ACHIEVE

***A**ldosterone blo**C**kade for **H**ealth **I**mprovement **EV**aluation in **E**nd-stage renal disease*

Population Health Research Institute
HEALTH THROUGH KNOWLEDGE

Hamilton Health Sciences

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HEALTH SCIENCES

Background and Study Rationale

- *Globally approximately 2.5 million people receive dialysis for kidney failure*
- *The outcomes for many patients receiving dialysis are poor with a median survival of only 3 years, frequent hospitalizations, and poor health related quality of life*
- *Heart disease is the leading cause of death for patients that require dialysis but there no treatments that are known to effectively reduce heart related deaths and hospitalizations*

Importance of the ACHIEVE Study

- *Aldosterone is a hormone that may play an important role in causing heart disease*
- *Blocking the actions of aldosterone reduce heart related deaths and hospitalizations in patients with normal kidney function and look promising for patients who have kidney failure treated with dialysis*
- *The ACHIEVE trial will help establish whether blocking aldosterone with a widely available drug called spironolactone prevents heart related deaths and hospitalizations in patients that receive dialysis*

Eligibility Assessment

Inclusion Criteria

1. Age
   a) ≥45 years
   or
   b) ≥18 with a history of diabetes

2. On dialysis ≥ 90 days

3. On either
   a) Hemodialysis at ≥ 2 tx/week
   or
   b) Peritoneal dialysis ≥ 1 exchange/day

4. Provides informed consent

Exclusion Criteria

1. Hyperkalemia
   a) Serum potassium >5.8 mmol/L in 6 weeks prior
   or
   b) Serum potassium >6.0 mmol/L during active run-in
2. Currently taking & unable to withdraw MRA
3. Known sensitivity or allergy to spironolactone
4. Current or planned pregnancy or breastfeeding
5. Scheduled living related donor renal transplant
6. Life expectancy < 6 months in the opinion of a treating nephrologist
7. Enrolled in another interventional trial testing a MRA or drug that has a known/likely interaction with spironolactone

Study Flow Diagram