Updates in Diabetes Management: Improving Outcomes

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Disclosure

Consultant: Anji; AstraZeneca; Bayer; Boehringer Ingelheim; Corcept; Eli Lilly; Merck; Mineralys; Novo Nordisk; Valo; Vertex; Zealand

Research Grant: Bluedrop; Boehringer Ingelheim; COUR; Eli Lilly; GentiBio; Merck; Roche

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What's New? – The Highlights

- Identifying populations at risk for diabetes
- Updates in cardio-renal risk reduction
- Increased emphasis on weight management
- Care pathways for MASLD/MASH
- Care of special populations (older adults)

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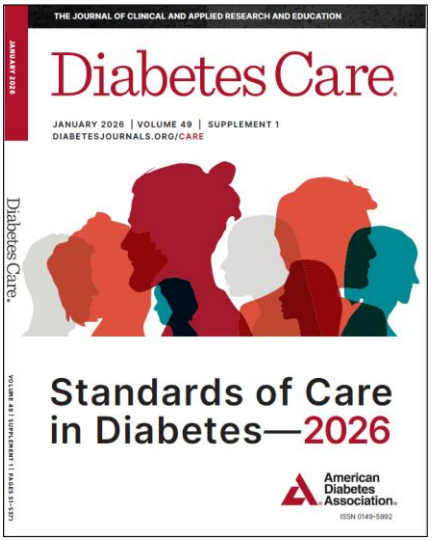
Standards of Care in Diabetes—2026

Intended to provide clinicians, patients, researchers, payers, and other interested individuals with the components of diabetes care, general treatment goals, and tools to evaluate the quality of care.



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Screening for Prediabetes and Diabetes

Table 2.5—Criteria for screening for diabetes or prediabetes in asymptomatic adults

1. Testing should be considered in adults with overweight or obesity (BMI ≥25 kg/m^2 or ≥23 kg/m^2 in individuals of Asian ancestry) who have one or more of the following risk factors:
   - First-degree relative with diabetes
   - High-risk race, ethnicity, and ancestry (e.g., African American, Latino, Native American, Asian American)
   - History of cardiovascular disease
   - Hypertension (≥130/80 mmHg or on therapy for hypertension)
   - HDL cholesterol level <35 mg/dL (<0.9 mmol/L) and/or triglyceride level >250 mg/dL (>2.8 mmol/L)
   - Individuals with polycystic ovary syndrome
   - Physical inactivity
   - Other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans, metabolic dysfunction-associated steatotic liver disease)
2. People with prediabetes (A1C ≥5.7% [≥39 mmol/mol], IGT, or IFG) should be tested yearly.
3. People who were diagnosed with GDM should have testing at least every 1–3 years.
4. For all other people, testing should begin at age 35 years.
5. If results are normal, testing should be repeated at a minimum of 3-year intervals, with consideration of more frequent testing depending on initial results and risk status.
6. Individuals in other high-risk groups (e.g., people with HIV, exposure to high-risk medicines, evidence of periodontal disease, history of pancreatitis) should also be closely monitored.

GDM, gestational diabetes mellitus; IFG, impaired fasting glucose; IGT, impaired glucose tolerance.

Standards of Medical Care in Diabetes—2026. American Diabetes Association. Diabetes Care 2026 Jan; Volume 49, Issue Supplement 1

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Diabetes Induced by Systemic Anti-Cancer Therapy

- People starting cancer treatment with **immune checkpoint inhibitors (ICI),** including anti-PD-1 or anti-PDL-1 therapy (e.g., nivolumab, pembrolizumab, avelumab), **Phosphatidylinositol 3-kinase α (PI3Kα) inhibitors** (e.g., alpelisib, inavolisib), or **mammalian target of rapamycin (mTOR) inhibitors** (e.g., everolimus), should be educated regarding risks, symptoms, and signs of hyperglycemia and hyperglycemic crises.

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Diabetes Induced by Systemic Anti-Cancer Therapy

- **Immune checkpoint inhibitors (ICIs),** which induce immune system responses against cancer, can in rare cases trigger an autoimmune response that destroys pancreatic beta cells, leading to a type 1-like diabetes often presenting with DKA.
- **Phosphatidylinositol 3-kinase α (PI3Kα) inhibitors** and **mammalian target of rapamycin (mTOR) inhibitors** can cause significant insulin resistance and hyperglycemia.
- Guidance regarding symptom, glucose, and/or HbA1c monitoring have been established for users of these medication classes

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Pancreatic Diabetes

Pancreatic Diabetes or Diabetes in the Context of the Exocrine Pancreas

- Screen people for diabetes within 3–6 months following an episode of acute pancreatitis and annually thereafter.
- Screening for diabetes is recommended annually for people with chronic pancreatitis.

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Post-transplantation Diabetes Mellitus

- After organ transplantation, screening for hyperglycemia should be done. A formal diagnosis of post-transplantation diabetes mellitus (PTDM) is best made once the individual is stable on an immunosuppressive plan and in the absence of an acute infection.
- The OGTT is the preferred test to make a diagnosis of PTDM.
- Immunosuppressive plans shown to provide the best outcomes for individuals and graft survival should be used, irrespective of PTDM risk.

Standards of Medical Care in Diabetes—2026. American Diabetes Association. Diabetes Care 2026 Jan; Volume 49, Issue Supplement 1

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New Recommendations to Screen for Asymptomatic Heart Failure and Peripheral Vascular Disease

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Cardiovascular Disease – Screening

- In asymptomatic individuals, routine screening for coronary artery disease is not recommended
- Adults with diabetes are at increased risk for the development of asymptomatic cardiac structural or functional abnormalities (stage B heart failure) or symptomatic (stage C) heart failure. Consider screening adults with diabetes by measuring a natriuretic peptide (B-type natriuretic peptide [BNP] or N-terminal pro-BNP [NT-proBNP]) to facilitate prevention of stage C heart failure.
- In asymptomatic individuals with diabetes and abnormal natriuretic peptide levels, echocardiography is recommended to identify stage B heart failure.

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Cardiovascular Disease – Screening

- In asymptomatic individuals with diabetes and age ≥65 years, microvascular disease in any location, or foot complications or any end-organ damage from diabetes, screening for PAD with ankle-brachial index testing is recommended if a PAD diagnosis would change management.

Standards of Medical Care in Diabetes—2026. American Diabetes Association. Diabetes Care 2026 Jan; Volume 49, Issue Supplement 1

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Updates in Cardio-kidney-metabolic Risk Reduction

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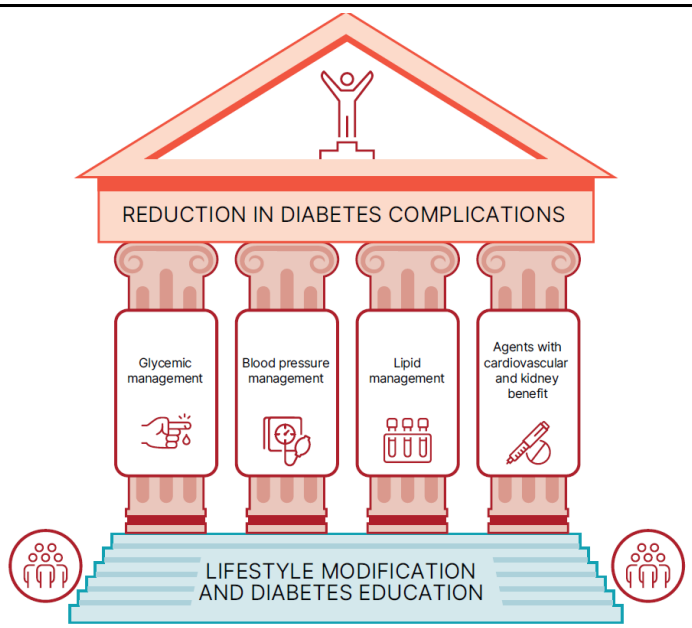

Figure 10.1—Multifactorial approach to reduction in risk of diabetes complications.

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Figure 10.1 Cardiovascular Disease and Risk Management: *Standards of Care in Diabetes - 2026 Diabetes Care* 2026;49(Suppl. 1):S216-S245

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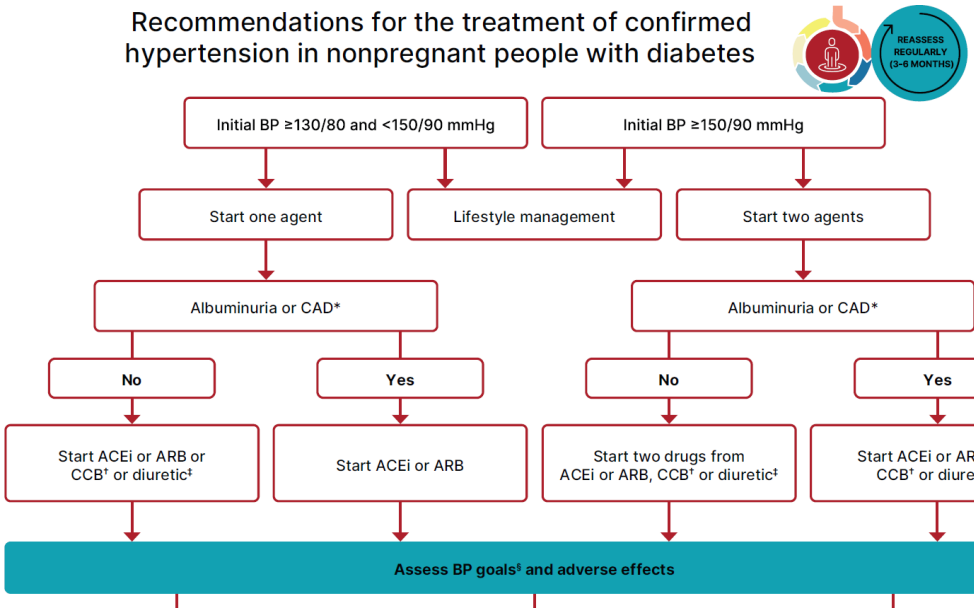

Figure 10.2
Cardiovascular Disease and Risk Management:
Standards of Care in Diabetes - 2026 Diabetes Care 2026;49(Suppl. 1):S216-S245

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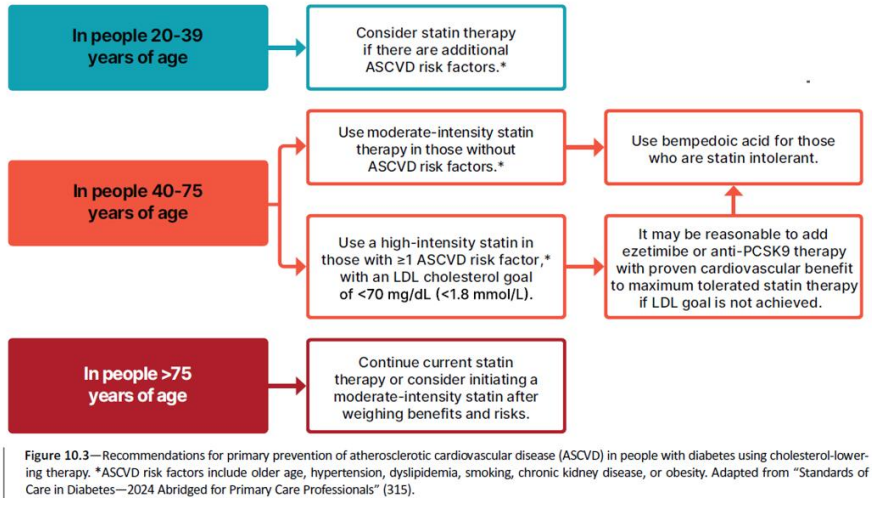

Figure 10.3—Recommendations for primary prevention of atherosclerotic cardiovascular disease (ASCVD) in people with diabetes using cholesterol-lowering therapy. *ASCVD risk factors include older age, hypertension, dyslipidemia, smoking, chronic kidney disease, or obesity. Adapted from "Standards of Care in Diabetes—2024 Abridged for Primary Care Professionals" (315).

Figure 10.3
Cardiovascular Disease and Risk Management:
Standards of Care in Diabetes - 2026 Diabetes Care 2026;49(Suppl. 1):S216-S245

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Lipid Management for Secondary Prevention of ASCVD

Use lifestyle and high-intensity statin therapy to reduce LDL cholesterol by ≥50% from baseline to a goal of <55 mg/dL (<1.4 mmol/L).

→ Add ezetimibe or anti-PCSK9 therapy with proven cardiovascular benefit if LDL cholesterol goals are not met on maximum tolerated statin therapy.

→ Use an alternative lipid-lowering treatment for those who are statin intolerant:

- PCSK9 monoclonal antibody with proven cardiovascular benefit
- Bempedoic acid
- PCSK9 inhibition with siRNA inclisiran

Figure 10.4—Recommendations for secondary prevention of atherosclerotic cardiovascular disease (ASCVD) in people with diabetes using cholesterol-lowering therapy. Adapted from "Standards of Care in Diabetes—2024 Abridged for Primary Care Professionals" (315).

Figure 10.4
Cardiovascular Disease and Risk Management:
Standards of Care in Diabetes - 2026 Diabetes Care 2026;49(Suppl. 1):S216-S245

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Use of glucose-lowering medications in the management of type 2 diabetes

(For recommendations for specific conditions, including non-glucose-lowering medications, refer to pertinent sections)

Healthy lifestyle behaviors; diabetes self-management education and support; social determinants of health

To avoid therapeutic inertia, reassess and modify treatment regularly (3–6 months)

Goal: cardiovascular and kidney risk reduction*

- +ASCVD†
  - +ASCVD/indicators of high CVD risk*
    - GLP-1 RA‡ with proven CVD benefit
    - SGLT2i§ with proven CVD benefit
  - If glycemia is above goal
    - For individuals on a GLP-1 RA, consider adding SGLT2i with proven CVD benefit or vice versa
    - Pioglitazone‖
- +Indicators of high CVD risk
  - +ASCVD/indicators of high CVD risk*
    - GLP-1 RA‡ with proven CVD benefit
    - SGLT2i§ with proven CVD benefit
  - If glycemia is above goal
    - For individuals on a GLP-1 RA, consider adding SGLT2i with proven CVD benefit or vice versa
    - Pioglitazone‖
- +HF
  - SGLT2i§ with proven HF benefit in current or prior symptoms of HFrEF or HFpEF
  - SGLT2i and/or either dual GIP/GLP-1 RA or GLP-1RA with proven benefit in symptomatic HFpEF and obesity
- +CKD
  - eGFR <60 mL/min/1.73 m² or albuminuria (ACR ≥3.0 mg/mmol [30 mg/g]). Repeat measurement is required to confirm CKD
  - +CKD (on maximally tolerated dose of ACEi or ARB)
    - SGLT2i§ with primary evidence of reducing CKD progression
    - SGLT2i can be started with eGFR ≥20 mL/min/1.73 m²
    - Glucose-lowering efficacy is reduced with eGFR <45 mL/min/1.73 m²
    - OR
    - GLP-1 RA‡ with proven CKD benefit
  - If glycemia is above goal, for individuals on SGLT2i, consider incorporating a GLP-1 RA or vice versa

Goal: achievement and maintenance of weight and glycemic goals

- +Weight management
  - Efficacy for weight loss
    - Very high: Semaglutide, tirzepatide
    - High: Dulaglutide, liraglutide
    - Intermediate: GLP-1 RA (not listed above), SGLT2i
    - Neutral: Metformin, DPP-4i
- +Achievement and maintenance of glycemic goals
  - Metformin or other agent (including combination therapy) that provides adequate efficacy to achieve and maintain glycemic treatment goals.
  - Prioritize avoidance of hypoglycemia in high risk individuals
  - Efficacy for glucose lowering
    - Very high: Dulaglutide (high dose), semaglutide, tirzepatide, insulin
    - Combination oral, combination injectable (GLP-1 RA and insulin)
    - High: GLP-1 RA (not listed above), metformin, pioglitazone, SGLT2, sulfonylurea
    - Intermediate: DPP-4i

American Diabetes Association.

Figure 9.4 Pharmacologic Approaches to Glycemic Treatment: *Standards of Care in Diabetes - 2026. Diabetes Care* 2026;49(Suppl. 1):S183-215

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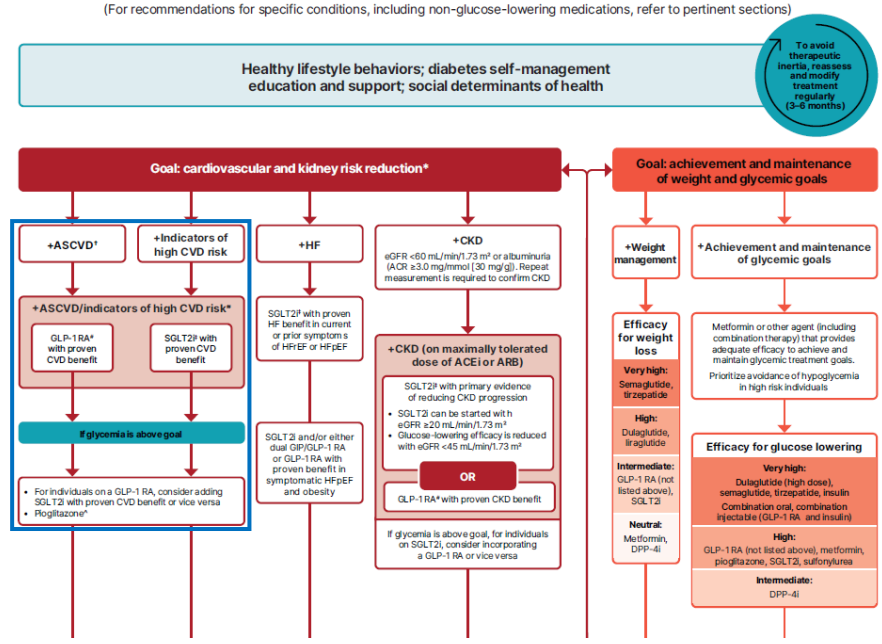

Figure 9.4 Pharmacologic Approaches to Glycemic Treatment: *Standards of Care in Diabetes - 2026. Diabetes Care* 2026;49(Suppl. 1):S183-215

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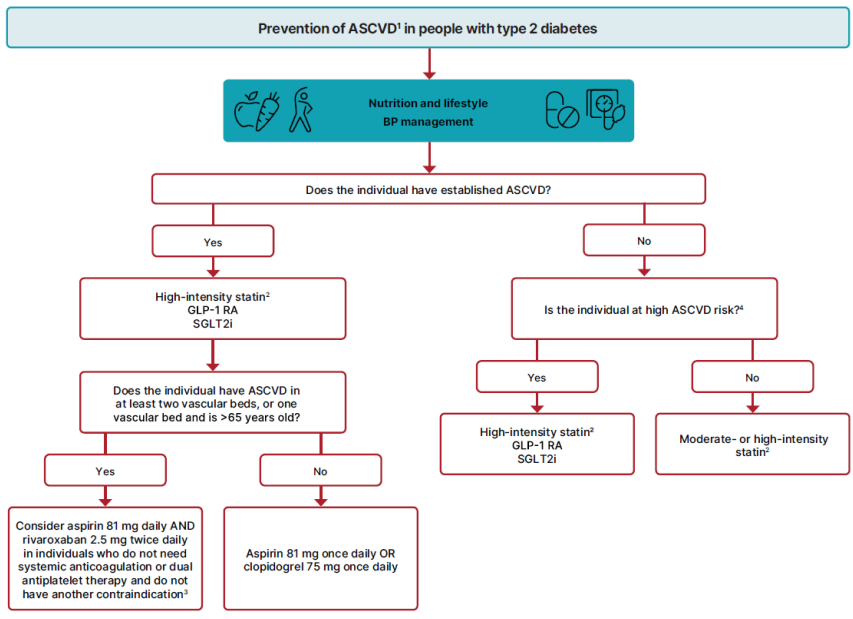

Figure 10.6
Cardiovascular Disease and Risk Management:
Standards of Care in Diabetes - 2026 Diabetes Care 2026;49(Suppl. 1):S216-S245

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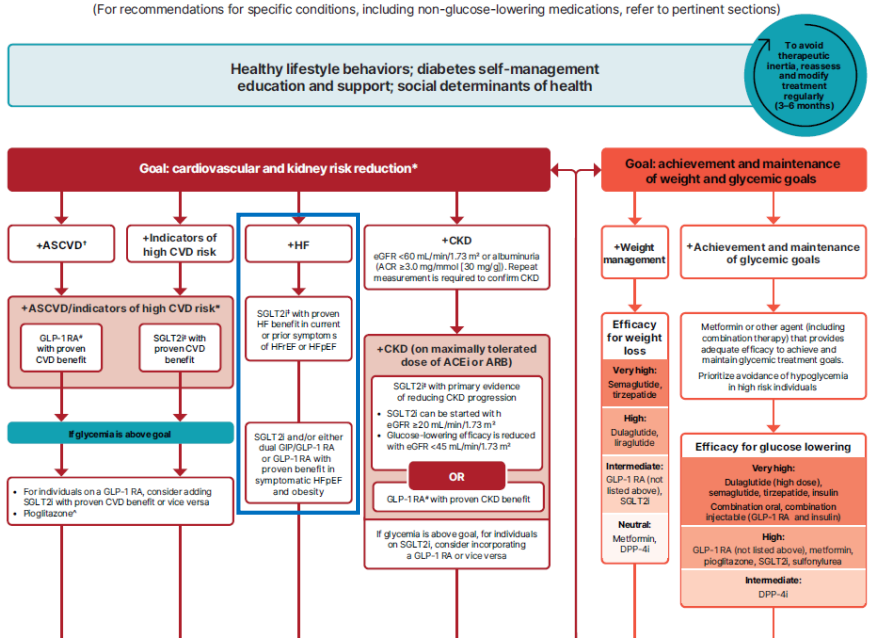

Figure 9.4 Pharmacologic Approaches to Glycemic Treatment: *Standards of Care in Diabetes - 2026. Diabetes Care* 2026;49(Suppl. 1):S183-215

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Phase 3 STEP-HFpEF DM Study: Semaglutide in Patients with Obesity-Related HFpEF and T2DM[1]

N = 616 patients with HFpEF, BMI ≥30 kg/m², and T2DM randomized to semaglutide 2.4 mg QW (n = 310) or placebo (n = 306) for 52 weeks

- **Median KCCQ-CSS: 59.4 points; median BMI 37 kg/m²** (64% with BMI ≥35 kg/m²); **median A1C 6.8%**
- 85% had HTN; 39% had AF; 24% had CAD
- Median NT-proBNP 493 pg/mL; median CRP 3.5 mg/L; median LVEF 56%; NYHA Class II: 71%
- **Dual primary endpoints: change from baseline in KCCQ-CSS and change in body weight**

Change From Baseline in KCCQ-CSS

	SEMA	PBO
Mean Δ KCCQ-CSS, points	13.7	6.4
Est. difference, points	7.3	
95% CI	4.1 to 10.4	
P	< .001	

Change From Baseline in Body Weight

	SEMA	PBO
Mean Δ body weight, %	-9.8	-3.4
Est. difference, %	-6.4	
95% CI	-7.6 to -5.2	
P	< .001	

Semaglutide reduced A1C, despite well-controlled glycemia at baseline, without an increase in clinically significant hypoglycemia

1. Kosiborod MN et al. *N Engl J Med.* 2024;390:1394-1407.

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Tirzepatide in HFpEF

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JANUARY 30, 2025 VOL. 392 NO. 5

Tirzepatide for Heart Failure with Preserved Ejection Fraction and Obesity

Milton Packer, M.D., Michael R. Zile, M.D., Christopher M. Kramer, M.D., Seth J. Baum, M.D., Sheldon E. Litwin, M.D., Venu Menon, M.D., Junbo Ge, M.D., Govinda J. Weerakkody, Ph.D., Yang Ou, Ph.D., Mathijs C. Bunck, M.D., Karla C. Hurt, B.S.N., Masahiro Murakami, M.D., and Barry A. Borlaug, M.D., for the SUMMIT Trial Study Group*

*About 48% of participants had T2D

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Tirzepatide in HFpEF

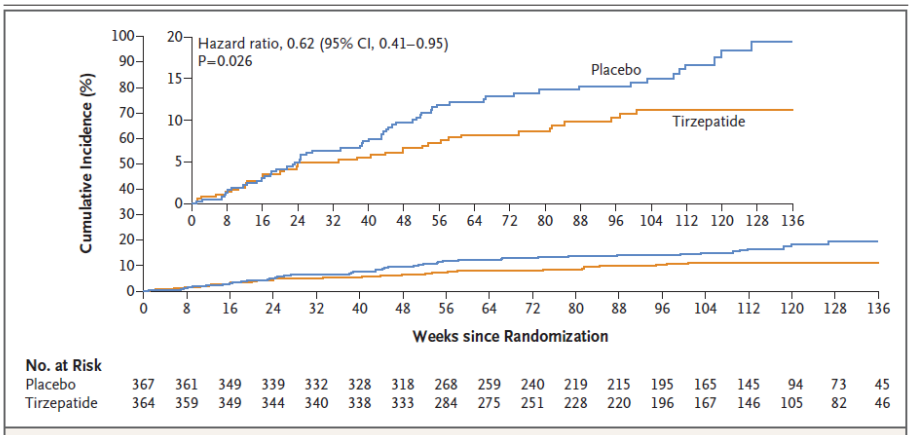

Figure 1. Composite of Death from Cardiovascular Causes or a Worsening Heart-Failure Event.
Shown is the cumulative incidence of death from cardiovascular causes or a worsening heart-failure event (the composite primary end point), assessed in a time-to-first-event analysis, among 364 patients who received tirzepatide and 367 patients who received placebo. The inset shows the same data on an expanded y axis.

N Engl J Med 2025;392:427-437 DOI: 10.1056/NEJMoa2410027

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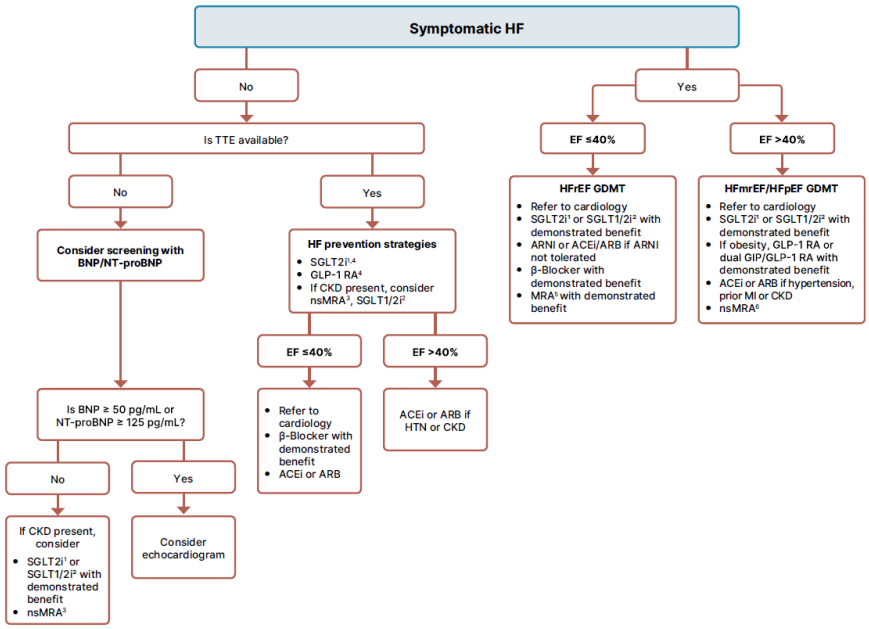

Figure 10.5
Cardiovascular Disease and Risk Management:
Standards of Care in Diabetes - 2026 Diabetes Care 2026;49(Suppl. 1):S216-S245

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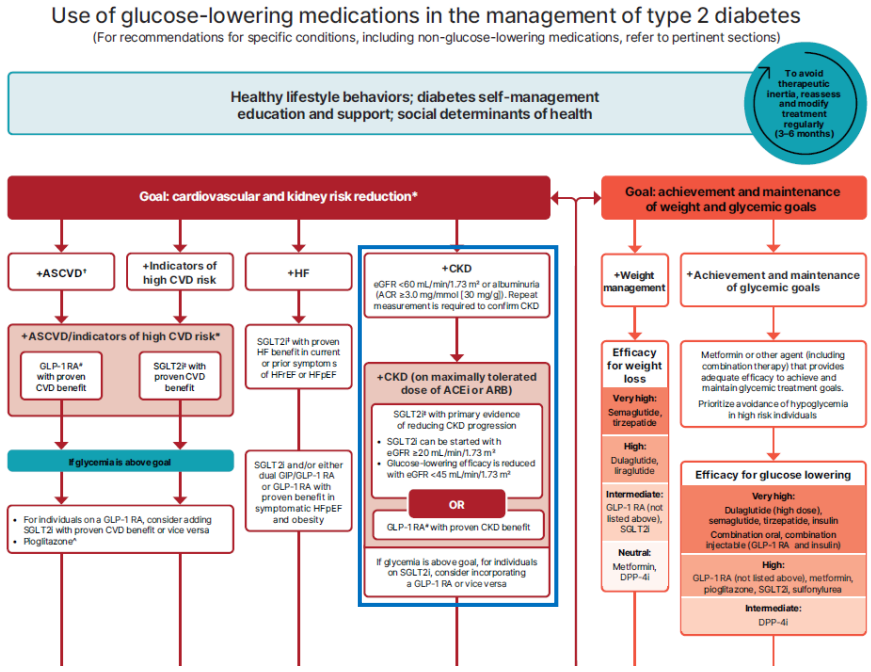

Figure 9.4 Pharmacologic Approaches to Glycemic Treatment: *Standards of Care in Diabetes - 2026. Diabetes Care* 2026;49(Suppl. 1):S183-215

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FLOW Study of Semaglutide in T2D with CKD

Methods

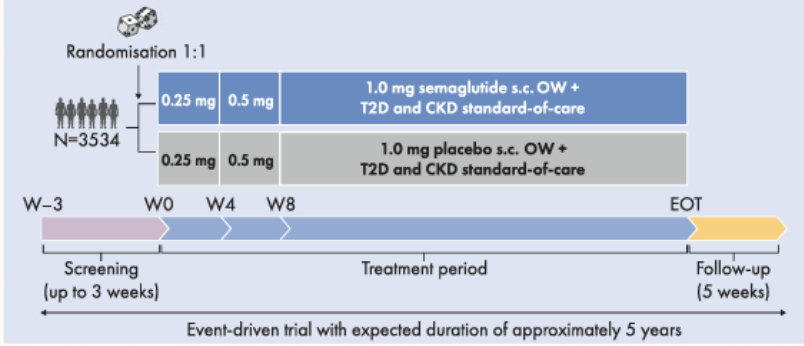
Participants:

- Adults with T2D
- eGFR ≥50 to ≤75 ml/min/1.73 m² and UACR >300 to <5000 mg/g OR
- eGFR ≥25 to <50 ml/min/1.73 m² and UACR >100 to <5000 mg/g

Composite primary endpoint:

Time to first occurrence of:

- Kidney failure (persistent eGFR <15 ml/min/1.73 m² or initiation of CKRT);
- Persistent ≥50% reduction in eGFR; or
- Death from kidney or CV causes



Baseline characteristics

68.2% at very high risk for CKD progression according to KDIGO categorisation, eGFR of 47.0 (15) ml/min/1.73 m²; median UACR of 568 (range: 2–11 852) mg/g

Advanced type 2 diabetes:
Mean age 66.6 years
Mean diabetes duration 17.4 years
Mean HbA_{1c} 7.8%

15.5% receiving SGLT-2is

CKD, chronic kidney disease; CKRT, chronic kidney replacement therapy; CV, cardiovascular; eGFR, estimated glomerular filtration rate; EOT, end of treatment; GLP-1RA, glucagon-like peptide-1 receptor agonist; HbA_{1c}, glycosylated haemoglobin; KDIGO, Kidney Disease: Improving Global Outcomes; OW, once weekly; s.c., subcutaneous; SGLT-2i, sodium-glucose cotransporter-2 inhibitor; T2D, type 2 diabetes; UACR, urine albumin-to-creatinine ratio; W, week.

Nephrol Dial Transplant. 2023 Aug 31;38(9):2041-2051. doi: 10.1093/ndt/gfad009. PMID: 36651820; PMCID: PMC10469096.

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FLOW Study of Semaglutide in T2D with CKD

Outcome	Semaglutide (N=1767)	Placebo (N=1766)	Hazard Ratio (95% CI)	Estimated Difference (95% CI)	P Value
Primary outcome: major kidney disease events — no. (%)†	331 (18.7)	410 (23.2)	0.76 (0.66 to 0.88)	—	0.0003
Components of primary outcome — no. (%)					
Persistent ≥50% reduction from baseline in eGFR	165 (9.3)	213 (12.1)	0.73 (0.59 to 0.89)	—	—
Persistent eGFR <15 ml/min/1.73 m²	92 (5.2)	110 (6.2)	0.80 (0.61 to 1.06)	—	—
Initiation of kidney-replacement therapy	87 (4.9)	100 (5.7)	0.84 (0.63 to 1.12)	—	—
Death from kidney-related causes	5 (0.3)	5 (0.3)	0.97 (0.27 to 3.49)	—	—
Death from cardiovascular causes	123 (7.0)	169 (9.6)	0.71 (0.56 to 0.89)	—	—
Composite of kidney-specific components of the primary outcome	218 (12.3)	260 (14.7)	0.79 (0.66 to 0.94)	—	—
Confirmatory secondary outcomes					
Mean annual rate of change in eGFR — ml/min/1.73 m²	−2.19	−3.36	—	1.16 (0.86 to 1.47)	<0.001
Major cardiovascular events — no. (%)	212 (12.0)	254 (14.4)	0.82 (0.68 to 0.98)	—	0.029
Death from cardiovascular causes	123 (7.0)	169 (9.6)	0.71 (0.56 to 0.89)	—	—
Nonfatal myocardial infarction	52 (2.9)	64 (3.6)	0.80 (0.55 to 1.15)	—	—
Nonfatal stroke	63 (3.6)	51 (2.9)	1.22 (0.84 to 1.77)	—	—
Death from any cause — no. (%)	227 (12.8)	279 (15.8)	0.80 (0.67 to 0.95)	—	0.01

median participant follow-up was 3.4 years

N Engl J Med. 2024 May 24. doi: 10.1056/NEJMoa2403347. Online ahead of print. PMID: 38785209

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Which of the Following Patients Should Be Screened Now for CKD, Including Measurement of Both eGFR and UACR?

A. Anyone with newly diagnosed Type 1 or Type 2 diabetes
B. An individual with newly diagnosed Type 2 diabetes
C. An individual with newly diagnosed Type 1 diabetes
D. An individual diagnosed with Type 1 diabetes two years ago

Screening and Diagnosis: KDIGO

Who and when to screen?

T1D Yearly starting 5 years after diagnosis

T2D Yearly starting at diagnosis

How to screen?

Spot urine ACR

and

eGFR

What to do with a positive result?

Repeat and confirm:
- Evaluate possible temporary or spurious causes
- Consider using cystatin C and creatinine to more precisely estimate GFR
- Only persistent abnormalities define CKD

Initiate evidence-based treatments

What defines CKD diagnosis?

Persistent urine ACR ≥30 mg/g

and/or

Persistent eGFR <60 mL/min/1.73 m²

and/or

Other evidence of kidney damage

de Boer Ih et al. Diabetes Management in Chronic Kidney Disease: A Consensus Report by the American Diabetes Association (ADA) and Kidney Disease: Improving Global Outcomes (KDIGO). Diabetes Care. 2022 Oct 3:dci220027. doi: 10.2337/dci22-0027. Epub ahead of print. PMID: 36189689.

				Albuminuria categories Description and range		
				A1	A2	A3
CKD is classified based on: • GFR (G) • Albuminuria (A)				Normal to mildly increased	Moderately increased	Severely increased
				<30 mg/g <3 mg/mmol	30-299 mg/g 3-29 mg/mmol	≥300 mg/g ≥30 mg/mmol
GFR categories (mL/min/1.73 m²) Description and range	G1	Normal or high	≥90	Screen 1	Treat 1	Treat and refer 2
	G2	Mildly decreased	60-89	Screen 1	Treat 1	Treat and refer 2
	G3a	Mildly to moderately decreased	45-59	Treat 1	Treat 2	Treat and refer 3
	G3b	Moderately to severely decreased	30-44	Treat 2	Treat and refer 3	Treat and refer 3
	G4	Severely decreased	15-29	Treat and refer 3	Treat and refer 3	**Treat and refer 4+**
	G5	Kidney failure	<15	**Treat and refer 4+**	**Treat and refer 4+**	**Treat and refer 4+**

Low risk (if no other markers of kidney disease, no CKD)
Moderately increased risk
High risk
Very high risk

Figure 11.1—Risk of CKD progression, cardiovascular disease risk, and mortality; frequency of visits; and referral to nephrology according to GFR and albuminuria. The numbers in the boxes are a guide to the frequency of screening or monitoring (number of times per year). Green reflects no evidence of CKD by estimated GFR or albuminuria, with screening indicated once per year. For monitoring of prevalent CKD, suggested monitoring varies from once per year (yellow) to four times or more per year (i.e., every 1–3 months [deep red]) according to risks of CKD progression and CKD complications (e.g., cardiovascular disease, anemia, and hyperparathyroidism). These are general parameters based only on expert opinion and underlying comorbid conditions, and disease state must be taken into account, as should the likelihood of impacting a change in management for any individual. CKD, chronic kidney disease; GFR, glomerular filtration rate. Adapted from de Boer et al. (1).

Figure 11.1
Chronic Kidney Disease and Risk Management:
Standards of Care in Diabetes – 2026 Diabetes Care 2026;49(Suppl. 1):S246-S260

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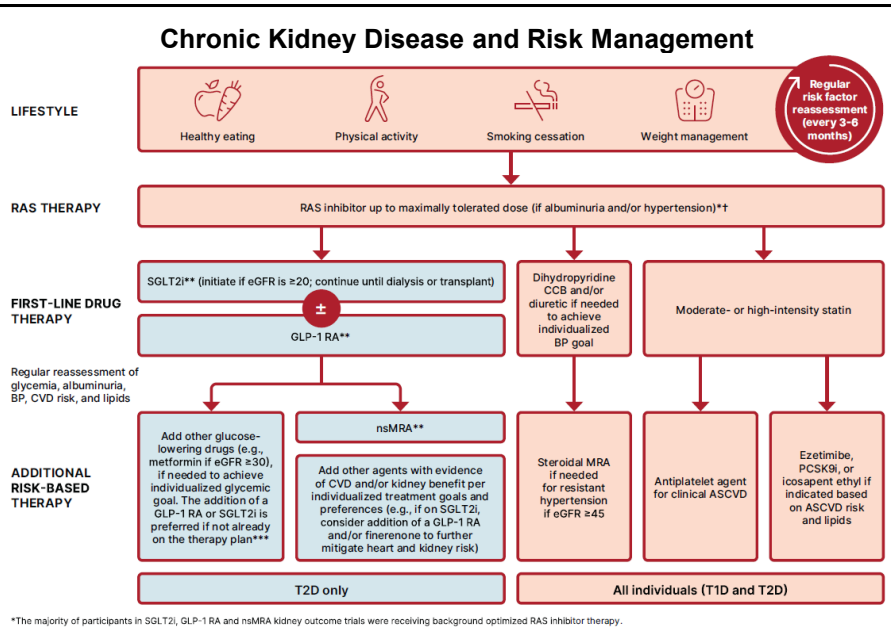

Figure 11.2
Chronic Kidney Disease and Risk Management:
Standards of Care in Diabetes – 2026 Diabetes Care 2026;49(Suppl. 1):S246-S260

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Increased Emphasis on Weight Management

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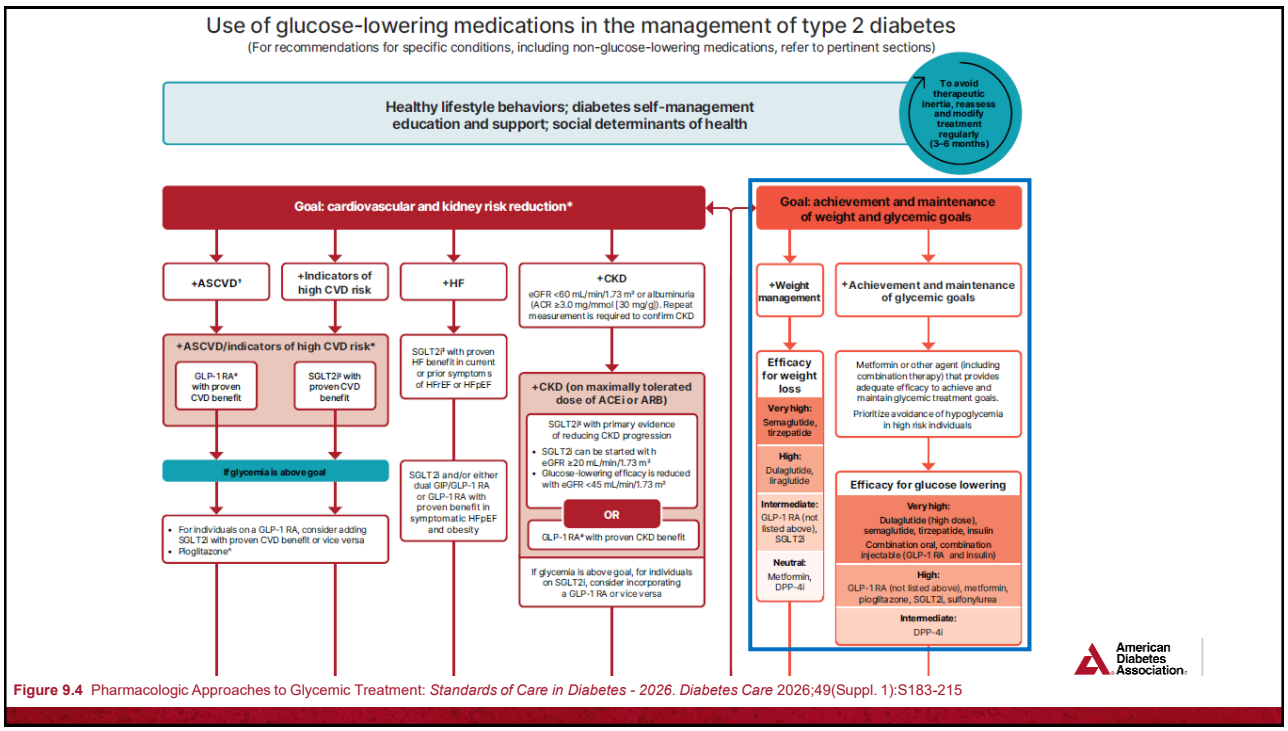

Figure 9.4 Pharmacologic Approaches to Glycemic Treatment: *Standards of Care in Diabetes - 2026. Diabetes Care* 2026;49(Suppl. 1):S183-215

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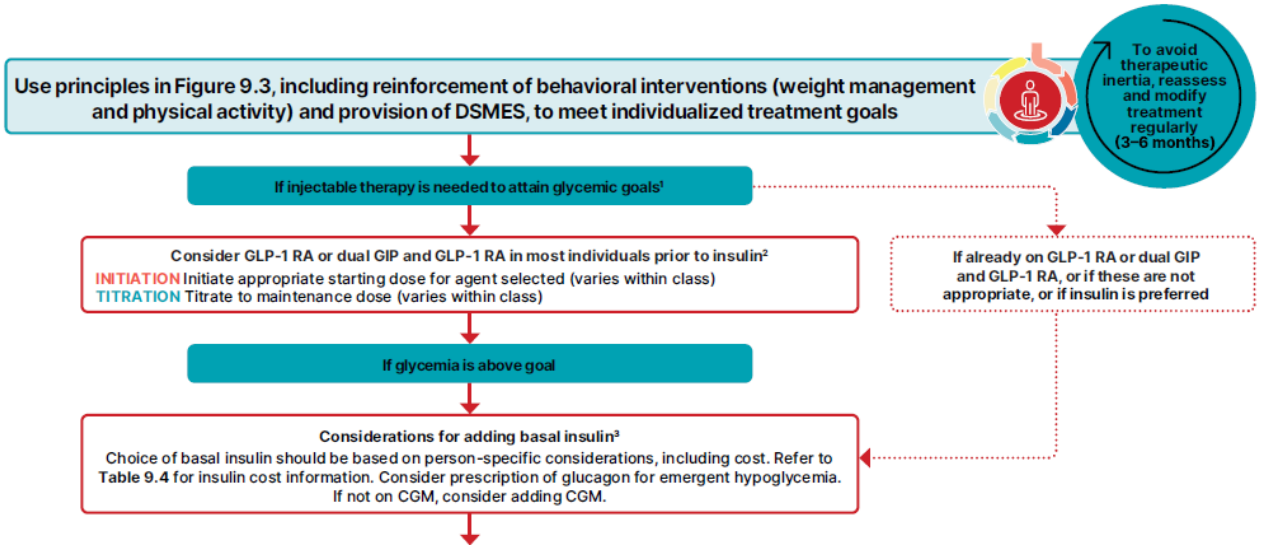

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Pharmacologic Approaches to Glycemic Treatment:
Standards of Care in Diabetes - 2026. Diabetes Care 2026;49(Suppl. 1):S183-215

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Metabolic-Associated Steatotic Liver Disease (MASLD) and Metabolic-Associated Steatohepatitis (MASH)

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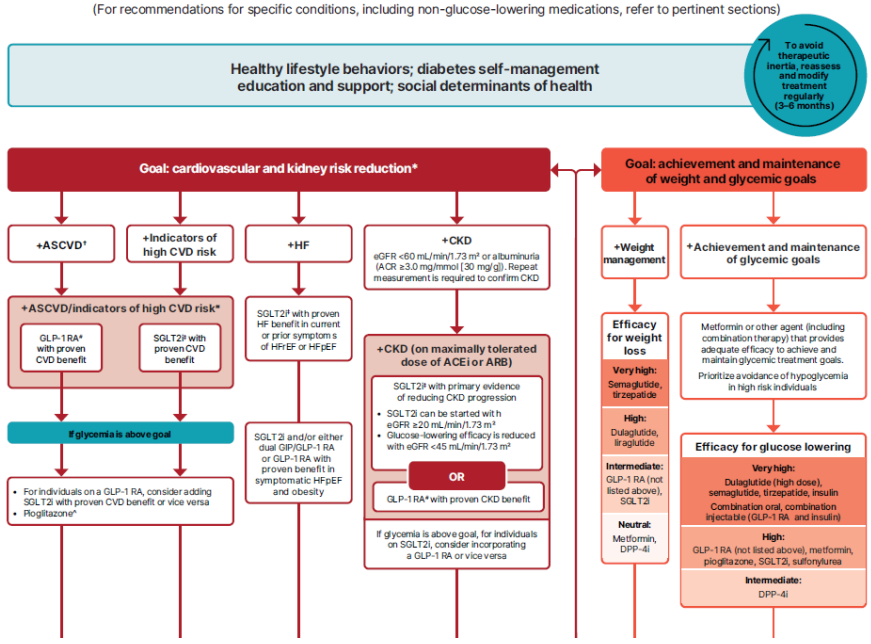

Figure 9.4 Pharmacologic Approaches to Glycemic Treatment: *Standards of Care in Diabetes - 2026. Diabetes Care* 2026;49(Suppl. 1):S183-215

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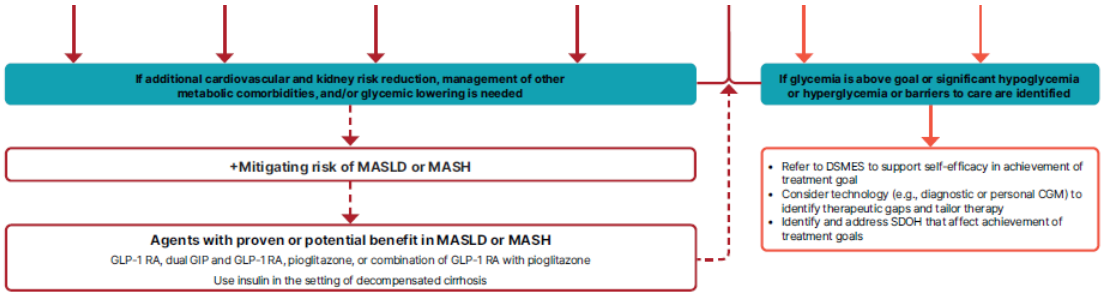

* In people with HF, CKD, established CVD, or multiple risk factors for CVD, the decision to use a GLP-1 RA or SGLT2i with proven benefit should be made irrespective of attainment of glycemic goal.

† ASCVD: Defined differently across CVOTs but all included individuals with established CVD (e.g., MI, stroke, and arterial revascularization procedure) and variably included conditions such as transient ischemic attack, unstable angina, amputation, and symptomatic or asymptomatic coronary artery disease. Indicators of high risk: While definitions vary, most comprise ≥55 years of age with two or more additional risk factors (including obesity, hypertension, smoking, dyslipidemia, or albuminuria).

≈ A strong recommendation is warranted for people with CVD and a weaker recommendation for those with indicators of high risk CVD. Moreover, a higher absolute risk reduction and thus lower numbers needed to treat are seen at higher levels of baseline risk and should be factored into the shared decision-making process. See text for details.

For GLP-1 RAs, CVOTs demonstrate their efficacy in reducing composite MACE, CV death, all-cause mortality, MI, stroke, and kidney end points in individuals with T2D with established or high risk of CVD. One kidney outcome trial demonstrated benefit in reducing persistent eGFR reduction and CV death for a GLP-1 RA in individuals with CKD and T2D.

‡ For SGLT2is, CV and kidney outcomes trials demonstrate their efficacy in reducing the risks of composite MACE, CV death, all-cause mortality, MI, HHF, and kidney outcomes in individuals with T2D and established or high risk of CVD.

^ Low-dose pioglitazone may be better tolerated and similarly effective as higher doses.

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Figure 9.4 (continued) Pharmacologic Approaches to Glycemic Treatment: *Standards of Care in Diabetes - 2026. Diabetes Care* 2026;49(Suppl. 1):S183-215

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MASLD and MASH- Screening

- Screen adults with T2D or prediabetes, particularly those with obesity or other cardiometabolic risk factors or established CVD, for risk of MASH-related cirrhosis using a calculated FIB-4 index, even if they have normal liver enzymes.
- Adults with T2D or prediabetes with a FIB-4 ≥1.3 should have additional risk stratification by liver stiffness measurement with transient elastography, or enhanced liver fibrosis (ELF) test.
- Refer adults with T2D or prediabetes at higher risk for significant liver fibrosis (i.e., as indicated by FIB-4, liver stiffness measurement, or ELF) to a liver specialist for further evaluation and management.

Comprehensive Medical Evaluation and Assessment of Comorbidities:
Standards of Care in Diabetes - 2026. Diabetes Care 2026;49(Suppl. 1):S61-S88

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Diagnostic algorithm for the prevention of cirrhosis in people with metabolic dysfunction–associated steatotic liver disease (MASLD)

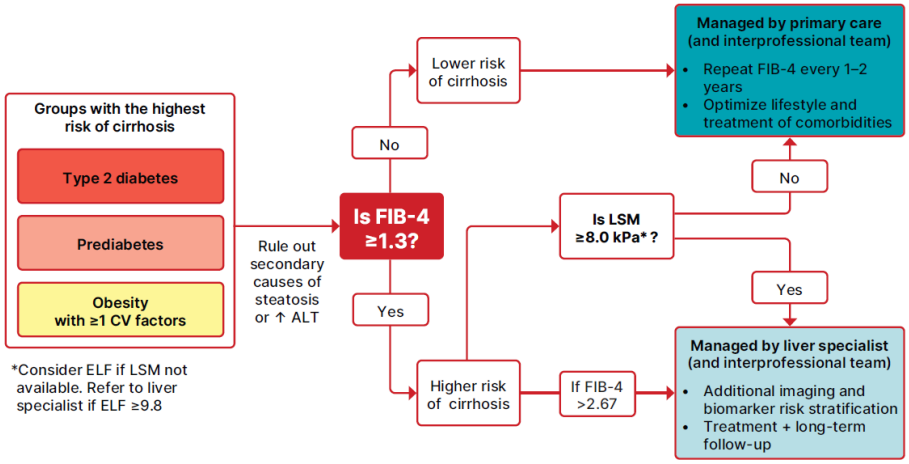

Figure 4.2—Diagnostic algorithm for risk stratification and the prevention of cirrhosis in individuals with metabolic dysfunction-associated steatotic liver disease (MASLD). CV, cardiovascular; ELF, enhanced liver fibrosis test; FIB-4, fibrosis-4 index; LSM, liver stiffness measurement, as measured by vibration-controlled transient elastography. *In the absence of LSM, consider ELF a diagnostic alternative. If ELF ≥9.8, an individual is at high risk of metabolic dysfunction-associated steatohepatitis with advanced liver fibrosis (≥F3–F4) and should be referred to a liver specialist.

Figure 4.2
Comprehensive Medical Evaluation and Assessment of Comorbidities:
Standards of Care in Diabetes - 2026. Diabetes Care 2026;49(Suppl. 1):S61-S88

American Diabetes Association.

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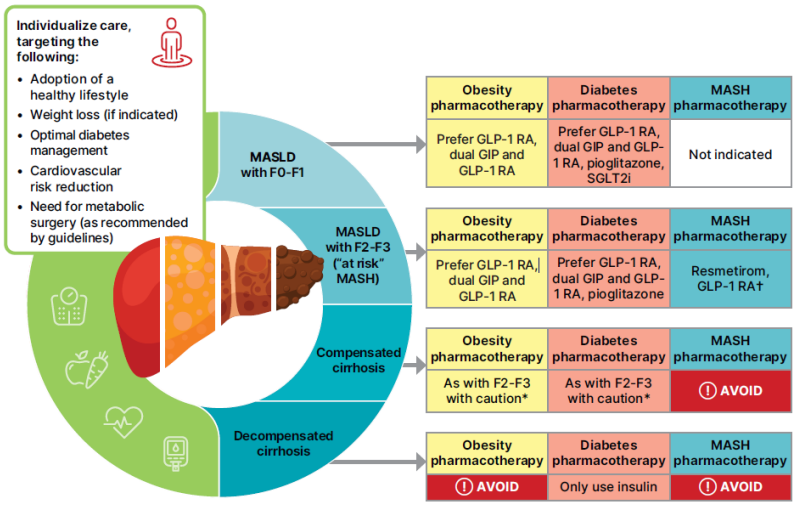
Metabolic dysfunction–associated steatotic liver disease (MASLD) treatment algorithm



† Only semaglutide among GLP-1 RAs has been approved by the FDA for treatment of MASH.
* Individualized care and close monitoring needed in compensated cirrhosis given limited safety data available.

Figure 4.3—Metabolic dysfunction-associated steatotic liver disease (MASLD) treatment algorithm. F0-F1, no to minimal fibrosis; F2-F3, moderate fibrosis; F4, cirrhosis; GIP, glucose-dependent insulinotropic polypeptide; GLP-1 RA, glucagon-like peptide 1 receptor agonist; MASH, metabolic dysfunction-associated steatohepatitis; SGLT2i, sodium–glucose cotransporter 2 inhibitor.

American Diabetes Association.

Figure 4.3 Comprehensive Medical Evaluation and Assessment of Comorbidities: *Standards of Care in Diabetes - 2026. Diabetes Care* 2026;49(Suppl. 1):S61-S88

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Diabetes and Older Adults

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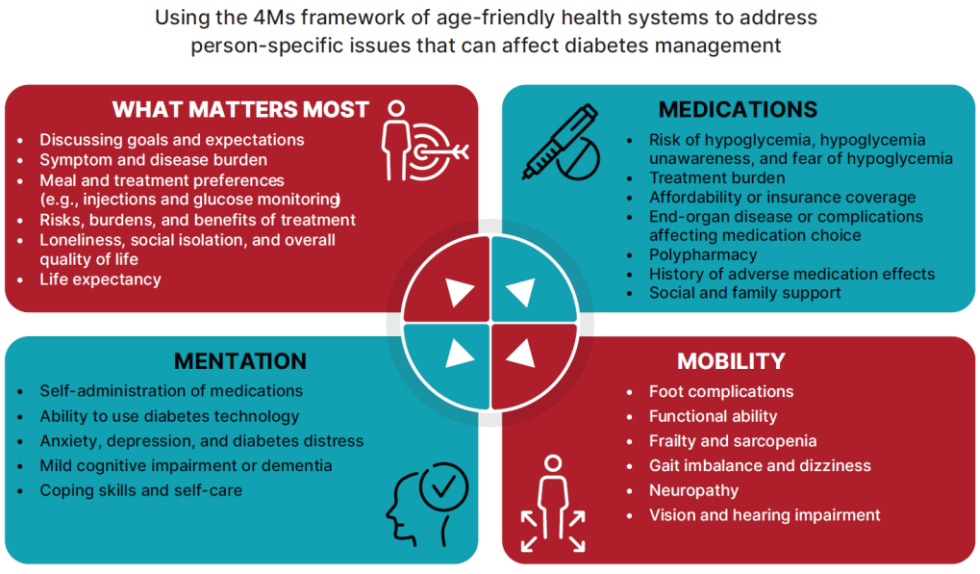

Figure 13.1—Using the 4Ms framework of age-friendly health systems to address person-specific issues that can affect diabetes management.

Figure 13.1
Older Adults:
Standards of Care in Diabetes - 2026 Diabetes Care 2026;49(Suppl. 1):S277-S296

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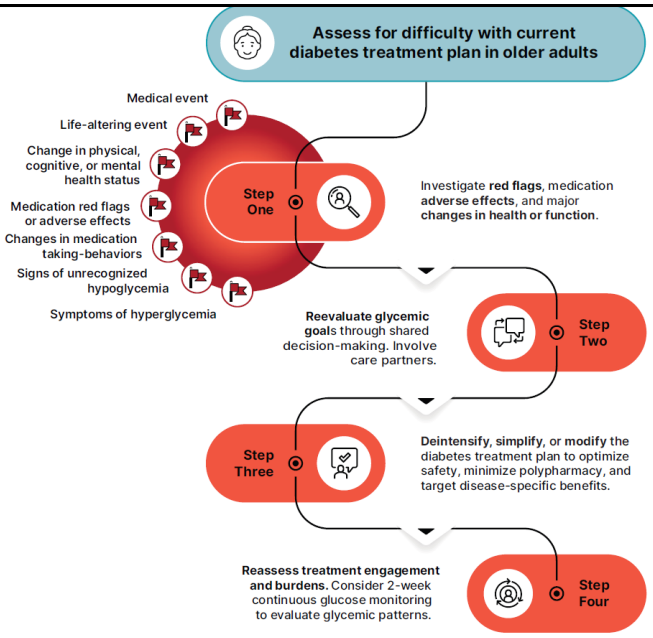

Figure 13.2—Stepwise approach for assessing difficulties in the diabetes treatment plan; reevaluating glycemic goals through shared decision-making; deintensifying, simplifying, or modifying the treatment plan; and reassessing the safety and burdens of any interventions. Created using recommendations from Munshi et al. (41).

Figure 13.2
Older Adults:
Standards of Care in Diabetes - 2026 Diabetes Care 2026;49(Suppl. 1):S277-S296

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Bone Health in Older Adults with Diabetes

Table 4.4—Diagnostic assessment

Individuals who should receive BMD testing
People aged ≥65 years
Postmenopausal women and men aged ≥50 years with history of adult-age fracture or with diabetes-specific risk factors: • Frequent hypoglycemic events • Diabetes duration >10 years • Diabetes medications: insulin, thiazolidinediones, sulfonylureas • A1C >8% • Peripheral or autonomic neuropathy, retinopathy, nephropathy • Frequent falls • Glucocorticoid use: prednisone at doses >2.5 mg per day for ≥3 months

Table 4.4
Comprehensive Medical Evaluation and Assessment of Comorbidities:
Standards of Care in Diabetes - 2026. Diabetes Care 2026;49(Suppl. 1):S61-S88

American Diabetes Association.

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What Is the Potential to Improve Outcomes?

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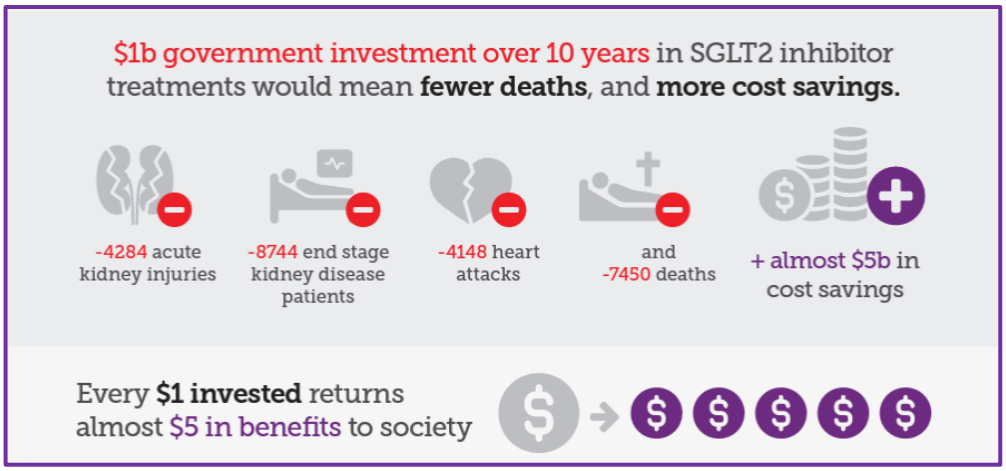
SGLT2i: Estimated Impact on Health

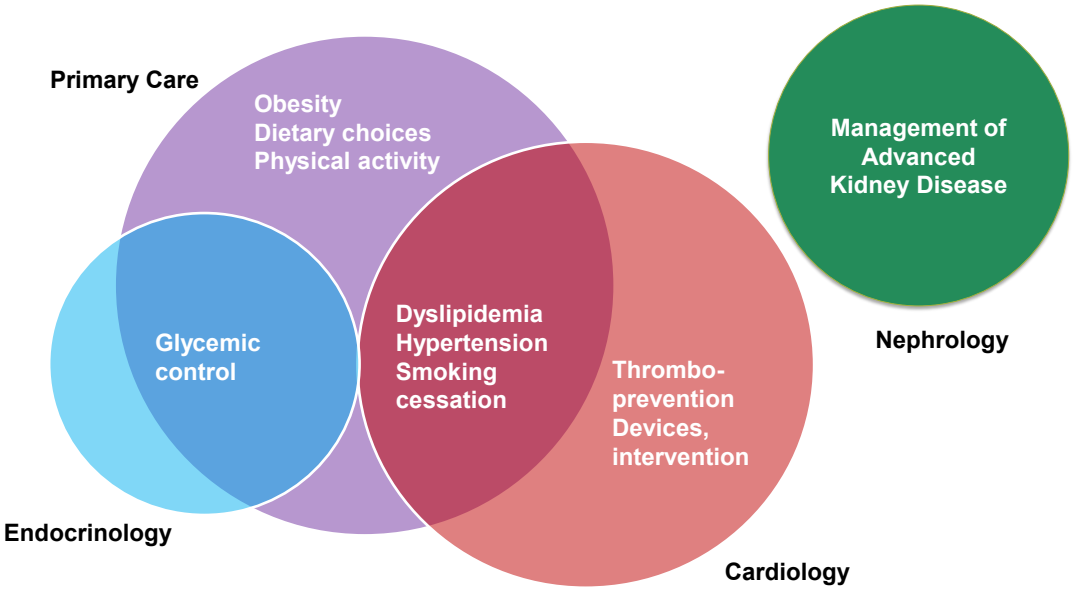
Assessed the Impact of Using SGLT2 Inhibitors in Australian Patients with T2DM, CKD and/or CVD



https://www.georgeinstitute.org/the-wider-benefits-of-sglt2-inhibitors

47

Traditional Care Silos in T2DM



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The Result

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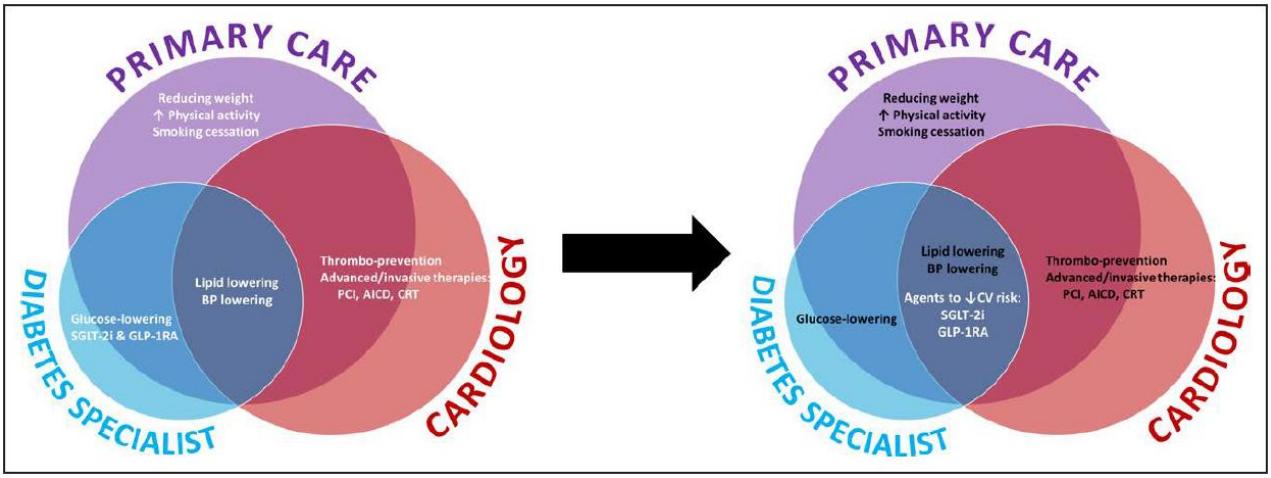
A New Paradigm Is Needed

Reframing Cardio-renal Risk Reduction



Nelson et al. Circulation. 2021;144:74–84. DOI: 10.1161/CIRCULATIONAHA.121.053766

50

A 66-year-old woman with T2DM, HL and HTN has evidence of chronic kidney disease (eGFR 55, UACr 80). Her HbA1c is 7.3% on metformin and a DPP4i. She is on statin therapy and BP is controlled on a regimen which includes an ACE inhibitor.

What Would You Recommend at This Time?

A. No change in treatment
B. Sulfonylurea
C. SGLT2 inhibitor
D. Pioglitazone

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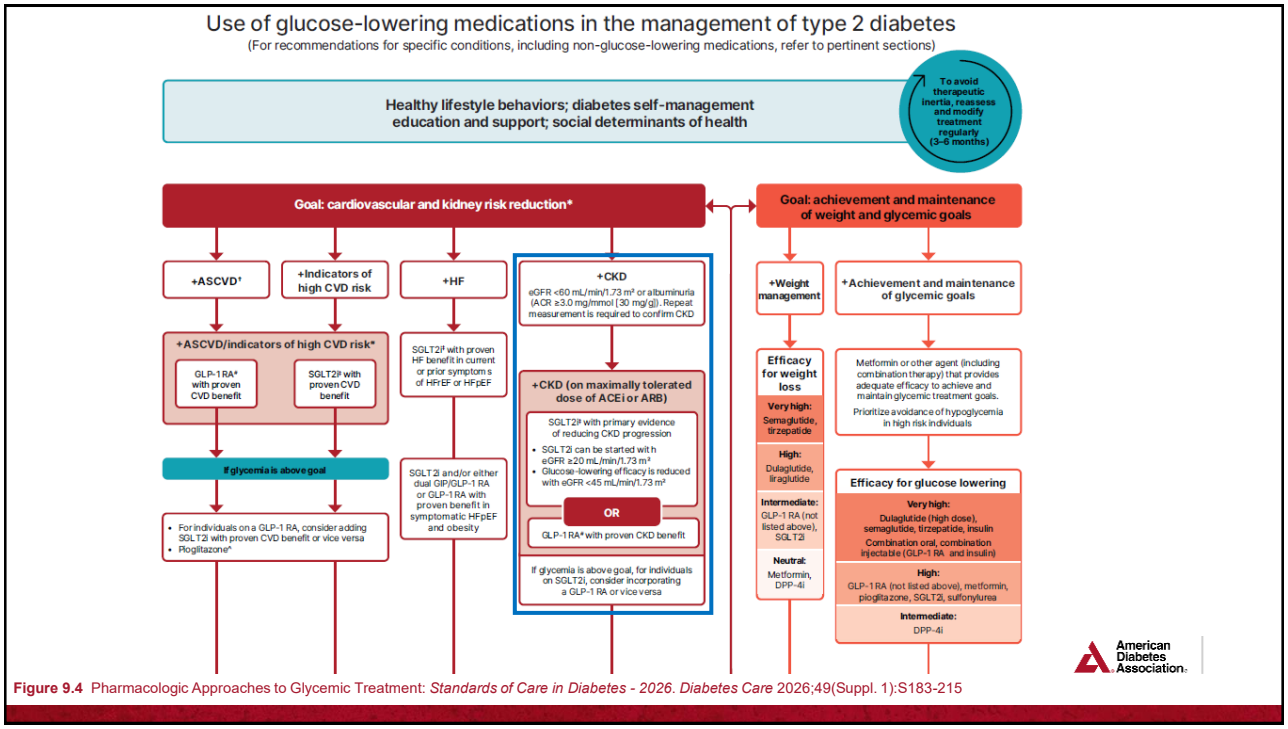

Figure 9.4 Pharmacologic Approaches to Glycemic Treatment: *Standards of Care in Diabetes - 2026. Diabetes Care* 2026;49(Suppl. 1):S183-215

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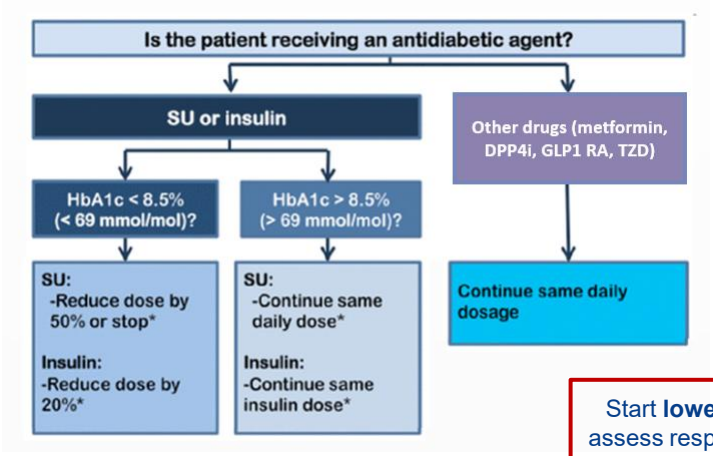
SGLT-2i: Starting with Other Diabetes Medications



Start **lowest dose** SGLT2i and assess response, make additional medication adjustments as necessary

*Avoid insulin withdrawal to minimize the risk of euglycemic diabetic ketoacidosis

Duke Clinical Research Institute

Adapted from Gomez-Peralta F et al. Diabetes Ther. 2017;8:953-62.

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The same patient has been started on an SGLT2 inhibitor. At her follow up appointment, her BP is 108/70 mmHg and she notes occasional lightheadedness when rising from a seated position.

What Would You Recommend at This Time?

A. Increased intake of fluids
B. Discontinue HCTZ
C. Decrease dose of lisinopril
D. Discontinue SGLT2 inhibitor

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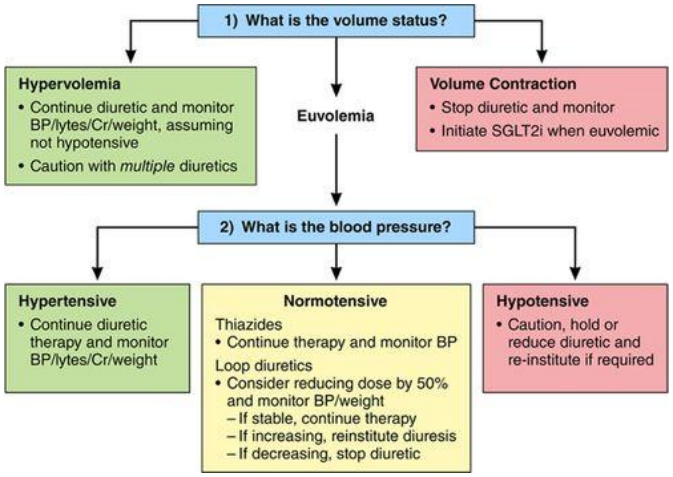
SGLT-2i: If Patient on Diuretic Therapy



Duke Clinical Research Institute

Cherney DZI and Udell JA. Circulation. 2016;134:1915-17.

55

The 66-year-old woman with T2DM, HL, HTN and CKD is on a medication regimen which includes an SGLT2i. Her lightheadedness has resolved with discontinuation of HCTZ, but she now has a GU infection. Her last prior GU infection was about one year prior to initiation of the SGLT2i.

What Would You Recommend at This Time?

A. Fluconazole 150 mg single oral dose
B. Fluconazole 150 mg weekly for six months
C. Discontinue SGLT2 inhibitor
D. Change from SGLT2i to GLP-1 RA therapy

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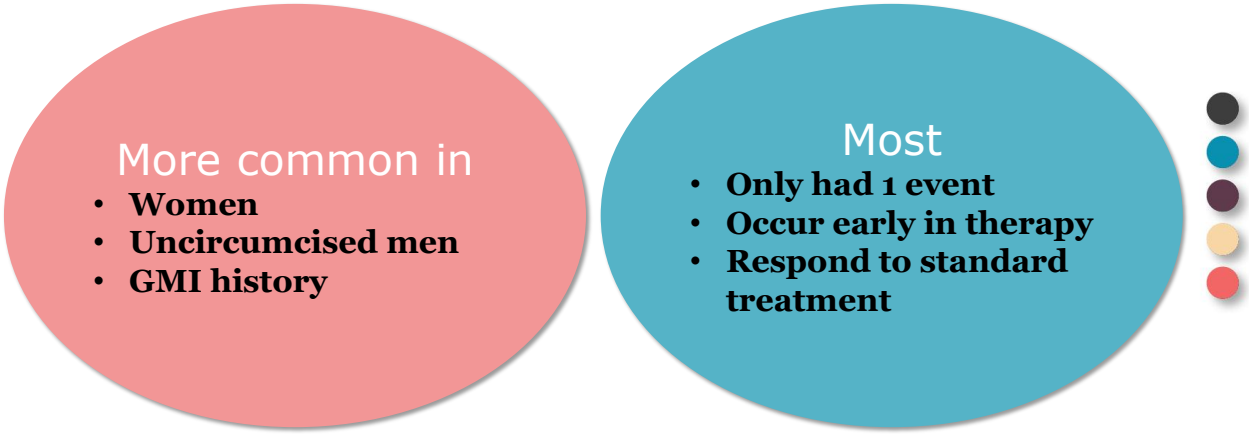
Genital Mycotic Infections (GMIs) with SGLT2 Inhibitors (Pooled 6 Month Data)



Adapted from http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/EndocrinologicandMetabolicDrugsAdvisoryCommittee/UCM336236.pdf, www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/EndocrinologicandMetabolicDrugsAdvisoryCommittee/ucm262996.pdf, www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/EndocrinologicandMetabolicDrugsAdvisoryCommittee/UCM378076.pdf and https://www.fda.gov/Drugs/DrugSafety/ucm617360.htm. Accessed 21st July, 2015; Nyirjesy P et al. Curr Med Res Opin. 2014;30(6):1109-19; Kim G et al. American Diabetes Association 73rd Scientific Sessions. 21st-25th June 2013. Chicago, IL.

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Case Discussion

How Else Might Care Be Optimized for This Patient with T2DM and Chronic Kidney Disease?

Medications

Metformin 500 mg twice daily
SGLT2i
Atorvastatin 20 mg daily
Lisinopril 20 mg daily

Allergy: Aspirin

Clinical Data

Hemoglobin A_{1c} 7.1%
(4.0%-5.6%) (56 mmol/mol [20-38 mmol/mol])
Estimated GFR 53 mL/min per 1.73 m^2
(>60 mL/min per 1.73 m^2)
Total Cholesterol 167 mg/dL
Triglycerides 117 mg/dL
HDL Cholesterol 46 mg/dL
LDL Cholesterol 98 mg/dL

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Lipid Management for Primary Prevention of ASCVD

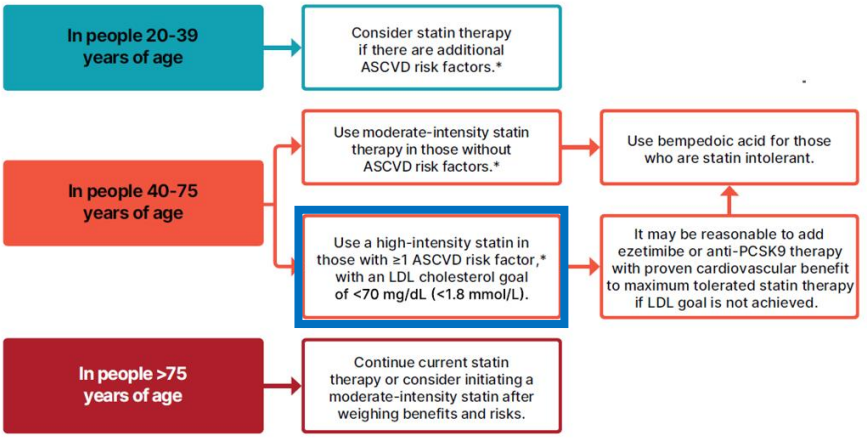

Figure 10.3—Recommendations for primary prevention of atherosclerotic cardiovascular disease (ASCVD) in people with diabetes using cholesterol-lowering therapy. *ASCVD risk factors include older age, hypertension, dyslipidemia, smoking, chronic kidney disease, or obesity. Adapted from "Standards of Care in Diabetes—2024 Abridged for Primary Care Professionals" (315).

Figure 10.3
Cardiovascular Disease and Risk Management:
Standards of Care in Diabetes - 2026 Diabetes Care 2026;49(Suppl. 1):S216-S245

American Diabetes Association.

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Summary

- Diabetes management guidelines are changing rapidly
- Individuals with T2DM have cardio-kidney-metabolic risks that are not fully addressed with traditional care strategies
- Newer medications, including SGLT2i, finerenone, GLP-1/GIP-RA and more can significantly improve outcomes when added to standard care

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Summary

- All providers have the potential to meaningfully improve the health of large populations of people with T2D
- Locally-appropriate strategies to improve the early identification and treatment of at-risk patients are needed