A 30% GFR decline may be sufficiently large to signal chronic kidney disease progression

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At the ERA-EDTA Congress in Amsterdam, Dr. J. Coresh and Dr. T. Chowdhuri today presented the results of a study on change in eGFR as an indicator of CKD progression, to be published simultaneously in JAMA.

At present the endpoint for clinical trials in the field of kidney disease, that has been accepted by the US Food and Drug Administration (FDA) and the European Medicines Agency (EMA), is a doubling of serum creatinine. This corresponds with a 57% decrease in kidney function (eGFR). This endpoint, however, is rare and occurs only after long follow-up, which has hindered clinical research. The data presented today [1] suggest that lesser reductions in estimated glomerular filtration rate (eGFR) below the 57% threshold is sufficient to define patients at high risk of disease progression. The investigators performed a meta-analysis involving 1.7 million participants, of whom more than 220,000 died and more than 12,000 reached end stage renal disease (ESRD). In the study, a GFR decline of 30% over two years was strongly associated with a high risk of ESRD and death thereafter. This decline occurred in 7% of subjects, whereas the endpoint of 57% reduction occurred in less than 1% of subjects included in the analyses. Moreover, the 30% reduction criterion was the most efficient to identify subjects that reached end-stage renal failure, for which dialysis or transplantation is needed. Dr. Gansevoort, a senior nephrologist in the Netherlands and co-author of the JAMA publication, pointed out that these results were very consistent across the many cohorts and dozens of countries included in the analysis.

“This is an important finding”, emphasized Prof. Raymond Vanholder, president of the ERA-EDTA. “It might increase the number of studies performed in nephrology.” Fewer clinical trials have been conducted for kidney disease than for other common diseases, due to the long follow-up periods which so far have been considered necessary.

About ERA-EDTA

With more than 6,600 members, the ERA-EDTA ("European Renal Association – European Dialysis and Transplant Association") is one of the biggest nephrology associations worldwide and one of the most important and prestigious European Medical Associations. It supports basic and clinical research in the fields of clinical nephrology, dialysis, renal transplantation and related subjects. The ERA-EDTA supports a number of studies as well as research groups and has founded a special "Fellowship Programme" for young investigators as well as grant programmes. In order to involve young nephrologists in all activities of the ERA-EDTA the Council decided to create a Young Nephrologists’ Platform (YNP). Besides, it has established various research networks and different working groups to promote the collaboration of nephrologists with other medical disciplines (e.g. cardiology, immunology). Furthermore, a "European Renal Best Practice" (ERBP) advisory board has been established by the ERA-EDTA to draw up and publish guidelines and position statements. Another important goal of the ERA-EDTA is education: several series of CME-courses as well as the annual congress offer an attractive scientific programme to cover the need of continuous medical education for doctors working in the fields of nephrology, dialysis and transplantation. The association’s journals, NDT (Nephrology, Dialysis, Transplantation) and CKJ (Clinical Kidney Journal), are currently the leading nephrology journals in Europe. The ERA-EDTA Registry is a large epidemiologic database comparing countries by assessing nephrology practice throughout Europe. Finally, ERA-EDTA is member of the European Kidney Health Alliance (EKHA), a consortium of renal societies that actively interacts with the European Parliament. For more information please visit www.era-edta.org