The SGLT-2 Inhibitor: Its Indication in Glycemic, Cardiovascular, and Renal Disease

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Disclosures:

- I have no relevant relationships with ineligible companies to disclose within the past 24 months.

Learning objectives:

- Review the key results from cardiovascular outcome trials (CVOTs) focusing on cardiovascular and renal protection in T2DM.
- Discuss clinical indications for SGLT-2 inhibitors from CVOTs and additional recent SLGT-2i trials
- Discuss how to design treatment approaches based on the newest guidelines that incorporate the results of recent trials

- Prevalence of T2DM and complications
- History of CVOT
- Role and Indications for SLGT-2 inhibitor use in T2DM
- Potential adverse reactions with SGLT-2 inhibitor use
- CVOT: EMPA-REG OUTCOME, CANVAS, DECLARE-TIMI 58, VERTIS-CV
- Potential MOAs in cardio-renal risk reduction
- Indication for use in management of T2DM
- CHF trials: DAPA-HF/EMPORER-REDUCED/EMPORER-PRESERVED/DELIVER
- Role of SGLT-2i use in HFrEF and HFpEF
- HFrEF case study
- SGLT-2 inhibitor CHF inpatient use – SOLIST WHF, TRANSLATE-HF
- Renal trials: CREDENCE/DAPA-CKD/EMPA KIDNEY
- Indication for SGLT-2i use in CKD
- T2DM/DKD case study

SGLT-2 inhibitor conclusions:

- The paradigm of treatment for T2DM has shifted dramatically from a focus on normoglycemia as the principal goal of treatment due to the new CVOT data
- Revise SOC and use appropriate therapies earlier and often for risk reduction, especially since CVOT results have been achieved on top of implementation of SOC
- AVOID INERTIA and pursue earlier intensification of treatment, including combination therapy
- Identify and apply use of SGLT-2i in clinical practice in both patients with and without T2DM

- Decrease risk of HHF -- greatest benefit likely HFrEF, however evidence of benefit in HFpEF following EMPORER-PRESERVED; additional trials ongoing
- Decrease risk of progression of kidney disease across range of baseline kidney function
- Reduce risk of CV death in high risk groups
- Reduce risk of MACE
- Primarily CV death and MI
- Over time frame studied, appears confined to pts with established ASCVD

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