

# Anti-diabetic Treatment Selector

Charts reviewed October 2019. Full information available at [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)

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

**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 <i>a priori</i> 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 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 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 or empagliflozin in the long term with tenofovir-DF due to potential additive bone toxicities.