#### SUPPLEMENTAL TABLES AND FIGURES

# Supplemental Table 1. Hazard ratios for clinical outcomes in participants with ABPM-ATRH and White coat-ATRH compared to No ATRH

Outcome	Unadjusted HR (95% CI)	Model A HR (95% CI)	Model B HR (95% CI)	Model C HR (95% CI)
Composite of Myocardial infarction, stroke, peripheral arterial disease, heart failure, and all-cause mortality				
ABPM-ATRH	2.38 (1.89, 2.99)	2.06 (1.62, 2.61)	1.49 (1.16, 1.92)	1.16 (0.87, 1.53)
White coat-ATRH	1.28 (0.65, 2.52)	1.1 (0.55, 2.17)	0.81 (0.4, 1.62)	0.76 (0.36, 1.59)
Heart Failure				
ABPM-ATRH	3.56(2.47, 5.12)	3.23(2.21, 4.73)	2.12(1.41, 3.18)	1.42(0.91, 2.2)
White coat-ATRH	2.13(0.84, 5.37)	1.71(0.67, 4.38)	1.1(0.42, 2.87)	0.86(0.3, 2.48)
Stroke				
ABPM-ATRH	1.58 (0.79, 3.16)	1.35 (0.65, 2.79)	0.91 (0.42, 1.97)	0.92 (0.39, 2.18)
White coat-ATRH	2.22 (0.51, 9.61)	1.61 (0.36, 7.26)	1.53 (0.32, 7.32)	2.17 (0.44, 10.81)

Model A: adjusted for age, gender, race and clinical center

Model B: adjusted for model A plus diabetes, smoking status, history of cardiovascular disease, BMI, and hemoglobin

Model C: adjusted for model B plus eGFR and Urine Protein/Creatinine Ratio, 24Hour and Spot measure combined

ABPM-ATRH, apparent treatment resistant hypertension by ABPM criteria or use of more than 3 antihypertensive medications; White coat-ATRH, apparent treatment resistant hypertension by office BP but not by ABPM criteria

# Supplemental Table 2. Sensitivity analysis – ATRH definition based on average 24 hour blood pressure thresholds by ABPM

### Hazard ratios for clinical outcomes in participants with ABPM-ATRH and White coat-ATRH compared to No ATRH

Outcome	Unadjusted HR (95% CI)	Model A HR (95% CI)	Model B HR (95% CI)	Model C HR (95% CI)
Composite of myocardial infarction, stroke, peripheral arterial disease, heart failure				
ABPM-ATRH	2.83 (2.02, 3.96)	2.40 (1.69, 3.42)	1.52 (1.06, 2.2)	1.03 (0.67, 1.57)
White coat-ATRH	1.54 (0.62, 3.85)	1.14 (0.45, 2.89)	0.79 (0.31, 2.04)	0.71 (0.25, 2.01)
Kidney outcome:				
ABPM-ATRH	3.64 (2.57, 5.17)	3.33 (2.31, 4.79)	2.91 (2, 4.22)	1.35 (0.85, 2.14)
White coat-ATRH	4.83 (2.56, 9.1)	3.87 (2.01, 7.43)	4.13 (2.12, 8.05)	3.30 (1.58, 6.86)
All-cause mortality				
ABPM-ATRH	2.88 (1.98, 4.21)	2.38 (1.6, 3.54)	1.83 (1.2, 2.78)	1.44 (0.88, 2.35)
White coat-ATRH	0 (0, .)*	0 (0, .)*	0 (0, .)*	0 (0, .)*

<sup>\*</sup>Note: there were no patients with White Coat-ATRH who were deceased at the end of the study.

Model A: adjusted for age, gender, race and clinical center

Model B: adjusted for model A plus diabetes, smoking status, history of cardiovascular disease, BMI, and hemoglobin

Model C: adjusted for model B plus eGFR and Urine Protein/Creatinine Ratio

Kidney outcomes - 50% decrease in eGFR or end-stage renal disease defined as renal transplantation or start of long-term renal dialysis

ABPM-ATRH, apparent treatment resistant hypertension by ABPM criteria or use of more than 3 antihypertensive medications; White coat-ATRH, apparent treatment resistant hypertension by office BP but not by ABPM criteria

#### Definitions based on average 24-hour BP thresholds by ABPM

ABPM-ATRH: Mean office systolic BP  $\geq$  140 mm Hg or diastolic BP  $\geq$  90 mm Hg AND Average 24 hr ABPM systolic BP  $\geq$  130 mm Hg or diastolic BP  $\geq$  80 mm Hg in patients taking  $\geq$  3 anti-hypertensive medications

OR

Apparent treatment resistant hypertension based on the use of more than 3 antihypertensive medications: Mean office systolic BP < 140 mm Hg and diastolic BP < 90 mm Hg AND average 24 hr ABPM systolic BP < 130 mm Hg and diastolic BP < 80 mm Hg in patients taking > 3 anti-hypertensive medications

White coat-ATRH: Mean office systolic BP  $\geq$  140 mm Hg or diastolic BP  $\geq$  90 mm Hg AND average 24 hr ABPM systolic BP < 130 mm Hg and diastolic BP < 80 mm Hg in patients taking  $\geq$  3 anti-hypertensive medications

No ATRH: Mean office systolic BP < 140 mm Hg and diastolic BP < 90 mm Hg AND average 24 hr ABPM systolic BP < 130 mm Hg and diastolic BP < 80 mm Hg in patients taking  $\leq$  3 anti-hypertensive medications

# Supplemental Table 3. Sensitivity analysis - hypertension defined by the 2017 ACC/AHA guidelines:

# Hazard ratios for clinical outcomes in participants with ABPM-ATRH and white coat-ATRH compared to participants with no ATRH

Outcome	Unadjusted HR (95% CI)	Model A HR (95% CI)	Model B HR (95% CI)	Model C HR (95% CI)
Composite of myocardial infarction, stroke, peripheral arterial disease, heart failure				
ABPM-ATRH	2.73 (1.89, 3.96)	2.41 (1.63, 3.55)	1.62 (1.09, 2.41)	1.19 (0.76, 1.85)
White coat-ATRH	1.39 (0.67, 2.88)	1.22 (0.58, 2.55)	0.79 (0.37, 1.67)	0.77 (0.35, 1.7)
Kidney outcome				
ABPM-ATRH	4.14 (2.81, 6.11)	3.74 (2.5, 5.61)	3.42 (2.27, 5.17)	1.34 (0.82, 2.2)
White coat-ATRH	2.84 (1.53, 5.24)	2.43 (1.29, 4.57)	2.44 (1.29, 4.61)	1.18 (0.57, 2.46)
All-cause mortality				
ABPM-ATRH	2.92 (1.9, 4.49)	2.58 (1.64, 4.05)	2.14 (1.33, 3.44)	1.93 (1.12, 3.35)
White coat-ATRH	1.96 (0.92, 4.18)	1.79 (0.83, 3.87)	1.67 (0.76, 3.66)	1.4 (0.55, 3.6)

Model A: adjusted for age, gender, race and clinical center

Model B: adjusted for model A plus diabetes, smoking status, history of cardiovascular disease, BMI, and hemoglobin Model C: adjusted for model B plus eGFR and Urine Protein/Creatinine Ratio

Kidney outcome-50% decrease in eGFR or end-stage renal disease defined as renal transplantation or start of long-term renal dialysis

ABPM-ATRH, apparent treatment resistant hypertension by ABPM criteria or use of more than 3 antihypertensive medications. White coat-ATRH apparent treatment resistant hypertension by office, but not by ABPM criteria.

#### Definitions based on hypertension as defined by the 2017 ACC/AHA guidelines:

ABPM-ATRH: apparent treatment resistant hypertension by ABPM and office blood pressure criteria: Mean office systolic BP  $\geq$  130 mm Hg or diastolic BP  $\geq$  80 mm Hg AND Average ABPM daytime systolic BP  $\geq$  130 mm Hg or diastolic BP  $\geq$  80 mm Hg In patients taking  $\geq$  3 anti-hypertensive medications

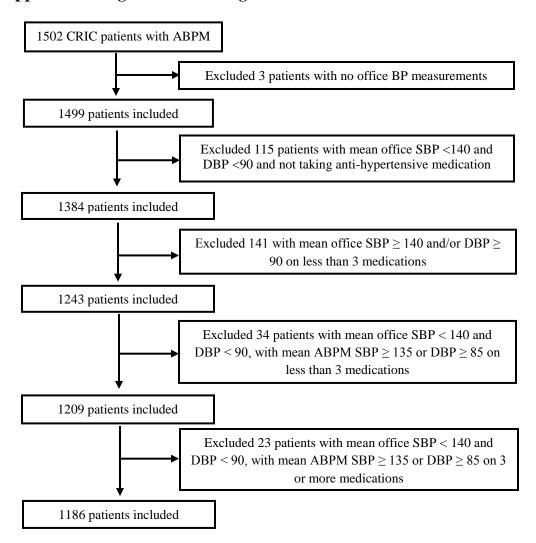
#### OR

Apparent treatment resistant hypertension based on the use of more than 3 antihypertensive medications: Mean office systolic BP < 130 mm Hg and diastolic BP < 80 mm Hg AND Average ABPM daytime systolic BP < 130 mm Hg and diastolic BP < 80 mm Hg In patients taking > 3 anti-hypertensive medications

White coat-ATRH: apparent treatment resistant hypertension by office, but not by ABPM criteria: Mean office systolic BP  $\geq$  130 mm Hg or diastolic BP  $\geq$  80 mm Hg AND Average ABPM daytime systolic BP < 130 mm Hg and diastolic BP < 80 mm Hg In patients taking  $\geq$  3 anti-hypertensive medications

No ATRH: Mean office systolic BP < 130 mm Hg and diastolic BP < 80 mm Hg AND Average ABPM daytime systolic BP < 130 mm Hg and diastolic BP < 80 mm Hg In patients taking  $\leq$  3 anti-hypertensive medications

#### Supplemental Figure 1: Flow diagram of exclusion criteria



ABPM, ambulatory blood pressure monitoring; BP, blood pressure; SBP, systolic blood pressure; DBP, diastolic blood pressure.