

Antihyperglycemic Agents and Renal Function

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From the CPG Diabetes Canada (Update Nov. 2024) and from the product monograph.

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		CRF stage						
		eGFR(mL/min/1.73 m ²):						
		5	4	3	2	1		
		<15	15-29	30-59	60-89	≥90		
Alpha-Glucosidase Inhibitor	Acarbose (Glucobay TM)		25				100 mg TID	
Biguanides	Metformin (Glucophage [®])		500 mg OD 30	1000 mg OD 45			850 mg TID	
DPP-4 Inhibitors	Alogliptin (Nesina [®])		6.25 mg 30	12.5 mg 45			25 mg OD	
	Linagliptin (Trajenta [®])	Limited experience	15				5 mg OD	
	Saxagliptin (Onglyza [®])		15	2.5 mg 45			5 mg OD	
	Sitagliptin (Januvia [®])		25 mg 30	50 mg 45			100 mg OD	
GLP-1R Agonists (Short acting)	Liraglutide (Victoza [®])	Limited experience	15				1.8 mg OD	
	Lixisenatide (Adlyxine TM)			30			20 ug OD	
	Semaglutide (Rybelsus [®])	Limited experience	15	30			14 mg OD	
GLP-1R Agonists (Long acting)	Dulaglutide (Trulicity [®])	Limited experience	15				4.5 mg per week	
	Semaglutide (Ozempic [®])	Limited experience	15				2 mg per week	
	Semaglutide (Wegovy [®])	Limited experience	15				2.4 mg per week	
GLP-1R Agonists and GIP (Long acting)	Tirzepatide (Mounjaro [®])	Limited experience	15				15 mg per week	
Insulin Secretagogues	Gliclazide (Diamicron [®])		15	30			MR 120 mg OD or 160 mg BID	
	Glimepiride (Amaryl [®])		15	30			4 mg BID	
	Glyburide (Diabeta [®])				60		10 mg BID	
	Repaglinide (Gluconorm [®])			Risk of hypoglycemia 30			4 mg TID	
SGLT2 Inhibitors	Canagliflozin (Invokana [®])		100 mg 30 ¹⁻²⁻⁴	100 mg 60			300 mg OD	
	Dapagliflozin (Forxiga [®])		25 ³⁻⁴				10 mg OD	
	Empagliflozin (Jardiance [®])		10mg 20 ⁴⁻⁵	10mg 30			25 mg OD	
Thiazolidinediones	Pioglitazone (Actos [®])	Heart failure / Limited experience	25				45 mg OD	
	Rosiglitazone (Avandia [®])	Heart failure / Limited experience	25				8 mg OD	
Insulin		Risk of hypo if accumulation			45			

Contraindicated

Not recommended

Dose adjustment required

Caution: reason indicated

Safe

¹ = Do not initiate if eGFR is < 30 ml/min

² = Previously treated patients with albuminuria > 33.9 mg/mmol.

For more information, please refer to the latest version of the product monograph.

³ = Do not initiate if eGFR is < 25 ml/min

⁴ = Stop when dialysis is started

⁵ = Do not initiate if eGFR is < 20 ml/min

The indicated dose is the maximum dose that can be used at this eGFR.