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Fact Sheet

The RENAL LIFECYCLE Trial: Assessing the effect of dapagliflozin on patients with severe chronic kidney disease – May 2024

The George Institute for Global Health

Facts:

- Chronic kidney disease (CKD) affects approximately 10% of the adult population worldwide.
- CKD patients are at least three times more likely to develop cardiovascular disease compared to those without CKD.
- The benefits and potential harms of SGLT2 inhibitors have been established in three dedicated kidney outcome trials recruiting more than 14,000 patients overall.

Project Cycle:
2022-2027

Partners:
University Medical Centre Groningen Netherlands

The George Institute for Global Health, Australia

Supporters:
National Health and Medical Research Council (NHMRC), Australia

Principal Investigator:
Dr Clare Arnott

Prof Sunil Badve

Background:

- CKD is a leading cause of morbidity and mortality globally, contributing to millions of deaths each year.
- Patients with severe CKD have a greater risk of developing kidney failure requiring dialysis, as well as cardiovascular disease.
- SGLT2 inhibitors are available for the treatment of type 2 diabetes and CKD, but participants with severe CKD have not been widely studied.
- Available data suggest a strong rationale for studying the long-term effects of SGLT2 inhibitors on the heart and kidneys in patients with severe CKD, including those on dialysis or who have undergone a kidney transplant.

Aims:

- To determine whether dapagliflozin is superior to placebo in reducing the incidence of kidney failure, hospitalisation for heart failure, or all-cause mortality in the overall study population.

Methods:

- The RENAL LIFECYCLE Trial is a multi-centre, randomised, controlled, double-blinded trial being conducted in The Netherlands, Germany, Australia and Belgium, with a global recruitment target of 1,500.
- Participants will be given 10mg/day of dapagliflozin or matching placebo daily.
- The study's outcome will determine how long the trial lasts, which might be shorter or longer than the planned 48 months.

Impact:

- The RENAL LIFECYCLE trial may identify a new effective treatment for patients with severe CKD that could reduce the risk of kidney failure, hospitalisation for heart failure or death.

Contact:
To find out more about this project and its principal investigators or The George Institute please contact Tina Wall +61 410 411 983 or twall@georgeinstitute.org.au

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