



ACHIEVE trial: Improving heart outcomes in dialysis patients – August 2024

FACTS:

- Globally, approximately 2.5 million people receive dialysis for end-stage renal disease.
- 650,000 new patients start dialysis each year.
- 40% of patients that start dialysis die within 3 years.
- The most common cause of death in patients receiving dialysis is cardiovascular disease (>40% of all deaths).

PROJECT CYCLE:

2018–2027

PARTNERS:

The George Institute for Global Health

Regional partner (Australia, New Zealand, Malaysia, India and China).

Population Health Research Institute, Canada (global sponsor)

SUPPORTERS:

The George Institute for Global Health

National Health and Medical Research Council (NHMRC), Australia

PRINCIPAL INVESTIGATOR:

Professor Martin Gallagher:

CONTACT:

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BACKGROUND:

- Individuals on dialysis are at risk of developing heart problems such as high blood pressure, heart attacks, and heart failure.
- Treatments to reduce the risk of heart problems in dialysis patients are needed urgently
- Spironolactone is a highly effective pill used to treat high blood pressure and heart failure in non-dialysis patients. It blocks a hormone that causes high blood pressure which damages the heart.

AIM:

- The goal for this intervention is to determine if spironolactone reduces death and/or hospitalisation due to heart failure in patients on dialysis.
- The project assesses the safety and efficacy of spironolactone in patients receiving chronic dialysis.
- The ACHIEVE trial plans to randomize up to 2,750 participants with an accrued 650 primary outcome events.

METHODS:

- The ACHIEVE trial, which started in 2018, has randomised over 1,000 eligible patients across Australia, New Zealand, Malaysia, India and China. Globally, more than 2,400 patients have been randomised and over 450 event outcomes have been accrued.
- Randomised participants are receiving a study supply of either spironolactone 25mg or identical placebo tablets.
- Participants are being followed up on a six-monthly basis via face-to-face, by telephone interviews or through mail-based or electronic questionnaires.
- Information gathered at each follow up includes outcome assessments, safety assessments, and drug adherence.

IMPACT

- Currently, there are no accepted, proven treatments to reduce cardiovascular morbidity and mortality in dialysis patients.
- Advanced chronic kidney disease patients are underrepresented in clinical trials examining treatments for cardiovascular disease.
- This research aims to address the need for therapies that reduce the burden of cardiovascular illness in dialysis patients.

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