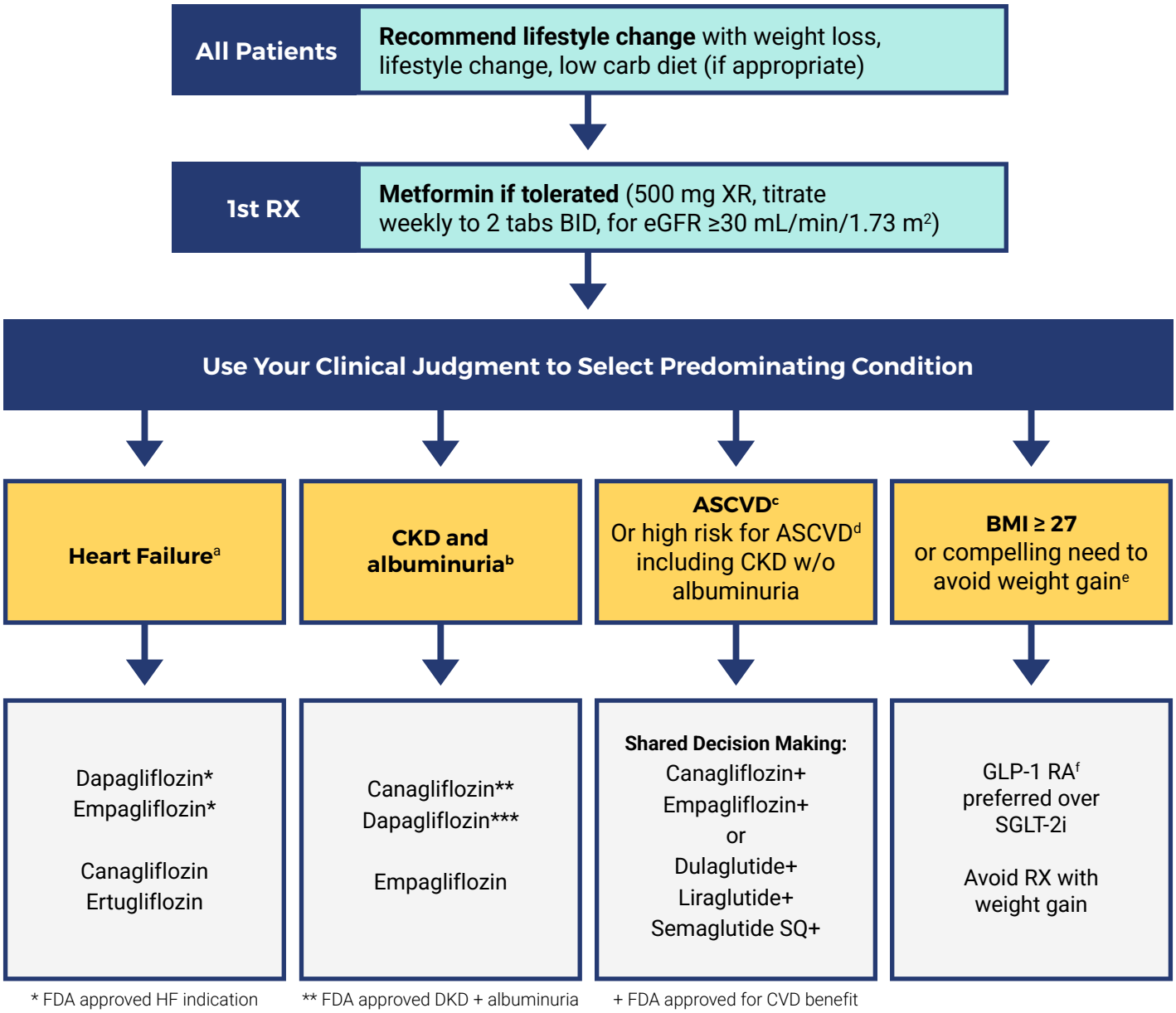
Clinician Decision Aid
SGLT2 Inhibitor / GLP-1 RA for T2D

Why this aid?

SGLT2 inhibitors and GLP-1 receptor agonists are two newer classes of medications for diabetes that reduce hyperglycemia, reduce endogenous insulin production, and improve cardiovascular and renal outcomes, weight loss, and mortality in Type 2 Diabetes.

This aid is meant to be used alongside your own clinical judgment and prescribing information to guide individualization of diabetes treatment.



* FDA approved HF indication

** FDA approved DKD + albuminuria
*** FDA approved CKD indication

\+ FDA approved for CVD benefit

MCT2D
MICHIGAN COLLABORATIVE FOR TYPE 2 DIABETES

Prescribing Reminders

SGLT2i

1. CI's: T1D, ESRD, dialysis, pregnancy, lactation, allergy to medication, or very-low carbohydrate diet (<50g/day).

2. Prior to prescribing, check eGFR. Optimize BP and volume status. Monitor eGFR closely if high risk.

3. If A1C>10% consider lowering glucose with another agent prior to starting SGLT2i.

4. If A1C<8.5 consider reducing total daily dose of insulin by 10-20% and holding or reducing sulfonylurea dose by 50%. If A1C>8.5% monitor closely and adjust other medications as needed.

5. Provide anticipatory guidance about side effects, especially hydration, common side effects, sick day management, and euglycemic DKA.

6. See most patients back after 4 weeks for dose adjustment, sooner if high-risk for complications.

GLP-1 RA

1. CI's: Personal or family hx medullary thyroid cancer or MEN-2-syndrome, pregnancy, lactation, or allergy to medication.

2. Prior to prescribing, check eGFR, volume status, and GI symptoms and monitor closely if high risk

3. Consider lowering basal insulin by 10% and prandial insulin by 30-40%, individualized to patient HbA1C.

4. Provide anticipatory guidance, especially regarding initial nausea, diarrhea, and sick day management to prevent dehydration.

5. Provide clear dose titration instructions and see most patients back in three months for re-assessment.

Footnotes

a. Recommend prescribing Empagliflozin and Dapagliflozin, agents with proven benefit and label indication for heart failure with reduced ejection fraction (HFrEF), both reduce the risk of cardiac death and hospitalization for heart failure in this population. Canagliflozin has secondary outcome benefit for hHF, the composite of CV death and hHF, and composite 3-point MACE; while ertugliflozin only has secondary outcome benefit for hospitalization for heart failure (hHF).

b. Recommend prescribing SGLT2i with primary evidence of reducing CKD progress OR SGLT2i with evidence of reducing CKD progression in CVOTs. Canagliflozin carries a label indication for diabetic nephropathy with albuminuria. Dapagliflozin carries a label indication for CKD. Empagliflozin has secondary outcome benefit (EMPA-KIDNEY) for reducing CKD progression. If SGLT2i not tolerated or contraindicated, can use GLP-1 RA with proven CVD benefit.

c. ASCVD is defined as coronary heart disease (CHD), cerebrovascular disease, or peripheral arterial disease presumed to be of an atherosclerotic origin.

d. ADA considers high risk to be factors such as age ≥55 with coronary, carotid, or lower extremity artery stenosis>50% or LVH.

e. US FDA defines the indication for obesity pharmacotherapy as BMI >27 kg.m2 with an obesity-related comorbidity like Type 2 Diabetes.

f. There are no comparative trials for GLP-1 RAs for weight loss in Type 2 Diabetes. In general, semaglutide SQ provides greater weight loss than other GLP-1 RAs and higher-dose GLP-1 RAs provide more weight loss than lower dose GLP-1 RAs. SGLT2is also have a weight loss benefit and other anti-hyperglycemic medications such as insulin and sulfonylureas cause weight gain.

References

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