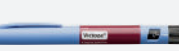
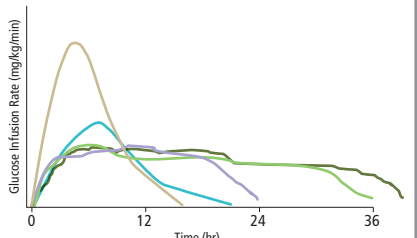
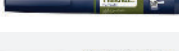
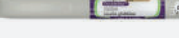
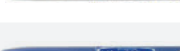
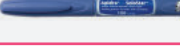


Quebec		ANTIDIABETICS FOR TYPE 2 DIABETES											v8 - May 2022 © Dr. Pierre McCabe			
Rx		 Dosage form	 Strength and dosage schedule	 eGFR (mL/min/1.73m²)				 ↓ % A1C (+ MET)	 Weight (+ MET)	 Hypo risk	 Major Adverse Cardiovascular Events¹	 Cardiorenal Benefits	RAMQ reimbursement criteria ♣			
				<15 or dialysis	15–29	30–44	45–59						Monotherapy MET + SU contraindicated or not tolerated	In conjunction If the other agent is contraindicated, not tolerated, or ineffective		Combination EN 150: SU contraindicated, not tolerated, or ineffective; and MET stable for last 1 month EN 219: MET stable for 1 month; recognized indication for empagliflozin
														+ MET	+ SU	Cardiovascular EN 179: In combination with other Rx, presence of CAD or PAD; A1C ≥7%
Metformin 1	GLUCOPHAGE (Metformin)		500 - 850 mg BID/TID (max. 850 mg TID/1000 mg BID)		500 mg QD (do not initiate)	500 mg BID		–	Neutral	Rare	–	–	Covered	–	Covered	–
	GLUMETZA (Metformin)		500 - 1000 mg QD (max. 2000 mg QD)			1000 mg QD		–		Rare			Private ins.	–	Private ins.	–
SGLT2i 2**	INVOKANA (Canagliflozin)		100 - 300 mg QD		Continue treatment	100 mg (Recommended for cardio-renal benefit. Lower glycemic efficacy.)		0.8 to 0.9%	3.3 to 4.0 kg	Rare	POSITIVE¹ (Established Atherosclerotic Cardiovascular Disease)	↓ Hospitalization for Heart Failure³ ↓ progression of Nephropathy⁴	EN 167	EN 148	EN 149	Invokamet 50 - 150/500 - 1000 Private ins.
	JARDIANCE (Empagliflozin)		10 - 25 mg QD			Recommended for cardio-renal benefit. Lower glycemic efficacy.		0.7 to 0.8%	2.1 to 3.1 kg	Rare			EN 167	EN 148	Private ins.	Synjardy 5 - 12.5/500 - 850 - 1000 EN 219 Glyxambi (empa + lina) 10/5 - 25/5 Private ins. Jardiance: EN 179
	FORXIGA (Dapagliflozin)		5 - 10 mg QD		Continue treatment			0.5 to 0.8%	2.9 to 3.2 kg	Rare			Private ins.	EN 148	EN 149	Xigduo 5/850 - 1000 EN 150 QTern (dapa + saxa) 5/5 - 10/5 Private ins.
GLP-1 RA 2**	VICTOZA (Liraglutide)		0.6 mg QD x 1 week 1.2 mg QD x 1 week 1.8 mg QD (optional)	NR				1.0 to 1.5%	2.6 to 3.4 kg	Rare	POSITIVE² (Established Atherosclerotic Cardiovascular Disease AND/OR >60 yo with 2 CV risk factors)	↓ Albuminuria⁵	Exception drug Not at target + MET; BMI >30.0 kg/m²; DPP-4i is ineffective, contraindicated, and/or not tolerated. 12 months per authorization (first continuation: ↓ A1C ≥0.5% or a value <7%)			–
	TRULICITY (Dulaglutide)		0.75 mg Q1W x 2 weeks 1.5 mg Q1W (optional)	Caution				1.0 to 1.4%	2.7 to 3.1 kg	Rare						–
	OZEMPIC (s.c. semaglutide)		0.25 mg Q1W x 4 weeks 0.5 mg Q1W x 4 weeks 1 mg Q1W (optional)	NR	Caution			1.3 to 1.6%	4.2 to 5.8 kg	Rare			Exception drug In association with MET, where a SU is contraindicated, not tolerated or ineffective			–
	RYBELSUS (oral semaglutide)		3 mg QD x 30 days 7 mg QD x 30 days 14 mg QD (optional) On empty stomach upon waking, with a sip of water, 30 min before food/drink	NR				1.0 to 1.3%	2.2 to 3.8 kg	Rare			Private ins.			–
DPP-4i	JANUVIA (Sitagliptin)		100 mg QD		25 mg	50 mg		0.7%		Rare	NEUTRAL	–	EN 167	EN 148	Private ins.	Janumet 50/500 - 850 - 1000 Janumet XR 50/500 - 1000; 100/1000 EN 150
	TRAJENTA (Linagliptin)		5 mg QD	Caution				0.5%	Neutral	Rare			EN 167	EN 148	Private ins.	Jentadueto 2.5/500 - 850 - 1000 EN 150
	NESINA (Alogliptin)		25 mg QD		6.25 mg	12.5 mg		0.6%		Rare			EN 167	EN 148	EN 149	Kazano 12.5/500 - 850 - 1000 EN 150
	ONGLYZA (Saxagliptin)		5 mg QD	NR	2.5 mg			0.7%		Rare			Private ins.	EN 148	EN 149	Komboglyze 2.5/500 - 850 - 1000 EN 150
α-glucosidase	GLUCOBAY (Acarbose)		50 - 100 mg TID					0.6%	Neutral	Rare	NEUTRAL	–	Covered			–
Secretagogues	DIABETA (Glyburide)		2.5 - 5 mg QD/BID (max. 10 mg BID)			Caution		0.5 to 1.0%	1.5 kg	++	–	–	Covered		–	–
	DIAMICRON (Gliclazide)		80 mg (max. 160 BID) MR 30 - 60 mg (max. 120 QD)	NR				0.5 to 1.0%	1.5 kg	+			Covered		–	–
	AMARYL (Glimepiride)		1 - 2 - 4 mg (max. 8 QD)	NR	Caution			0.5 to 1.0%	1.5 kg	++			EN 23	EN 23	–	–
	GLUCONORM (Repaglinide)		0.5 - 1 - 2 mg TID (max. 4 QID)	Caution				0.5 to 1.0%	1.6 kg	+			Covered		–	–
TZD	ACTOS (Pioglitazone)		15 - 30 - 45 mg QD	Caution				0.9 to 1.5%	1.5 to 2.8 kg	Rare	NEUTRAL	↑ Heart Failure	EN 121	EN 118	EN 119	EN 117 (For patients with CKD) EN 120 (In combination with MET + SU when insulin is indicated, but the patient is unable to receive it)
	AVANDIA (Rosiglitazone)		2 - 4 - 8 mg QD	Caution				0.9 to 1.5%		Rare			EN 121	EN 118	EN 119	

		R _x	Pen	Delivery system	Dosage ¹			Hypo risk	RAMQ coverage	Duration of action			R _x	Pen	Delivery system	Onset	RAMQ coverage			
					Initiation	Titration	Switch													
BASAL INSULIN	Long-acting	TRESIBA U100 (Degludec)		FlexTouch (max. 80 U)	10 U at any time of day	2 units every 3–4 days OR 4 units once a week until targets reached (4.0 to 7.0 mmol/L)	1:1 (↓ by 20% when switched from TOUJEO or twice daily insulin)	+	Covered		MEALTIME INSULIN	Fast	FIASP (Faster aspart)		Cartridge FlexTouch (max. 80 U)	4 min	Private insurance (Plan dependent)			
		TRESIBA U200		FlexTouch (max. 160 U)									NOVORAPID (Aspart)		Cartridge FlexTouch (max. 80 U)	9–20 min	Private insurance (Plan dependent)			
		TOUJEO U300 (Glargine)		SoloSTAR (max. 80 U) DoubleSTAR (max. 160 U)	10 U at bedtime or in the morning	1 unit per day until targets reached (4.0 to 7.0 mmol/L)	1:1 (↓ by 20% when switched from twice daily insulin)	+	Covered				TRURAPI (Biosimilar aspart)		Cartridge SoloSTAR (max. 80 U)	9–20 min	Covered			
		LANTUS U100 (Glargine)		Cartridge SoloSTAR (max. 80 U)	10 U at bedtime or in the morning	1 unit per day until targets reached (4.0 to 7.0 mmol/L)	1:1 (↓ by 20% when switched from TOUJEO or twice daily insulin)	++	Private insurance (Plan dependent)				HUMALOG U100 (Lispro)		Cartridge, KwikPen (max. 60 U)	10–15 min	Private insurance (Plan dependent)			
		BASAGLAR (Biosimilar glargine)		Cartridge KwikPen (max. 80 U)	10 U at bedtime or in the morning	1 unit per day until targets reached (4.0 to 7.0 mmol/L)	1:1 (↓ by 20% when switched from TOUJEO or twice daily insulin)	++	Covered				HUMALOG U200		KwikPen (max. 60 U)		Covered			
		LEVEMIR (Detemir)		Cartridge FlexTouch (max. 80 U)	10 U at bedtime or in the morning	1 unit per day until targets reached (4.0 to 7.0 mmol/L)	1:1 (↓ by 20% when switched from twice daily insulin)	++	Covered				ADMELOG (Biosimilar lispro)		Cartidge SoloSTAR (max. 80 U)	10–15 min	Covered			
	Inter-mediary	HUMULIN N		Cartridge, KwikPen (max. 60 U)	10 U at bedtime	1 unit per day until targets reached (4.0 to 7.0 mmol/L)	1:1	+++	Covered				HUMULIN N NOVOLIN NPH	12-18h	Regular	HUMULIN R		Cartridge, KwikPen (max. 60 U)	30 min	Covered
		NOVOLIN NPH		Cartridge												NOVOLIN GE TORONTO		Cartridge		

Hirsch IB, N Engl J Med. 2005; 352:174-83.
Flood TM. J Fam Pract. 2007; 56(suppl 1):S1-S12.
Becker RH et al. Diabetes Care. 2015; 38:637-43.
Tim Heise. Expert Opinion on Drug Metabolism & Toxicology. 2015; 11,8, 1193-1201.

Recommendations based on Diabetes Canada guidelines.

1* Metformin is the first line of treatment. 2** SGLT2i and GLP-1 RA should be favoured after metformin in patients with CV comorbidity and/or in poorly controlled patients in whom it is desirable to promote CV benefits and/or weight loss while minimizing the risk of hypoglycemia. † Patients on insulin should have an individualized fasting glucose targets.

³ 3-point MACE is defined as a composite of nonfatal stroke, nonfatal myocardial infarction, and cardiovascular death.

Results of CV studies (evidence level A and B in *italic*): 1) ↓ in MACE: if established Atherosclerotic Cardiovascular Disease OR *if CKD*. 2) ↓ in MACE: if established Atherosclerotic Cardiovascular Disease OR if >60 yo with 2 risk factors (tobacco, HBP, DLD, obesity) OR *if CKD*. 3) ↓ in Hospitalization for Heart Failure: if history of Heart Failure OR if CKD OR *if established Atherosclerotic Cardiovascular Disease OR if >60 yo with 2 CV risk factors*. 4) ↓ progression of nephropathy: if CKD OR *if established Atherosclerotic Cardiovascular Disease*. 5) ↓ Albuminuria: *if established Atherosclerotic Cardiovascular Disease*.

CAD: coronary artery disease | CKD: chronic kidney disease | CV: cardiovascular | DLD: dyslipidemia
eGFR: estimated glomerular filtration rate | HBP: high blood pressure | MET: metformin | NR: not recommended
PAD: peripheral artery disease | Q1W: once weekly | QID: four times a day | s.c.: subcutaneous | SU: sulfonylurea

Reference: Efficacy on A1C and weight lowering data as add-on to metformin have been taken from product monographs or from head-to-head trials.
This guide reflects current standards and the author's opinion. It does not replace clinical judgement and should only be used as a reference.
Some products are not represented on the chart as they are rarely prescribed. | 2020 © Photos by Vigilance Santé inc.