Supplemental Table 1. Characteristics of the AASK (n=899) and MDRD Trial (n=761) participants according to percentage renal function decline from the time of randomization until month 3 or 4.

Table 1A. AASK Baseline characteristics (N=899)	<5% decline N=590	5-<20% decline N=237	≥20% decline N=72	P-value across % decline categories
Mean age (yr) ± SD	54.1 ± 10.3	55.1 ± 10.9	54.0 ± 10.7	0.42
Women, N (%)	214 (36.3)	84 (35.4)	34 (47.2)	0.16
Baseline MAP (mm Hg) ± SD*	112.0 ± 16.5	115.7 ± 15.5	116.4 ± 12.6	0.002
Achieved MAP (mm Hg) ± SD at 3 month visit*	106.7 ± 13.5	103.1 ± 12.4	105.0 ± 15.1	0.003
Baseline median proteinuria (g/day) [IQR]	0.08 [0.04-0.29]	0.18 [0.05-1.00]	0.36 [0.10-1.95]	<0.001
Median serum creatinine (mg/dL) [25th-75th percentile]	1.8 [1.5-2.3]	1.8 [1.5-2.5]	2.1[1.6-2.9]	<0.001
Baseline mean eGFR (mL/min/1.73m^2) ± SD	43.9 ± 13.0	43.2 ± 14.7	37.3 ± 15.8	<0.001
Baseline heart disease N (%)	311 (52.7)	131 (55.3)	31 (43.1)	0.19
Assignment to ACE inhibitor N (%)	221 (37.5)	102 (43.0)	23 (31.9)	0.16

Table 1B. MDRD Baseline characteristics (N=761)	<5% decline N=372	5-<20% decline N=286	≥20% decline N=103	P-value across %decline categories
Mean age (yr) ± SD	52.9 ± 12.1	50.8 ± 12.0	51.1 ± 13.6	0.08
Women, N (%)	142 (38.2)	114 (39.9)	39 (37.9)	0.23
Baseline MAP mm Hg ± SD*	96.6 ± 9.5	100.2 ± 9.4	102.7 ± 10.7	<0.001

Achieved MAP mm Hg ± SD at 4 month visit	95.9 ± 10.7	96.8 ± 10.1	97.0 ± 12.9	0.46
Baseline median proteinuria (g/day) [IQR]*	0.16 [0.05-0.80]	0.45 [0.09-1.5]	2.1 [0.19-4.0]	<0.001
Median serum creatinine (mg/dL)* [25th-75th percentile]	2.0 [1.6-2.8]	2.15 [1.7-2.7]	2.4 [1.8-3.3]	0.04
Baseline mean eGFR (mL/min/1.73m^2) ± SD*	33.4 ± 12.7	33.1 ± 12.4	30.0 ± 12.4	0.04
Baseline heart disease N (%)	36 (9.7)	21 (7.3)	15 (14.6)	0.09
ACE inhibitor N (%)	132 (35.5)	101 (35.3)	37 (35.9)	0.99
Black, N (%)	24 (6.5)	21 (7.3)	12 (11.7)	0.25

*Trend test statistically significantly different across percent decline categories (p<0.05).
**Missing in N=22.

Supplemental Table 2A. Participant characteristics of AASK included or excluded in our analysis.

AASK Baseline characteristics (N=1094)	Included for analysis N=899	Excluded from analysis due to missing data N=195	P-value
Mean age (yr) ± SD	54.3 ± 10.5	53.1 ± 11.5	0.13
Women, N (%)	332 (36.9)	92 (47.2)	0.008
Baseline MAP (mm Hg) ± SD	113.3 ± 16.0	115.9 ± 15.9	0.04
Achieved MAP (mm Hg) ± SD at 3 month visit	105.6 ± 13.4	107.0 ± 16.7	0.35
Baseline median proteinuria (g/day) [IQR]	0.11 [0.04-0.52]	0.13 [0.05-0.78]	0.14
Median serum creatinine (mg/dL) [25th-75th percentile]	1.80 [1.5-2.3]	1.80 [1.5-2.3]	0.61
Baseline mean eGFR (mL/min/1.73m^2) ± SD	43.2 ± 13.8	42.9 ± 13.7	0.80
Baseline heart disease N (%)	473 (52.6)	91 (46.7)	0.13
Assignment to ACE inhibitor N (%)	346 (38.5)	90 (46.2)	0.05

Supplemental Table 2B. Participant characteristics of MDRD Trial included or excluded in our analysis.

MDRD Baseline characteristics (N=840)	Included for analysis N=761	Excluded from analysis due to missing data N=79	P-value
Mean age (yr) ± SD	51.8 ± 12.3	50.8 ± 13.0	0.49
Women, N (%)	295 (38.8)	37 (46.8)	0.16
Baseline MAP (mm Hg) ± SD	98.8 ± 9.9	97.7 ± 9.5	0.35
Achieved MAP (mm Hg) ± SD at 3 month visit	96.4 ± 10.8	95.6 ± 7.9	0.87

Baseline median proteinuria (g/day) [IQR]	0.31 [0.07-1.43]	0.35 [0.10-1.81]	0.37
Median serum creatinine (mg/dL) [25th-75th percentile]	2.10 [1.65-2.85]	2.15 [1.75-2.90]	0.54
Baseline median eGFR (mL/min/1.73m^2) ± SD	31.9 [22.8-42.1]	30.7 [23.0-40.0]	0.29
Baseline heart disease N (%)	72 (9.5)	9 (11.4)	0.58
Assignment to ACE inhibitor N (%)	270 (35.5)	32 (40.5)	0.38

Supplemental Table 3. Sensitivity analysis of the risk of ESRD during AASK with follow-up limited to the trial duration.

AASK Trial (N=899)								
Strict BP arm (N=448)					**Usual BP arm** (N=451)			
Percent renal function decline	**N**	**ESRD incidence*** (95% CI)	**Unadjusted Hazard ratio** (95%CI)	**Adjusted Hazard ratio**[1] (95%CI)	**N**	**ESRD incidence*** (95% CI)	**Unadjusted Hazard ratio** (95%CI)	**Adjusted Hazard ratio**[1] (95%CI)
<5%	271	1.8 (1.2-2.7)	0.92 (0.52-1.63)	0.67 (0.37-1.21)	319	1.9 (1.3-2.8)	1.0 (Ref)	1.0 (Ref)
5-<20%	139	3.7 (2.4-5.6)	1.91 (1.07-3.39)	1.62 (0.91-2.89)	98	5.9 (4.0-8.8)	3.07 (1.76-5.34)	2.17 (1.23-3.83)
≥20%	38	9.8 (5.9-16.5)	5.19 (2.71-9.94)	3.90 (1.98-7.67)	34	12.9 (7.7-21.6)	6.96 (3.63-13.34)	4.03 (2.04-7.96)

[1]Adjusted for age, sex, baseline heart disease, anti-hypertensive drug assignment (ACE inhibition versus other agents), baseline eGFR category, baseline proteinuria category, and baseline mean arterial pressure.
*Per 100 person-years