KDIGO made 12 recommendations for managing diabetes with CKD


**Guideline scope:** Management of patients with diabetes and chronic kidney disease (CKD).

**Methods:** The Kidney Disease: Improving Global Outcomes (KDIGO) Work Group developed recommendations based on systematic reviews that searched multiple databases from Oct 2018 to Feb 2020 for studies that assessed comprehensive care, glycemic monitoring and targets, lifestyle interventions, antihyperglycemic therapies, and management approaches in patients with diabetes and CKD. 244 randomized controlled trials (approximately n = 150,000), 31 observational studies, and 50 reviews met the inclusion criteria.

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**EVIDENCE-BASED GUIDELINE**

**Commentary:** The KDIGO guidelines highlight the importance of treating patients who have diabetes, hypertension, and albuminuria with an angiotensin-converting enzyme inhibitor or ARB and titrate to the highest tolerated, approved dose. (Grade 1B)

**Key evidence:** ACE inhibitor or ARB therapy reduces severely increased albuminuria (RR, 0.45 [95% CI, 0.29 to 0.69]) and 0.37 [CI, 0.20 to 0.68], respectively) or doubling of serum creatinine (RR, 0.68 [CI, 0.47 to 1.00] and 0.84 [CI, 0.72 to 0.98], respectively).

**Results:** Grade 1A and 1B recommendations for management of patients with diabetes and CKD*

**Treat patients with diabetes, hypertension, and albuminuria with an ACE inhibitor or ARB and titrate to the highest tolerated, approved dose.** (Grade 1B)

**Treat patients with T2DM, CKD, and eGFR ≥30 mL/min/1.73 m² with metformin. (Grade 1B)**

**Treat patients with T2DM, CKD, and eGFR ≥30 mL/min/1.73 m² with an SGLT2 inhibitor. (Grade 1A)**

**Treat patients with T2DM and CKD who have not achieved individualized glycemic targets despite use of metformin and an SGLT2 inhibitor, or who are unable to use those medications, with a long-acting GLP-1 RA. (Grade 1B)**

**Bottom line:** Based on current best evidence, the KDIGO Work Group made several recommendations for managing patients with diabetes and CKD.

**Commentary:**

Despite inherent limitations of subgroup analyses, the consistency of findings for patients with T2DM and CKD across trials suggests that chance is an unlikely explanation for the observed beneficial cardiovascular and kidney effects of SGLT2 inhibitors and long-acting GLP-1 RAs. The credibility of the subgroup meta-analyses based on kidney disease is enhanced by the fact that the analyses synthesized within-trial subgroup differences from well-designed and executed trials. The evidence is particularly strong for canagliflozin because it is also based on data from a dedicated kidney outcome trial (4). Of note, a kidney outcome trial for dapagliflozin has been recently published (5), whereas studies are ongoing for empagliflozin and sotagliflozin. This underscores the value of a living systematic review process to ensure that guidelines keep up with emerging evidence as soon as it becomes available (6).

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**References**


