

## Anti-Hyperglycemic Medications and Renal Dose Adjustment

		CKD Stage:					
		1 or 2	3a	3b	4	5	
		eGFR (mL/min/1.73 <sup>2</sup> ):	≥60	59-45	44-30	29-15	<15
<b>Biguanide</b>	Metformin (Glucophage®)		45	500-1000mg	30		
<b>SGLT2 inhibitors</b>	Canagliflozin (Invokana®)	60		100mg	30		on dialysis
	Dapagliflozin (Forxiga®)		45*		25		on dialysis
	Empagliflozin (Jardiance®)				30	10mg	20
<b>GLP-1R agonists</b>	Dulaglutide (Trulicity®)						15
	Liraglutide (Victoza®)						15
	Semaglutide (Ozempic® – inj)				30		
	Semaglutide (Rybelsus® – oral)				30		
<b>DPP-4 inhibitors</b>	Alogliptin (Nesina®)	60		12.5mg	30		6.25mg
	Linagliptin (Trajenta®)						15
	Saxagliptin (Onglyza®)		45		2.5mg		15
	Sitagliptin (Januvia®)		45	50mg	30		25 mg
<b>Insulin secretagogues</b>	Gliclazide regular release (Diamicon®)	60			30		
	Gliclazide MR (Diamicon MR®)	60			30		
	Glimepiride (Amaryl®)	60			30		
	Glyburide (Diabeta®)	60					
	Repaglinide (GlucoNorm®)				30		
<b>Thiazolidinediones</b>	Pioglitazone (Actos®)	60					
	Rosiglitazone (Avandia®)	60					
<b>Alpha-glucosidase inhibitor</b>	Acarbose (Glucobay®)				30		
<b>Insulins</b>	All insulin				30		

use alternative    
  do not initiate    
  dose adjustment required    
  caution    
  dose adjustment not required

\* D/C at eGFR <45 mL/min due to lack of glycemic efficacy, but may continue for heart failure and CKD indication until dialysis, but not to initiate at <25 mL/min.

Created by Michelle Lee, RPh, BScPharm. Last updated July 2024. Based on product monograph precautions.

Adapted from Lipsombe L, Booth G, Butalia S, Dasgupta K, et al. *Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada: Pharmacologic Glycemic Management of Type 2 Diabetes in Adults*. Can J Diabetes 2018;42(Suppl 1):S88-S103. Figure 2 Antihyperglycemic medications and renal function.

The Chronic Kidney Disease (CKD) Clinical Pathway is a resource for primary care providers to aid in the diagnosis, medical management, and referral of adults with CKD.