Highlights from the 62nd European Renal Association (ERA) Congress

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THE EUROPEAN Renal Association (ERA) Congress 2025 marked a pivotal moment in nephrology this year, bringing together over 9,000 global experts to explore transformative advancements in kidney disease diagnosis and treatment.

HIGHLIGHTS FROM THE EUROPEAN RENAL ASSOCIATION 2025

A central aspect of this congress that caught our attention was the innovation seen across different areas of nephrology, including novel drugs that are under investigation in several clinical trials, as well as drugs that are already available in clinical practice.

Sessions that explored innovation in kidney transplantation addressed frailty and ageing in kidney transplantation, incorporating advanced assessment techniques and the feasibility of accepting frail patients for transplantation. Further discussions on kidney transplantation included advances in xenotransplantation, along with its social, ethical, and clinical implications.

Another prominent theme in this year's ERA Congress was diabetic kidney disease and cardiometabolic health, reflecting the growing connection between nephrology, cardiology, and endocrinology. As specialists, we can no longer work in separate clinics. There was an important focus on sodium–glucose cotransporter 2 (SGLT2) inhibitors and glucagon-like peptide-1 (GLP-1) receptor agonists, as well as promising combination therapies. Insights into the role of aldosterone pathway inhibition, alongside traditional treatments like renin–angiotensin system (RAS) inhibitors, have also been addressed.

Chronic kidney disease remains a key focus of our specialty, with updates this year on metabolic bone disorders and fracture management in patients with chronic kidney disease. There were also discussions regarding personalised therapies for elderly populations and the impact of ageing societies.

Regarding dialysis, we had the opportunity to learn about advancements in home dialysis, and how AI might help drive predictions for dialysis adequacy. A particularly valuable session examined strategies for reducing cardiovascular risk in dialysis recipients.

The theme of AI featured prominent throughout the congress, including its growing role in predicting treatment outcomes and diagnosing conditions, including acute kidney injury (AKI) predictive models. Studies showing the use of AI to predict congenital abnormalities of the

kidney and urinary tract, and showcased the use of generative AI in solving nephrology tests were presented.

The area of genetic and rare kidney diseases has seen interesting advances, with progress made in clustered regularly interspaced short palindromic repeats (CRISPR) and gene therapy research for conditions such as primary hyperoxaluria and cystinosis. Of particular interest were debates on the utility of genetic testing in all patients with autosomal dominant polycystic kidney disease.

As far as AKI discussions are concerned, the congress explored innovations in biomarkers and diagnostic strategies aimed at moving beyond traditional creatinine measurements, as well as discussions on greener approaches to renal replacement therapy for AKI.

The theme of sustainability was also prominent at the congress, highlighted by a session on nephrology and sustainability. This emphasised avenues for reducing the environmental footprint of dialysis and fostering a circular economy within nephrology practices.

Among the presented late-breaking clinical trials were combined therapies with finerenone and empagliflozin, alongside strategies to enhance kidney transplantation outcomes.[1]

FUTURE PERSPECTIVES

ERA 2025 underscored a shift towards precision medicine, leveraging novel biomarkers, genetic insights, and AI. Promising drugs and therapeutic approaches are poised to redefine the management of kidney diseases, aiming for better outcomes and sustainability in nephrology. The inclusion of patient-centred care and ethical debates, such as organ donation policies, also highlighted the holistic approach of modern nephrology. ERA 2025 solidifies the nephrology community's commitment to innovation and collaboration, setting the stage for the next era of kidney disease management.

As a researcher excited about innovation, the author recommends one of their newest publications in this area, a book titled, 'Innovations in Nephrology', which brings essential information on technologies that are currently being applied in nephrology and those that can be applied in the future, with real potential to improve the care of kidney diseases.[2,3] The book is available in English and German.

Looking forward to seeing the new developments in nephrology at the ERA Congress 2026 in Glasgow!

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