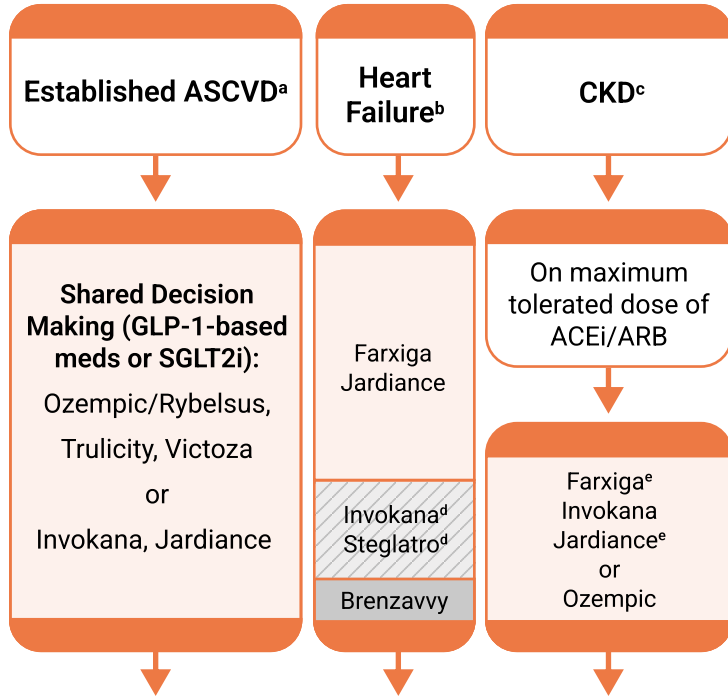


SGLT2 inhibitors and GLP-1-based medications are first-line treatments for T2D in patients with cardiorenal disease. *This aid is meant to support the use of GLP-1-based meds and SGLT2 inhibitors, alongside your own clinical judgement, to guide patient-centered diabetes treatment.*¹

ALL PATIENTS WITH T2D Recommend lifestyle change with reduced carb intake and weight loss if indicated. Promote diabetes self management education and support (DSMES) upon diagnosis.

CLINICAL GOAL To reduce cardiorenal risk independent of A1C in high risk patients



If A1C is above target, consider the following:

- Additional agents⁹ (based on glycemic, weight lowering, and comorbidity needs)
- Initiation of a CGM
- Referral or re-referral to DSMES

○ FDA Labeled (preferred)
 ○ No Evidence - low cost (see footnote f)
▨ Off Label

a. Consider use in HIGH risk patients: ADA Standards gives a weaker recommendation for use given cardiovascular outcomes trial (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).

b. Heart failure includes: HFpEF (preserved EF) and HFrEF (reduced EF, ≤40%).

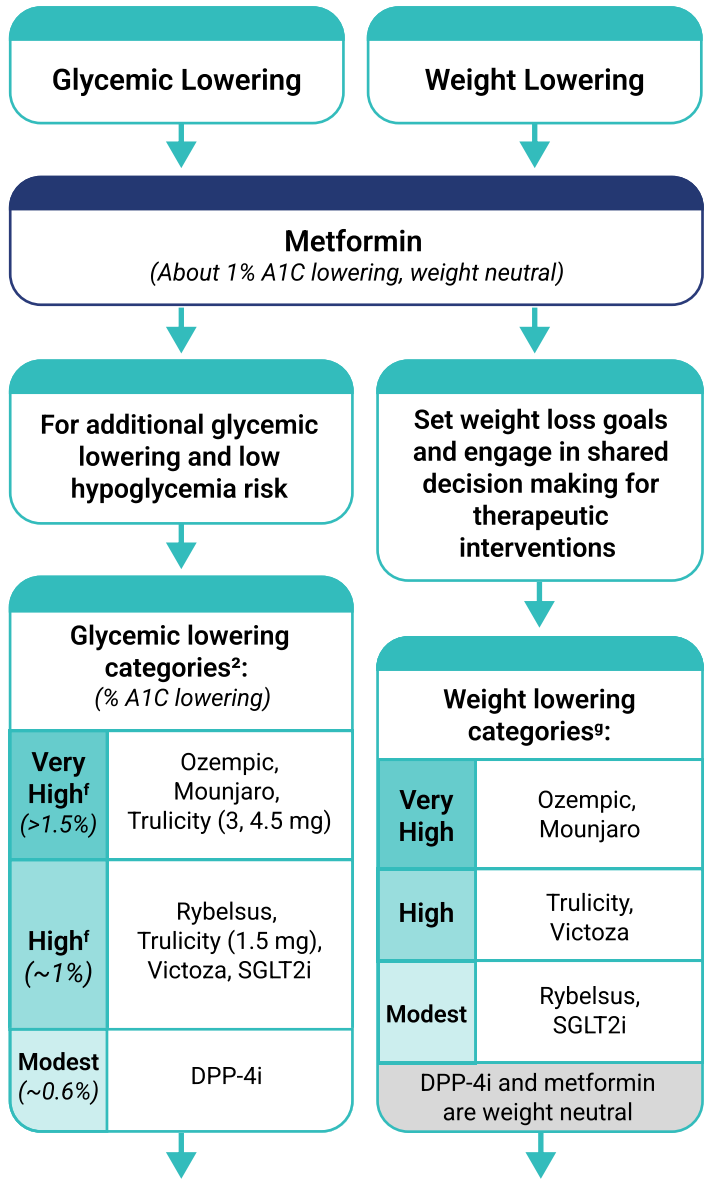
c. Diagnosis of CKD (eGFR<60) and/or presence of albuminuria: Determine after repeating measures of GFR and albuminuria twice, 3 months apart.

d. Invokana in HF: Data for use from secondary outcomes of CVOT T2D trials. **Steglatro in HF:** Data for use from a non-inferiority trial, no proven benefit.

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 (See chart on next page).

f. Brenzavvy: Low cost option (\$50-60/month) if guideline directed SGLT2i is not affordable. No evidence to support added ASCVD/CKD benefits.

CLINICAL GOAL To achieve and sustain glycemic control and promote weight loss



If A1C is above target, consider the following:

- Additional agents⁹ (based on glycemic, weight lowering, and comorbidity needs)
- Initiation of a CGM
- Referral or re-referral to DSMES

g. Additional Glycemic Agents: Insulin (very high), sulfonylureas and pioglitazone (high) are effective glycemic lowering agents, but are not included because they are associated with weight gain. These agents also cause hypoglycemia.

Prescribing Reminders and Recommendations

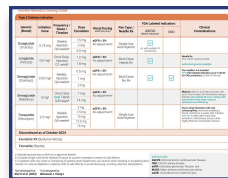
GLP-1-based Medications		SGLT2 Inhibitors
Contraindications	Personal or family history of medullary thyroid cancer or MEN-2-syndrome , pregnancy, lactation, or allergy to medication.	T1D, very low carbohydrate diet (less than 50g/day) , pregnancy, lactation, or allergy to medication.
Precautions	History of: <ul style="list-style-type: none"> • Pancreatitis • Severe GI disease (gastroparesis) • Gallbladder disease 	On dialysis: Contraindicated. ^h High risk for amputation (e.g. active foot ulcers, prior amputations, or severe peripheral artery disease). See <i>MCT2D Precautions Guide</i> . If A1c greater than 10%: Consider alternative medication to lower glucose to avoid excess glucosuria.
Considerations for impaired renal function	Monitor for volume depletion: Use caution in patients with GI side effects or acute illness (e.g. vomiting, diarrhea, dehydration) when initiating or escalating doses.	For glycemic lowering benefit - Avoid if: <ul style="list-style-type: none"> • eGFR < 45: Farxiga and Steglatro • eGFR < 30: Jardiance, Invokana, and Brenzavvy
Considerations for medication adjustments	If A1C is less than 9% and on: <ul style="list-style-type: none"> • Basal insulin: lower by 10%² • Prandial insulin: lower by 30-40%² 	If A1C less than 8.5% and patient is on: <ul style="list-style-type: none"> • Insulin: lower total daily dose by 10-20% - Avoid insulin discontinuation to minimize risk of euglycemic DKA • Sulfonylurea: Discontinue or lower dose by 50%
Key counseling points	<ul style="list-style-type: none"> • GI mitigating strategies and expected time for improvement • Sensitizing doses have negligible impact on glucose 	<ul style="list-style-type: none"> • Hydration • Sick day management • Perineal hygiene • Blood pressure monitoring
Drug interactions	DPP-4 Inhibitors (all GLP-1-based meds): No benefit from combination Oral contraceptives (Tirzepatide only): Add backup method for 4 weeks after initiation and for 4 weeks after each dose escalation.	Diuretic therapy - Monitor for: <ul style="list-style-type: none"> • Volume depletion • Hypotension with other antihypertensive therapy <i>Adjustment upon initiation of SGLT2i is not required.</i>
Prior to surgery	Daily agents: Hold on the day of surgery ³ Weekly agents: Hold at least 7 days prior ³ <i>Bridge with other glucose lowering medications if necessary. Use shared decision-making with surgery and anesthesia to hold incretin mimetic based on patient risk.</i>	Hold for 4 days prior. Resume after full oral intake is established.

h. Per KDIGO guidelines, contraindicated given lack of safety studies in those receiving dialysis. Studies are ongoing in the ESRD population.

SGLT2i Renal Cutoffs: For Patients with CKD/HF and T2D

	eGFR 25 - 45	eGFR 20 - 30
	Farxiga	Jardiance
CKD	10 mg daily	10 mg daily
Heart Failure	(can continue if eGFR < 25)	(can continue if eGFR < 20)
On Dialysis: Contraindicated^h		

Medication Dosing Guide



michmed.org/Zxn7B



Patient Medication Handouts



michmed.org/bmx5B



References

1. ADA 2025 doi: 10.2337/dc25-S009
2. Van Dril 2022 doi: 10.1016/j.ahjo.2022.100163
3. Kindel 2024 doi: 10.1016/j.soard.2024.08.033