HF Evaluation and Management in patients with T2D

HF in patients with T2D

People with **T2D** have a 2-fold greater risk of **HF** versus those without **T2D**[1]

Up to 3 in 10 people with **T2D** have **HF**[2]

Monitor patients with T2D to reduce HF risk[3]

Assess CV risk factors at least annually for prevention and management of ASCVD and HF

- Dyslipidemia
- Obesity/overweight
- Hypertension
- Smoking
- Chronic kidney disease
- Family history of premature coronary disease
- Presence of albuminuria (ACR)

Management of patients with T2D and HF[3]

- Lifestyle modifications, including exercise and balanced caloric intake
- Lipid management
- BP management
- Glycemic control
- Standard treatment, (eg, β-blockers, mineralocorticoid inhibitor, and consideration of ACEIs and ARBs)

Select appropriate glucose-lowering therapies for patients with T2D and HF[3-5]

Ⓜ METFORMIN

- **First-line** therapy for T2D, **including those with HF**
- Reduces mortality and CV morbidity in patients with diabetes, with or without HF[6]
- **Continue** for glucose-lowering as long as it is **tolerated and not contraindicated**
  - Avoid in unstable/hospitalized with HF
  - Avoid if eGFR <30 mL/min/1.73 m^2

Ⓢ SGLT2 INHIBITORS

- Consider **independently of baseline or target A1c** to reduce risk of HHF
- Prefer agent with **evidence of reducing HF risk**
  - Canagliflozin, dapagliflozin, empagliflozin, and ertugliflozin reduce risk of HHF[7,8]
  - Canagliflozin and empagliflozin reduce risk of MACE; empagliflozin reduces risk of CV death[3]
- Consider **SGLT2 inhibitor with proven benefit** in patients with **T2D and established HFrEF** to reduce risk of **worsening HF and CV death**[9,10]; may be a class effect[4]
- Avoid if eGFR <45 mL/min/1.73 m^2 (<30 for canagliflozin and ertugliflozin)

Ⓖ GLP-1 RAs

- Add GLP-1 RA with proven CVD benefit
  - **IF SGLT2** inhibitor **not tolerated** or **contraindicated**, or if **eGFR less than adequate**
  - **IN ADDITION** to SGLT2 inhibitor **if A1c above target**
- No significant effect on HF risk[11,12]
- Liraglutide, semaglutide, and dulaglutide reduce risk of MACE, particularly in patients with CVD[11,12]
- Reduce all-cause mortality[11,12]

OTHER AGENTS

- Consider **if A1c above target**
  - DPP-4 inhibitor (*not saxagliptin)* in the setting of HF (if not on GLP-1 RA)
  - Basal insulin
  - Sulfonylurea
- Ⓣ **AVOID** thiazolidinediones

ABBREVIATIONS

A1c, glycated hemoglobin; ACEI, angiotensin-converting enzyme inhibitor; ADA, American Diabetes Association; ARB, angiotensin receptor blocker; ASCVD, atherosclerotic cardiovascular disease; BP, blood pressure; CV, cardiovascular; CVD, cardiovascular disease; DPP-4, dipeptidyl peptidase-4; eGFR, estimated glomerular filtration rate; GLP-1 RA, glucagon-like peptide-1 receptor agonist; HF, heart failure; HHF, hospitalization for heart failure; HFrEF, heart failure with reduced ejection fraction; MACE, major adverse cardiovascular event; SGLT2, sodium-glucose co-transporter 2; T2D, type 2 diabetes

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