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Combination finerenone and empagliflozin shows superior efficacy in reducing albuminuria in chronic kidney disease and type 2 diabetes patients

(Vienna, Austria, Thursday 5 June 2025) New data from the CONFIDENCE trial demonstrates that combination therapy with finerenone and empagliflozin leads to significantly greater reductions in albuminuria than either agent alone in patients with chronic kidney disease (CKD) and type 2 diabetes (T2D).¹ The breakthrough study was presented today at the 62nd ERA Congress and published in the *New England Journal of Medicine*.

For many patients, albuminuria is the earliest sign of CKD.² Increased levels of albuminuria is linked to a faster rate of CKD progression in both diabetic and nondiabetic kidney disease patients.³

Finerenone, a selective nonsteroidal mineralocorticoid receptor antagonist (nsMRA), and SGLT2 inhibitors like empagliflozin have independently demonstrated efficacy in delaying CKD progression and improving cardiovascular outcomes.^{4,5} The CONFIDENCE study is the first randomised trial to test the hypothesis that early, simultaneous use of both agents would provide superior reduction in urinary albumin-to-creatinine ratio (UACR) over 6 months, compared to either drug alone.

This phase 2, multicentre, randomised, double-blind trial enrolled 818 adults with CKD (eGFR 30–90 ml/min/1.73 m²) and T2D, with a UACR between 100 and <5,000 mg/g, all receiving a maximally tolerated dose of a renin–angiotensin system inhibitor for at least one month. Participants were randomised in a 1:1:1 ratio to receive empagliflozin 10 mg once daily + placebo, finerenone 10 or 20 mg once daily + placebo, or a combination of finerenone and empagliflozin, with doses adjusted based on baseline eGFR. Baseline clinical characteristics were published in *Nephrology Dialysis Transplantation* on 7 February 2025.¹

Randomisation was stratified by eGFR (< or ≥60 ml/min/1.73 m²) and UACR (≤ or >850 mg/g). Patients were recruited from 143 sites across 14 countries between July 2022 and August 2024, ensuring a diverse population with a high burden of comorbidities, including cardiovascular disease (28%), diabetic retinopathy (16%), and heart failure (4%).

At Day 180, the combination group showed a 52% median reduction in UACR from baseline, which was significantly greater than reductions seen with either drug alone. Specifically, UACR was reduced by an additional 29% compared to finerenone alone ($P<0.001$) and by 32% compared to empagliflozin alone ($P<0.001$).

“The CONFIDENCE study delivers the clear message that simultaneous initiation of finerenone and empagliflozin led to an early and additive reduction in UACR of 52% in patients with CKD and T2D, which was significantly greater than with either treatment alone,” said lead researcher Dr. Rajiv Agarwal.

“In other chronic conditions like heart failure or hypertension, we’re moving away from the traditional stepwise approach toward upfront combination therapy,” Dr. Agarwal explained. “In CONFIDENCE, 70% of patients on both therapies achieved the ADA-recommended UACR reduction target of >30%. Since UACR is a key mediator of kidney and cardiovascular outcomes, these results are highly relevant for clinical decision-making.”

Importantly, combination therapy was well tolerated, with no unexpected safety signals. Rates of symptomatic hypotension, acute kidney injury, and hyperkalemia leading to treatment discontinuation were low.

The findings support a paradigm shift toward early, dual-pathway intervention in CKD and T2D, offering clinicians a new, evidence-based strategy to optimise outcomes in a population at high risk of kidney and cardiovascular complications.

ENDS

Notes to editors:

A reference to the ERA Congress must be included in all coverage and/or articles associated with this study. For more information or to arrange an expert interview, please contact press@era-online.org

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About the lead study authors:

Dr. Rajiv Agarwal is Professor Emeritus of Medicine at Indiana University School of Medicine and a staff physician at the Richard L. Roudebush VA Medical Center in Indianapolis. He is an internationally recognised leader in nephrology, particularly in the management of hypertension in hemodialysis patients and CKD. Dr. Agarwal has authored over 450 research papers and reviews and has been continuously funded by the National Institutes of Health since 2003. He serves on the editorial boards of several prominent journals, including *Kidney International* and *Nephrology Dialysis Transplantation*. In the CONFIDENCE trial, Dr. Agarwal served as the Chair of the Steering Committee, overseeing the study's design and execution.

About the European Renal Association (ERA):

With more than 28,000 active members, the ERA is one of the biggest nephrology associations worldwide leading European nephrology, and one of the most important European medical associations. It organises annual congresses and several educational and scientific activities. The ERA also collects data and performs epidemiological studies through its Registry. The Society supports fellowships and educational/research projects through its committees and working groups. Its publications are *NDT*, *CKJ* (Open Access journal), and the ERA Neph-Manual, an e-book hosted on the ERA e-learning platform.

Website: www.era-online.org

The 62nd ERA Congress takes place between June 4-7, both virtually and live in Vienna, Austria.

References:

1. Agarwal, R., Green, J. B., Heerspink, H. J. L., et al. (2025). Combination effect of Finerenone and Empagliflozin in participants with chronic kidney disease and type 2 diabetes using a UACR Endpoint (CONFIDENCE) trial: Baseline clinical characteristics. *Nephrology, dialysis, transplantation: official publication of the European Dialysis and Transplant Association - European Renal Association*, gfa022. Advance online publication. <https://doi.org/10.1093/ndt/gfa022>
2. National Institute of Diabetes and Digestive and Kidney Diseases. (n.d.). *Assess urine albumin*. U.S. Department of Health and Human Services, National Institutes of Health. Retrieved June 3, 2025, from <https://www.niddk.nih.gov/health-information/professionals/clinical-tools-patient-management/kidney-disease/identify-manage-patients/evaluate-ckd/assess-urine-albumin>

3. Vaidya SR, Aeddula NR. Chronic Kidney Disease. [Updated 2024 Jul 31]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK535404/>
4. Vaduganathan, M., Filippatos, G., Claggett, B. L., et al. (2024). Finerenone in heart failure and chronic kidney disease with type 2 diabetes: FINE-HEART pooled analysis of cardiovascular, kidney and mortality outcomes. *Nature Medicine*, 30(9), 3758–3764. <https://doi.org/10.1038/s41591-024-03264-4>
5. The EMPA-KIDNEY Collaborative Group (2023). Empagliflozin in patients with chronic kidney disease. *The New England Journal of Medicine*, 388(2), 117–127. <https://doi.org/10.1056/NEJMoa2204233>