caution is needed when coadministering oral rilpivirine and GLP-1 agonists due to their potential to inhibit gastric secretion (and in some cases to slow gastric emptying), thereby reducing the absorption of rilpivirine. Consider taking oral rilpivirine 4 hours before the GLP-1 agonist.

d 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.

e Caution is recommended when coadministering canagliflozin in the long term with tenofovir-DF due to potential additive bone toxicities.

Abbreviations ATV atazanavir, DRV darunavir, LPV lopinavir, /c cobicistat, /r ritonavir, DOR doravirine, EFV efavirenz, ETV etravirine, NVP nevirapine, RPV rilpivirine, FTR fostemsavir, LEN lenacapavir, MVC maraviroc, BIC bictegravir, CAB cabotegravir, DTG dolutegravir, EVG elvitegravir, RAL raltegravir, F or FTC emtricitabine, TAF tenofovir alafenamide, TDF tenofovir-DF