

ANTIDIABETIC DRUGS (April 2017)

Class	Generic name (brand name)	Mechanism of action	When to take it	Adverse effects
Sulfonylureas	<i>Gliclazide</i> (Diamicon®) <i>Gliclazide</i> (Diamicon® MR) <i>Glimepiride</i> (Amaryl®) <i>Glyburide</i> (DiaBeta®)	Stimulate the pancreas to produce more insulin	Before meals (≤ 30 minutes); Do not take at bedtime For Diamicon® MR ONLY : Take at breakfast	Hypoglycemia (low blood sugar)
Meglitinides	<i>Nateglinide</i> (Starlix®) <i>Repaglinide</i> (GlucNorm®)	Stimulate the pancreas to produce more insulin	Before meals (≤ 15 minutes); Do not take at bedtime	Hypoglycemia (low blood sugar)
Biguanides	<i>Metformine</i> (Glucophage®)	Reduce the production of glucose by the liver	During meals	Diarrhea, metallic aftertaste, nausea
	<i>Metformine extended-release</i> (Glumetza®)		At dinner	
Thiazolidinediones (TZD)	<i>Pioglitazone</i> (Actos®) <i>Rosiglitazone</i> (Avandia®)	Increase insulin sensitivity of the body cells and reduce the production of glucose by the liver	With or without food, at the same time each day	<ul style="list-style-type: none"> Swelling due to water retention, weight gain Pioglitazone : increased risk of bladder cancer (Health Canada restriction) Rosiglitazone : increased risk of non-fatal heart attack (Health Canada restriction)
Alpha-glucosidases inhibitor	<i>Acarbose</i> (Glucobay®)	Slow the absorption of carbohydrates (sugar) ingested	With the first mouthful of a meal	Bloating and flatulence (gaz)
Dipeptidyl-peptidase-4 (DPP-4) inhibitors	<i>Linagliptine</i> (Trajenta®) <i>Saxagliptine</i> (Onglyza ^{MC}) <i>Sitagliptine</i> (Januvia®) <i>Alogliptine</i> (Nesina®)	Intensify the effect of intestinal hormones (incretines) involved in the control of blood sugar	With or without food, at the same time each day	Pharyngitis, headache
Glucagon-like peptide-1 (GLP-1) agonist	<i>Exenatide</i> (Byetta®)	Mimic the effect of certain intestinal hormones (incretines) involved in the control of blood sugar	<u>Injection</u> to take 0 to 60 minutes before breakfast or dinner	Nausea, diarrhea, vomiting
	<i>Exenatide extended-release</i> (Bydureon®)		<u>Injection</u> once a week, the same day, any hour of the day, with or without food	
	<i>Liraglutide</i> (Victoza®)		<u>Injection</u> to take with or without food, at the same time each day	
	<i>Dulaglutide</i> (Trulicity®)		<u>Injection</u> once a week, the same day, any hour of the day, with or without food	
Sodium glucose cotransporter 2 (SGLT2) inhibitors	<i>Canagliflozine</i> (Invokana®)	Help eliminate glucose in the urine	Before the first meal of the day	Genital and urinary infections, more frequent urination
	<i>Dapagliflozine</i> (Forxiga®)		Any time of day, with or without food	
	<i>Empagliflozine</i> (Jardiance®)			

The following pills combine 2 classes of antidiabetic drugs:

- Thiazolidinedione + biguanide (Avandamet®)
- DPP-4 inhibitors + biguanide (Janumet®, Janumet®XR, Jentaduet^{MC} Komboglyze^{MC})
- SGLT2 inhibitor + biguanide (Xigduo®, Invokamet®, Synjardy®)
- DPP-4 inhibitor + SGLT2 inhibitor (Glyxambi^{MC})