

# Antihyperglycemic Agents and Renal Function

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 From the CPG Diabetes Canada (Update Nov. 2021)  
 and from the product monograph.  
 Last date of revision: November 26, 2021

		CRF stage				
		5	4	3	2	1
		eGFR(mL/min/1.73 m <sup>2</sup> ):				
		<15	15-29	30-59	60-89	≥90
Alpha-Glucosidase Inhibitor	Acarbose (Glucobay <sup>TM</sup> )	25				100 mg TID
Biguanides	Metformin (Glucophage <sup>®</sup> )	500 mg OD 30		1000 mg OD 45	850 mg TID	
DPP-4 Inhibitors	Alogliptin (Nesina <sup>®</sup> )	6.25 mg 30		12.5 mg 45	25 mg OD	
	Linagliptin (Trajenta <sup>®</sup> )	Limited experience	15		5 mg OD	
	Saxagliptin (Onglyza <sup>®</sup> )	30		2.5 mg 45	5 mg OD	
	Sitagliptin (Januvia <sup>®</sup> )	25 mg 30		50 mg 45	100 mg OD	
GLP-1R Agonists (Short acting)	Exenatide (Byetta <sup>®</sup> )	30		Possible GI Effect 50	10 ug BID	
	Liraglutide (Victoza <sup>®</sup> )	15		1.8 mg OD		
	Lixisenatide (Adlyxine <sup>TM</sup> )	30		20 ug OD		
	Semaglutide (Rybelsus <sup>®</sup> )	15	Limited experience 30	14 mg OD		
GLP-1R Agonists (Long acting)	Dulaglutide (Trulicity <sup>®</sup> )	Limited experience	15		1.5 mg per week	
	Exenatide XR (Bydureon <sup>®</sup> )	30		Possible GI Effect 50	2 mg per week	
	Semaglutide (Ozempic <sup>®</sup> )	15	Limited experience 30	1 mg per week		
Insulin Secretagogues	Gliclazide (Diamicron <sup>®</sup> )	Risk of hypoglycemia		45	MR 120 mg OD or 160 mg BID	
	Glimepiride (Amaryl <sup>®</sup> )	Risk of hypoglycemia		45	4 mg BID	
	Glyburide (Diabeta <sup>®</sup> )	60				10 mg BID
	Repaglinide (Gluconorm <sup>®</sup> )	Risk of hypoglycemia		45	4 mg TID	
SGLT2 Inhibitors	Canagliflozin (Invokana <sup>®</sup> )	100 mg	30 <sup>1-2-4</sup>	100 mg	60	300 mg OD
	Dapagliflozin (Forxiga <sup>®</sup> )	25 <sup>3-4</sup>				10 mg OD
	Empagliflozin (Jardiance <sup>®</sup> )	20		30 <sup>1</sup>	25 mg OD	
Thiazolidinediones	Pioglitazone (Actos <sup>®</sup> )	Heart failure		45	45 mg OD	
	Rosiglitazone (Avandia <sup>®</sup> )	Heart failure		45	8 mg OD	
	Insulin	Risk of hypo if accumulation		30		

Contraindicated

Not recommended

Dose adjustment required

Caution: reason indicated

Safe

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

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

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

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

<sup>4</sup> = Stop when dialysis is started

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