Supporting Information File S1: Ethics Statement

The PREPARE-2 study was evaluated and approved by the medical ethics committee of the Leiden University Medical Center (LUMC). The medical ethics committee or institutional review board (as appropriate) of the other participating centers only evaluated the local feasibility of the study and thereafter gave their approval. These centers are:

- Amsterdam, Academic Medical Center
- Amsterdam, Sint Lucas-Andreas Hospital
- Amsterdam, VU Medical Center
- Apeldoorn, Gelre Hospitals
- Breda, Amphia Hospital
- Delft, Reinier de Graaf
- Den Bosch, Jeroen Bosch Hospital
- The Hague: Medical Center Haaglanden
- Ede, Hospital Gelderse Vallei
- Eindhoven, Catharina Hospital
- Emmen, Scheper Hospital (approval also included Beilen, Dialysis Clinic North)
- Goes, Admiraal de Ruyter Hospital
- Gouda, Groene Hart Hospital
- Groningen, University Medical Center Groningen
- Haarlem, Kennemer Gasthuis
- Leeuwarden, Medical Center Leeuwarden
- Leiden, Leiden University Medical Center
- Leiderdorp, Rijnland Hospital
- Roermond, Laurentius Hospital
- Roosendaal, Franciscus Hospital
- Rotterdam, Franciscus Gasthuis
- Veldhoven, Máxima Medical Center
- Zaandam, Zaans Medical Center
- Zwolle, Isala Clinics

Table S1. Vitamin K antagonist use and renal function decline; PREPARE cohort stratification

	PREPARE-I	PREPARE-II
Mean decline in eGFR (ml/min/1.73 m^2/y)	-2.97 (-3.51 to -2.43)	-2.05 (-2.46 to -1.64)
	Change in decline in eGFR ml/min/1.73m^2 per year (95% CI)	Change in decline in eGFR ml/min/1.73m^2 per year (95% CI)
Vitamin K antagonist non-users	Reference	Reference
Vitamin K antagonist users, crude	1.83 (0.06 to 3.59)	0.22 (-1.05 to 1.48)
Vitamin K antagonist users, adjusted[a]	1.17 (-0.71 to 3.06)	-0.32 (-1.78 to 1.14)
Vitamin K antagonist users, adjusted[b]	1.11 (-0.86 to 3.07)	-0.40 (-1.89 to 1.09)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, and primary kidney disease

[b]Additionally adjusted for hemoglobin levels

Table S2. Vitamin K antagonist use and hazard ratios for start of dialysis; PREPARE cohort stratification

	PREPARE-I	**PREPARE-II**
	HR (95% CI)	**HR (95% CI)**
Vitamin K antagonist non-users	1 (reference)	1 (reference)
Vitamin K antagonist users, crude	0.99 (0.66 to 1.50)	0.87 (0.56 to 1.34)
Vitamin K antagonist users, adjusted[a]	1.11 (0.73 to 1.70)	0.85 (0.52 to 1.38)
Vitamin K antagonist users, adjusted[b]	1.38 (0.87 to 2.18)	1.09 (0.63 to 1.86)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, and primary kidney disease

[b]Additionally adjusted for hemoglobin and eGFR levels

Table S3. Vitamin K antagonist use and renal function decline; extra adjustments

	Change in decline in eGFR ml/min/1.73m^2 per year (95% CI)
Vitamin K antagonist non-users	Reference
Vitamin K antagonist users, adjusted[a]	-0.12 (-1.30 to 1.05)
Vitamin K antagonist users, adjusted[b]	-0.17 (-1.42 to 1.08)
Vitamin K antagonist users, adjusted[c]	0.23 (-1.74 to 2.20)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, malignancy, gastro-intestinal problems, antiplatelet drug use, primary kidney disease, and haemoglobin (no cardiovascular disease)

[b]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, primary kidney disease, haemoglobin, ACE inhibition, ARB use, blood pressure

[c]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, primary kidney disease, haemoglobin, CRP, BMI, albumin, and proteinuria

Table S4. Vitamin K antagonist use and hazard ratios for start of dialysis; extra adjustments

	HR (95% CI)
Vitamin K antagonist non-users	1 (reference)
Vitamin K antagonist users, adjusted[a]	1.23 (0.88 to 1.73)
Vitamin K antagonist users, adjusted[b]	0.80 (0.37-1.74)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, malignancy, gastro-intestinal problems, antiplatelet drug use, primary kidney disease, haemoglobin, and eGFR levels (no cardiovascular disease

[b]Additionally adjusted for cardiovascular disease, CRP, BMI, albumin, and proteinuria

Table S5. Vitamin K antagonist use and renal function decline; restriction to persistent non-users and users of vitamin K antagonists

Mean decline in eGFR (ml/min/1.73 m^2/y)	-1.52 (-1.87 to -1.16)
	Change in decline in eGFR ml/min/1.73m^2 per year (95% CI)
Vitamin K antagonist non-users	Reference
Vitamin K antagonist users, crude	0.63 (-0.69 to 1.94)
Vitamin K antagonist users, adjusted[a]	0.18 (-1.13 to 1.49)
Vitamin K antagonist users, adjusted[b]	0.15 (-1.17 to 1.47)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, and primary kidney disease

[b]Additionally adjusted for hemoglobin levels

Table S6. Vitamin K antagonist use and hazard ratios for start of dialysis; restriction to persistent non-users and users of vitamin K antagonists

	HR (95% CI)
Vitamin K antagonist non-users	1 (reference)
Vitamin K antagonist users, crude	0.98 (0.73 to 1.34)
Vitamin K antagonist users, adjusted[a]	1.05 (0.75 to 1.47)
Vitamin K antagonist users, adjusted[b]	1.36 (0.96 to 1.93)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, and primary kidney disease

[b]Additionally adjusted for hemoglobin and eGFR levels

Table S7. Vitamin K antagonist use and renal function decline; restriction to patients with cardiovascular disease

Mean decline in eGFR (ml/min/1.73 m^2/y)	-2.14 (-2.64 to -1.64)
	Change in decline in eGFR ml/min/1.73m^2 per year (95% CI)
Vitamin K antagonist non-users	Reference
Vitamin K antagonist users, crude	0.25 (-1.24 to 1.74)
Vitamin K antagonist users, adjusted[a]	0.19 (-1.38 to 1.75)
Vitamin K antagonist users, adjusted[b]	0.07 (-1.50 to 1.64)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, and primary kidney disease

[b]Additionally adjusted for hemoglobin levels

Table S8. Vitamin K antagonist use and hazard ratios for start of dialysis; restriction to patients with cardiovascular disease

	HR (95% CI)
Vitamin K antagonist non-users	1 (Reference)
Vitamin K antagonist users, crude	0.66 (0.45 to 0.97)
Vitamin K antagonist users, adjusted[a]	0.80 (0.52 to 1.25)
Vitamin K antagonist users, adjusted[b]	1.04 (0.66 to 1.65)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, and primary kidney disease

[b]Additionally adjusted for hemoglobin and eGFR levels

Table S9. Vitamin K antagonist use and renal function decline: follow-up period five years

Mean decline in eGFR (ml/min/1.73 m^2/y)	-1.13 (-1.43 to -0.83)
	Change in decline in eGFR ml/min/1.73m^2 per year (95% CI)
Vitamin K antagonist non-users	Reference
Vitamin K antagonist users, crude	0.33 (-0.61 to 1.27)
Vitamin K antagonist users, adjusted[a]	-0.00 (-1.04 to 1.03)
Vitamin K antagonist users, adjusted[b]	0.09 (-0.97 to 1.15)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, and primary kidney disease

[b]Additionally adjusted for hemoglobin levels

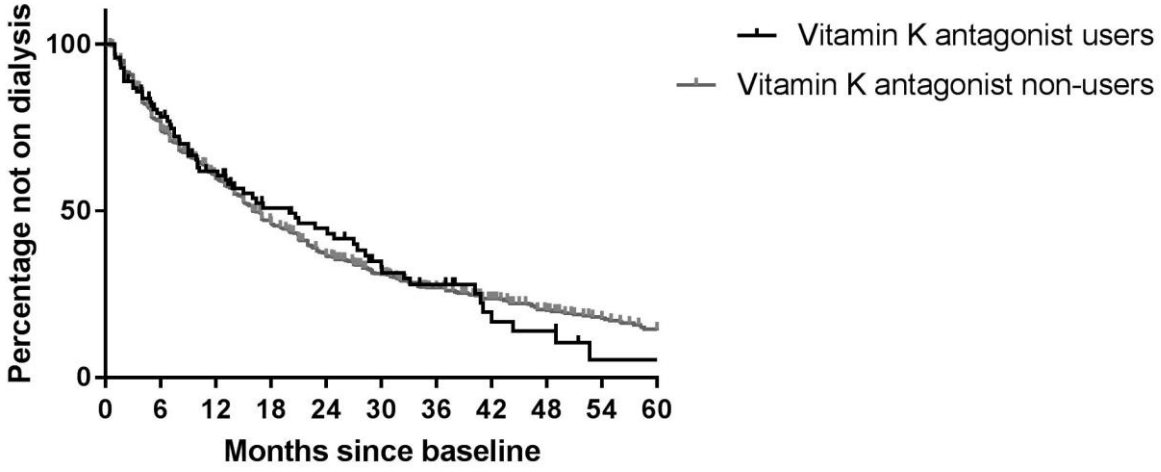
Table S10. Vitamin K antagonist use and hazard ratios for start of dialysis; follow-up period five years

	HR (95% CI)
Vitamin K antagonist non-users, N=883	1 (Reference)
Vitamin K antagonist users, crude, N=101	0.84 (0.62 to 1.13)
Vitamin K antagonist users, adjusted[a] N=101	0.91 (0.65 to 1.27)
Vitamin K antagonist users, adjusted[b] N=101	0.99 (0.98 to 0.99)

[a]Adjusted for: age, sex, race, diabetes mellitus, hypertension, cardiovascular disease, malignancy, gastro-intestinal problems, antiplatelet drug use, and primary kidney disease

[b]Additionally adjusted for hemoglobin and eGFR levels

Figure S1: Kaplan Meier 5 years of follow-up for start of dialysis stratified for vitamin K antagonist use



Month	0	6	12	18	24	30	36	42	48	54	60
Number at risk vitamin K antagonist users	101	70	50	34	29	20	15	7	5	1	1
Number at risk vitamin K antagonist non-users	883	632	470	336	248	190	145	107	75	49	34