

# 2020 Expert Consensus Decision Pathway on Novel Therapies for Cardiovascular Risk Reduction in Patients With Type 2 Diabetes

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Summary of Therapy Recommendations on the  
Use of Glucose-Lowering Agents With Proven CV  
Benefit and the Role of the CV Specialist



# This booklet summarizes the American College of Cardiology 2020 Expert Consensus Decision Pathway on Novel Therapies for Cardiovascular Risk Reduction in Patients With Type 2 Diabetes, which was endorsed by the American Diabetes Association.

## Overview

CV disease is the leading cause of morbidity and mortality in patients with type 2 diabetes, and therefore, developing treatment strategies for improving CV outcomes in this patient population is a priority.<sup>1</sup>

- The ECDP states that data from clinical trials with GLP-1 RAs and SGLT2is have demonstrated improved CV outcomes in patients with type 2 diabetes and CV disease
- These data have “triggered a major paradigm shift beyond glucose control to a broader strategy of comprehensive CV risk reduction”<sup>1</sup>
- This comprehensive strategy includes the recommendation to start a GLP-1 RA or an SGLT2i with proven benefit for CV risk reduction in patients with type 2 diabetes (*Figure 1*)<sup>1</sup>
- The **role of the CV specialist** in the management of type 2 diabetes should **evolve** to include either **taking an active role in prescribing** GLP-1 RAs and SGLT2is with proven CV benefit or **recommending** these agents to the patient and/or the patient’s clinician that manages their type 2 diabetes<sup>1</sup>

ASCVD=atherosclerotic cardiovascular disease; CV=cardiovascular; DKD=diabetic kidney disease; ECDP=Expert Consensus Decision Pathway; FDA=Food and Drug Administration; GLP-1 RA=glucagon-like peptide-1 receptor agonist; HF=heart failure; SGLT2i=sodium-glucose cotransporter-2 inhibitor.

## Therapy Recommendations

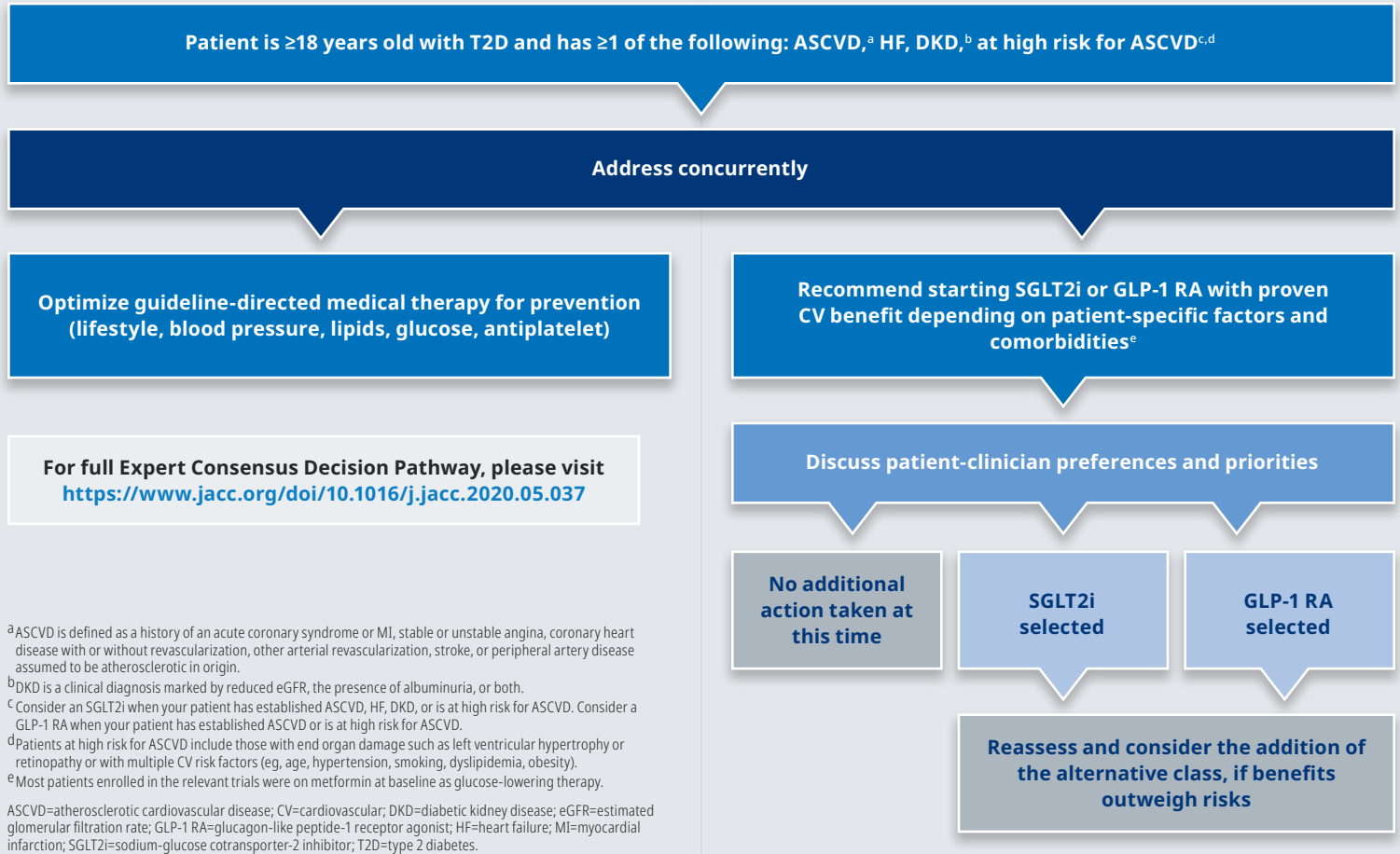
The ECDP recommends that clinicians initiate a conversation with adult patients with type 2 diabetes with or at high risk for clinical ASCVD, HF, and/or DKD about the use of a GLP-1 RA or an SGLT2i with proven CV benefit.<sup>1</sup> In addition to optimized, guideline-directed medical therapy, the ECDP recommends starting a GLP-1 RA or an SGLT2i with proven CV benefit depending on patient-specific factors/comorbidities (*Figure 1*).

### Specifically,

- A GLP-1 RA with proven ASCVD benefit should be considered for patients with type 2 diabetes and established ASCVD or at high risk for ASCVD<sup>1</sup>
- An SGLT2i with proven ASCVD, HF, or DKD benefit should be considered for patients with type 2 diabetes and established clinical ASCVD, HF (specifically HF with reduced ejection fraction), and/or DKD, or at high risk for clinically evident ASCVD<sup>1</sup>
- The choice of agent should depend on patient-specific factors and comorbidities but should not be contingent on A1C level<sup>1</sup>

## Therapy Recommendations (cont'd)

**Figure 1**  
**Summary Graphic on the American College of Cardiology 2020 Expert Consensus Decision Pathway on Novel Therapies for Cardiovascular Risk Reduction in Patients With Type 2 Diabetes<sup>1</sup>**



## Initiating a GLP-1 RA With Demonstrated CV Benefit

The ECDP lists multiple opportunities when a clinician may consider starting a patient with type 2 diabetes on a GLP-1 RA with demonstrated CV benefit (*Table 1*).<sup>1</sup>

**Table 1**

### Opportunities to Initiate an SGLT2i or a GLP-1 RA With Demonstrated CV or Renal Benefit in Patients With T2D<sup>a</sup>

- In a patient with T2D and ASCVD (SGLT2i or GLP-1 RA)
- At the time of diagnosis of clinical ASCVD (SGLT2i or GLP-1 RA), DKD, and/or HF (SGLT2i)<sup>b</sup> in a patient with T2D on a drug regimen that does not include an SGLT2i or GLP-1 RA with CV benefit
- At the time of diagnosis of T2D in a patient with clinical ASCVD (SGLT2i or GLP-1 RA), DKD, and/or HF (SGLT2i)<sup>b,c</sup>
- At hospital discharge (with close outpatient follow-up) after admission for an ASCVD (SGLT2i or GLP-1 RA) or HF (SGLT2i) event<sup>d</sup>
- In a patient with T2D and DKD (SGLT2i, alternatively GLP-1 RA for eGFR <30 ml/min/1.73 m<sup>2</sup>)<sup>c</sup>
- In patients determined to be at high risk of ASCVD<sup>e</sup> (SGLT2i or GLP-1 RA) or HF (SGLT2i)<sup>b,c</sup>

<sup>a</sup>At the time of hospital discharge or in the outpatient setting. Increased vigilance regarding hypoglycemia surveillance is warranted, especially if on background insulin, sulfonylurea, or glinide therapy.

<sup>b</sup>A minority of patients included in the CANVAS, LEADER, SUSTAIN-6, and EXSCEL trials and a majority of patients in the REWIND trial could be characterized as high-risk primary prevention patients. These patients did not have established ASCVD but did have prespecified ASCVD risk factors.

<sup>c</sup>Use clinical judgment when initiating an SGLT2i in a patient who will be starting or up-titrating an ACE (angiotensin-converting enzyme) inhibitor or ARB (angiotensin receptor blocker) if the patient's renal function is impaired.

<sup>d</sup>Hospitalized patients were not included in most of the CV outcome trials discussed here. There is a lack of practical and safety data regarding in-hospital addition of SGLT2is or GLP-1 RAs to a patient's regimen.

<sup>e</sup>Consider for patients at very high risk of ASCVD to include patients with end-organ damage such as left ventricular hypertrophy or retinopathy or with multiple CV risk factors (eg, age, hypertension, smoking, dyslipidemia, obesity).

## The Role of the CV Specialist

CV specialists have a **key role in managing CV risk in patients with type 2 diabetes** because a significant portion of their patients have diagnosed type 2 diabetes or prediabetes.<sup>1</sup>

**The ECDP lists 3 key areas where CV specialists are well positioned to optimize the CV care of patients with type 2 diabetes:**

1. Screening for type 2 diabetes in patients with or at high risk for CV disease
2. Aggressively treating CV risk factors
3. Incorporating newer glucose-lowering agents with evidence for improving CV outcomes into routine practice<sup>1</sup>

The ECDP encourages CV specialists to reexamine their roles to be more actively involved in prescribing medications that were first approved by the FDA for glycemic control and have been viewed primarily as glucose-lowering therapies but that have demonstrated CV benefit.<sup>1</sup>

CV specialists are also encouraged to adopt a team approach and to coordinate care with other health care professionals that have a distinct role in managing type 2 diabetes, such as a patient's primary care physician and endocrinologist.<sup>1</sup>

## Reference

1. Das SR, Everett BM, Birtcher KK, et al. 2020 Expert consensus decision pathway on novel therapies for cardiovascular risk reduction in patients with type 2 diabetes: a report of the American College of Cardiology Solution Set Oversight Committee. *J Am Coll Cardiol.* 2020;76(9):1117-1145.