Clinician Decision Aid SGLT2is / GLP-1 RAs for Type 2 Diabetes



SGLT2 inhibitors and GLP-1 receptor agonists are first-line treatments for T2D in patients with cardiorenal disease. *This aid is meant to be used alongside your own clinical judgment, guideline-directed therapy, and prescribing information to guide individualization of diabetes treatment.*¹



Consider Metformin with above agents for additive glycemic lowering

Footnotes

- a. **Glycemic lowering as primary clinical goal:** Use Metformin or in combination with other T2D medications to achieve patient's glycemic goal. The following glycemic lowering categories (modified from ADA Standards of Care¹)
 - i. VERY HIGH: dulaglutide (high dose), semaglutide, tirzepatide
 - ii. HIGH: GLP-1 RA (not previously listed, metformin, SGLT2i, sulfonylurea, TZD
 - iii. INTERMEDIATE: DPP-4i
- b. **Consider use in HIGH risk patients:** ADA Standards gives weaker recommendation for use given CVOT data were not powered for primary analysis in this subgroup. This subgroup includes: age ≥ 55 with 2 or more risk factors (e.g, obesity, hypertension, smoking, hyperlipidemia, albuminuria).
- c. Diagnosis of CKD (eGFR<60) and/or presence of albuminuria: Determine after repeating measures of GFR and albuminuria twice, 3 months apart.
- d. **HFpEF:** Heart failure with preserved ejection fraction. **HFrEF:** Heart failure with reduced ejection fraction (left ventricular $EF \le 40\%$).

- e. When using for HF and/or CKD protection: Irrespective of T2D diagnosis, dose is 10mg daily, and can be used at renal functions below renal cutoffs for glycemic lowering.
- f. **Canagliflozin/Ertugliflozin in HF:** Data for use from secondary outcomes of CVOT T2D trials.

See back for list of generic and brand drug names

MCT2D Medication Coverage Guide



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Prescribing Reminders and Recommendations

GLP-1 RA

- 1. **Contraindications:** Personal or family hx medullary thyroid cancer or MEN-2-syndrome, pregnancy, lactation, or allergy to medication.
- 2. **Precautions:** History of pancreatitis, severe GI disease (gastroparesis), gallbladder disease. In patients with impaired renal function and reporting severe gastrointestinal side effects, closely monitor renal function.
- 3. **Assess baseline:** Gastrointestinal status for nausea, vomiting, and diarrhea.
- Medication adjustment: <u>If A1c less than 9%</u>, consider lowering basal insulin by 10% and prandial insulin by 30-40%.²
- 5. **Key counseling points:** Counsel patients on mitigating strategies for common GI side effects and expected improvement over time.
- 6. **Dose titration:** Provide clear dose titration instructions when prescribing agents that have sensitizing starting dose.
- 7. **Combination therapy:** Avoid combination with DPP4-inhibitors.
- 8. **Prior to surgery:** Hold day prior or day of surgery or week prior if on weekly GLP-1RA. See Reference 3 for more details.

Generic and Brand Drug Names

GLP-1 RAs Generic and Brand Names	
Dulaglutide	Trulicity
Exenatide	Byetta
Exenatide XR	Bydureon BCise
Liraglutide	Victoza
Semaglutide SQ	Ozempic
Semaglutide (oral)	Rybelsus

SGLT2is Generic and Brand Names		
Canagliflozin	Invokana	
Dapagliflozin	Farxiga	
Empagliflozin	Jardiance	
Ertugliflozin	Steglatro	

Patient GLP-1 RA & SGLT2i Handouts



SGLT2i

- 1. **Contraindications:** T1D, ESRD, dialysis, pregnancy, lactation, allergy to medication, or very low carbohydrate diet (less than 50g/day).
- 2. **Renal function:** Prior to prescribing, review recent eGFR to ensure eligibility for glycemic lowering based on renal cutoffs.
- 3. **Amputation risk:** Prior to prescribing, consider risk versus benefit in patients with a history of PAD, recent foot infections, or history of foot amputations.
- Consider alternative: <u>If A1c greater than 10%</u>, to avoid excess glucosuria – consider another agent to lower glucose, prior to starting SGLT2i.
- 5. Medication adjustment, if A1C less than 8.5% and on:
 - a. Insulin Consider reducing total daily dose of insulin by 10-20%. Caution: Avoid insulin discontinuation to minimize risk of euglycemic DKA.
 - b. *Sulfonylurea* Discontinue or lower dose by 50%.
 - c. If A1C greater than 8.5% monitor closely and adjust other medications as needed.⁴
- 6. **Key counseling points:** Counsel patients on common side effects, importance of hydration, sick day management, notification of healthcare team if adopting a lower carbohydrate diet (less than 130g/day) and euglycemic DKA. Patients should be reminded to check feet daily, and notify prescriber immediately if any new onset foot pain, soreness, or ulcers.
- 7. **Prior to surgery:** Hold medication for at least 4 days if procedure is associated with prolonged fasting.
- 8. **Follow-up:** If patient is high-risk, complex, and/or has impaired renal function, consider 4-week follow-up. Repeat metabolic panel and dose adjust as needed. When considering dose increase, balance glycemic lowering benefit with risk of dose intolerance (hypotension, increased urinary frequency, urinary/ mycotic infections, and volume status).

References

- 1. American Diabetes Association. 9. Pharmacologic Approaches to Glycemic Treatment: Standards of Medical Care in Diabetes-2023. Clin Diabetes 2023;41(1):4–31. doi.org/10.2337/cd23-as01
- Sassenrath K, Phillips BB, Stone RH. Evaluation of GLP-1 Receptor Agonists in Combination With Multiple Daily Insulin Injections for Type 2 Diabetes. J Pharm Pract. 2022 Dec;35(6):979-990. doi: 10.1177/08971900211010678. Epub 2021 Apr 29. PMID: 33926305.
- 3. Joshi GP, Abdelmalak BB, Weigel WA, et al. American Society of Anesthesiologists Consensus-Based Guidance on Preoperative Management of Patients (Adults and Children) on Glucagon-Like Peptide-1 (GLP-1) Receptor Agonists. American Society of Anesthesiologists. 2023 Jun 29. michmed.org/JQmKJ
- 4. Gomez-Peralta F, Abreu C, Lecube A, et al. Practical Approach to Initiating SGLT2 Inhibitors in Type 2 Diabetes [published correction appears in Diabetes Ther. 2017 Aug 23;:]. Diabetes Ther. 2017;8(5):953-962. doi:10.1007/s13300-017-0277-0



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