## Supplementary Table S1: Detailed overview of Study Visits

Activity / measurement	Run-in phase		Baseline	Year 1			Year 2	
	VSD	V0	V1	V2	V3	V4	V5	V6
	(t=-4W)	(t=-2W)	(t=0)	(t=1M)	(t=6M)	(t=12M)	(t=18M)	(t=24M)
Time window			13-17D	± 1W	± 1M	± 1M	± 1M	± 1M
Informed consent	<b>√</b> *	✓						
Stop exclusion drug	<b>√</b> *							
2-week treatment KCl		✓						
Randomization & start			✓					
study supplement								
Fixed checklist		✓	✓		✓	✓	✓	✓
BMI & hip-waist ratio		✓				✓		✓
ABPM		✓				✓		✓
Office BP		✓	✓		✓	✓	✓	✓
PWV & BIA		✓				✓		✓
Blood sample		✓	✓	✓	✓	✓	✓	✓
24h-urine		✓	✓		✓	✓	✓	✓
Spot urine		✓	✓		✓	✓	✓	✓
Pregnancy test	<b>√</b> *	✓						
(if indicated)**								

<sup>\*</sup> Only for patients who use dual RAAS-blockade, mineralocorticoid receptor antagonists, potassium-sparing diuretics, or potassium binders, who's prescribing physician agrees to discontinuation of that particular drug.

**Abbreviations**: 24h, 24-hour; ABPM, ambulatory blood pressure measurement; BIA, bioimpedance analysis; BP, blood pressure. BMI, body mass index; D, days; KCl, potassium chloride; M, month(s); PWV, pulse wave velocity; RAAS, renin angiotensin aldosterone system; t, time; V, visit; VSD, visit stop drug; W, week(s).

<sup>\*\*</sup> For all women in the fertile age (all women < 45 years or menstruating).

#### **Supplementary Table S2:** Stopping rules.

### **Temporary discontinuation supplements**

- New drug that can increases serum K<sup>+</sup> (as evaluated by the research team)
- Symptoms of vomiting and/or diarrhea
- Hospital admission

## Withdrawal from supplement but follow-up for intention to treat

- Development of severe or symptomatic hyperkalemia (defined as repeated serum K<sup>+</sup> > 6.5 mmol/l or K<sup>+</sup> > 6.0 mmol/l with ECG features of hyperkalemia and in the absence of pseudohyperkalemia)
- Medical reasons to start with dual RAAS-blockade, mineralocorticoid receptor antagonists, or potassium-sparing diuretics during the trial
- Episode of ventricular arrhythmia
- Pregnancy during the trial

#### Criteria on which the DSMB may decide to terminate the trial prematurely

- 25% more SAEs (any untoward medical occurrence that results in death or hospitalization for electrolyte disorders, cardiac problem, renal problem) in patients receiving potassium chloride or potassium citrate
- Cardiopulmonary resuscitation due to hyperkalemia in a patient receiving potassium chloride or potassium citrate

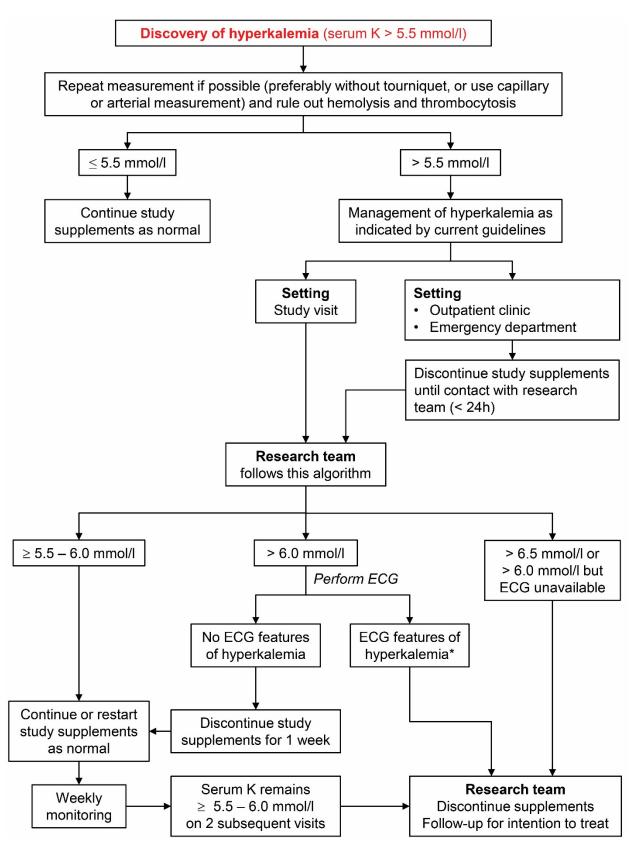
**Abbreviations:** DSMB, data safety monitoring board; ECG, electrocardiogram; RAAS, renin angiotensin aldosterone system; SAE, serious adverse event.

**Supplementary Figure S1**: Map of The Netherlands showing the four university medical centers and the sixteen affiliated hospitals

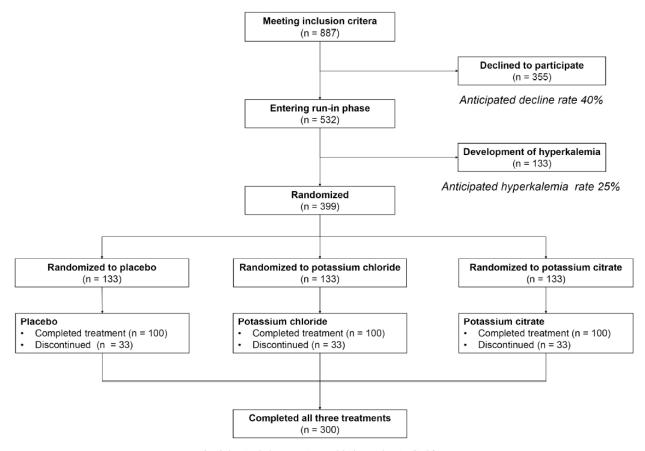


**Abbreviations:** AMC, Academic Medical Center; MC, Medical Center; OLVG, Onze Lieve Vrouwe Gasthuis; NWG, NoordWestGroep; UMC, University Medical Center; VUMC, VU University Medical Center.

Supplementary Figure S2: Hyperkalemia algorithm.



# Supplementary Figure S3: Flowchart with anticipated patient numbers



Anticipated drop-out or withdrawal rate 25%