Объединение
молодых нефрологов
России и Новых Независимых Государств

РДО

NEPHROPROTECTIVE TREATMENT WITH DAPAGLIFLOZIN IN PATIENTS WITH DIABETIC KIDNEY DISEASE

Olimkhon Sharapov, MD, PhD

Republican Specialized Scientific Practical Medical Center of Nephrology and Kidney transplantation, Tashkent, Uzbekistan

Relevance and purpose of the study

- Albuminuria in patients with diabetes presents a higher risk for adverse renal and cardiovascular (CV) outcomes.
- Sodium glucose co-transporter 2 (SGLT2) inhibitors demonstrate improved albuminuria and reduces the risk of end-stage renal disease in patients with chronic kidney disease.
- The study aim was the impact of the SGLT2 inhibitor dapagliflozin on urine albumin-to-creatinine ratio (UACR) and GFR decline.

Methods

- Single center trial, total 132 participants with DKD were randomly assigned to dapagliflozin (n=78) 10 mg once daily or placebo (n=54).
- The primary end point was a composite of sustained decline in eGFR >50%, end-stage renal disease, or kidney or cardiovascular death.
- Progression/regression of UACR were assessed.
- Percentage treatment difference was estimated by geometric mean ratio for the overall cohort and by eGFR and UACR subgroups.
- Hazard ratios, 95% confidence intervals (CI), and p-values were estimated by Cox proportional hazards model.

Results

- Median baseline eGFR was 42.3ml/min/1.73 m2, with 5% at <30ml/min/1.73 m2.
- At baseline, median UACR was 103 mg/g, and 1/4 of patients had normoalbuminuria, 2/4 had micro, and 1/4 had macroalbuminuria.
- Median follow up was 18 months.
- The UACR difference for dapagliflozin vs placebo was -25.1% (95% CI -27.5, -23.2; p< 0.001). Reductions were similar across eGFRs.
- In UACR 30-299mg/g and >300mg/g, reductions were significant in dapagliflozin (p< 0.001).
- Progression risk was lower and regression risk higher in dapagliflozin vs placebo (p<0.001).

Conclusions

- Dapagliflozin significantly slowed long-term eGFR decline in patients with CKD with T2D compared with placebo, and significantly reduced UACR and had favorable effects on UACR progression and regression.

Welcome to Uzbekistan!