

Diabetes Pharmacotherapy Review

Generic Name <i>Trade Name</i> Dosage Form & Strength	PharmaCare ¹ Annual Cost	CV Benefit	Renal Benefit	A1c Reduction, Glucose Lowering & Weight	Comments
Biguanide					
Metformin <i>Glucophage</i> ®, generics Tab: 500 & 850 mg	Regular Benefit \$20-\$40	✓	Neutral	A1c Reduction: 1% Glucose Lowering: max effect: 1500 mg. Hypoglycemia rare. Weight: loss of 2.9 kg over 5 years	GI side effects dose related , common to occur at initiation and usually temporary. No difference in GI side effects between immediate and extended release. Not recommended if eGFR <30 mL/min.
<i>Glumetza</i> ®, generics ER ² Tab: 500 & 1000 mg ² Extended Release	Non-Benefit \$400-\$800				
GLP-1 Agonists					
Semaglutide <i>Ozempic</i> ® Multidose pre-filled pen (1.34 mg/mL): 1.5 mL (0.25 or 0.5 mg per dose) & 3 mL (1 mg per dose)	Limited Coverage – Special Authority \$2855	✓	Neutral	A1c Reduction: 1 to 2% Glucose Lowering: hypoglycemia risk increased with insulin (reduce insulin dose by 20-30% initially) Weight: loss based on dosage <ul style="list-style-type: none"> ▪ 0.5 mg: 3.6 kg ▪ 1 mg: 4.9 kg ▪ 2 mg: 6.4 kg 	Special authority criteria: inadequate glycemic control on maximum <u>tolerated</u> dose of metformin. Pharmicare will cover to a maximum of 1 mg SUBCUT weekly for diabetes. Health Canada has approved 2 mg SUBCUT weekly for diabetes management, however this dosage currently not covered by Pharmicare.
<i>Wegovy</i> ® Single dose pre-filled pen: 0.25 mg/0.5 mL, 0.5 mg/0.5 mL, 1 mg/0.5 mL, 1.7 mg/0.75 mL & 2.4 mg/0.75 mL	Non-Benefit. Not available yet for purchase in Canada.	✓	Neutral		Approved for weight loss, not diabetes.
<i>Rybelsus</i> ® Tab: 3, 7 & 14 mg	Non-Benefit. \$2759	Neutral			Poor bioavailability, must be taken on empty stomach with maximum ½ cup of water. Recommend to wait 30 minutes before taking other medications.
Liraglutide <i>Victoza</i> ® Multidose pre-filled pen (6mg/mL): 3 mL (0.6, 1.2 & 1.8 mg per dose)	Non-Benefit. \$3755	✓	Neutral		
<i>Saxenda</i> ® Multidose pre-filled pen (6mg/mL): 3 mL (0.6, 1.2, 1.8, 2.4 & 3 mg per dose)	Non-Benefit. \$5025	✓	Neutral		Marketed for chronic weight loss, not diabetes.
Dulaglutide <i>Trulicity</i> ® Single dose pre-filled pen: 0.75 mg/0.5 mL & 1.5 mg/0.5 mL	Non-Benefit. \$2955	✓	Neutral		
SGLT2 Inhibitors					
Dapagliflozin <i>Forxiga</i> ® Tab: 5 & 10 mg	Regular Benefit. \$1080	✓	✓	A1c Reduction: 0.5 to 0.9% (10 & 25 mg tabs have similar A1c lowering and CV benefit). Glucose Lowering: hypoglycemia negligible Weight: loss 2 to 3 kg	
+ metformin <i>Xigduo</i> ® Tab: 5mg + 850/100 mg	Non-Benefit. \$1035				
Empagliflozin <i>Jardiance</i> ® Tab: 10 & 25 mg	Limited Coverage – Special Authority \$1080				
+ metformin <i>Synjardy</i> ® Tab: 5 mg + 500/850/1000 mg & 12.5 mg + 500/850/1000 mg	Limited Coverage – Special Authority \$1115				
Canagliflozin <i>Invokana</i> ® Tab: 100 & 300 mg	Non-Benefit. \$1140				
+ metformin <i>Invokamet</i> ® Tab: 50 mg + 500 /1000 mg & 150 mg + 500/1000 mg	Non-Benefit. \$1310				

DPP4 Inhibitors					
Linagliptin <i>Trajenta</i> ® Tab: 5 mg	Limited Coverage – Special Authority \$930	Neutral			Special authority criteria: after inadequate glycemic control on maximum <u>tolerated</u> doses of dual therapy of metformin and sulfonylurea or dual therapy of metformin and an insulin.
+ metformin <i>Jentaduo</i> ® Tab: 2.5 mg + 500/850/1000 mg	Limited Coverage – Special Authority \$975				Cannot have concurrent special authority for DPP-4 inhibitors if GLP-1 agonist and/or SGLT-2 inhibitors have already been approved.
Saxagliptin <i>Onglyza</i> ®, generics Tab: 2.5 & 5 mg	Limited Coverage – Special Authority \$500-600	↑ HF hospitalization			GLP-1 agonist and DPP-4 inhibitor combination NOT recommend, overlapping mechanism of action with no additional A1c lowering.
+ metformin <i>Komboglyze</i> ® Tab: 2.5 mg + 500/850/1000 mg	Limited Coverage – Special Authority \$1000		Neutral	A1c Reduction: 0.5 to 0.7% Glucose Lowering: negligible Weight: neutral	Linagliptin does not require dose adjustment for renal function and can safely be used if eGFR <15 mL/min.
Sitagliptin <i>Januvia</i> ® Tab: 25, 50 & 100 mg	Non-Benefit \$1230	Neutral			
+ metformin <i>Janumet</i> ® Tab: 50 mg + 500/850/1000 mg	Non-Benefit \$1400				
+ metformin XR ³ <i>Janumet XR</i> ® Tab: 50 mg + 500/1000 mg & 100 mg + 1000 mg ³ Extended Release					
Sulfonylureas					
Glyburide <i>Diabeta</i> ®, generics Tab: 2.5 & 5 mg	Regular Benefit. \$15-90			A1c Reduction: 1 to 1.5 %	Avoid in older adults due to hypoglycemia risk.
Gliclazide <i>Diamicon</i> ®, generics Tab: 80 mg ² ER Tab: 30 & 60 mg	Limited Coverage – Special Authority⁴ \$40-150 ⁴ Regular Benefit under Plan W (no special authority required)	Neutral	Neutral	Glucose Lowering: hypoglycemia risk: glyburide > gliclazide Weight: gain 1.2 and 3.2 kg	Special authority criteria: if patient has treatment failure or intolerance to at least one other sulfonylurea (glyburide) at adequate dose.

¹Cost is an approximation and includes initial to maximum dose without mark-up and professional fees.

Additional Notes/Resources:

- First Nation Health Authority (FNHA) or Plan W registrations have full coverage of all regular benefit medications and limited coverage medications, if special authority has been applied and approved. In exceptional cases, the prescriber or pharmacist may provide a written request for Special Authority for a drug that is a non-benefit or when the general Special Authority criteria is not met.
- ★ **NEW:** PEER (Patient Experience Evidence Research) Diabetes Decision Aid: <https://decisionaid.ca/diabetes/>. A new app to help translate benefits and harms of diabetes pharmacotherapy to patients.
- Antihyperglycemic Agents and Kidney Function – Diabetes Canada: https://guidelines.diabetes.ca/CDACPG/media/documents/hcp-resources/Renal_Dosing_Chart.pdf. Please make referral to Primary Care Clinical Pharmacist for complete assessment of renal dose adjustment.