

SUPPLEMENTAL MATERIAL

Data S1. Methods of Blood Pressure Measurement

- 1.** The auscultation method should use an accurately calibrated mercury or aneroid sphygmomanometer. A calibrated electronic sphygmomanometer can also be used.
- 2.** Healthcare professionals should choose the correct cuff size and wrap the cuff around the arm, with the center of the cuff bladder over the brachial artery. The stethoscope, standard sphygmomanometers, and cuff and bulb should be checked regularly to ensure that BP measurements have a standardized high level of accuracy and precision. The appropriate BP cuff size should be determined by measuring the participant's arm circumference at the mid-point between the acromion and olecranon. A cuff with a bladder 13 cm wide and 22–24 cm long should be used for the auscultation method. A pediatric cuff should be used for a brachial girth less than 27 cm, and a large adult cuff for an arm girth ≥ 34 cm.
- 3.** Caffeine, eating, heavy physical activity, smoking, and talking should be avoided before measurement.
- 4.** Research staff should measure right-arm brachial artery blood pressure two times after the participant had been sitting in a quiet room for 5 minutes in a seated position on a chair with back support and the participant's legs uncrossed. The inner aspect of the bend at the elbow (cubital fossa) should be maintained at heart level.
- 5.** Measurement: The cuff should rapidly be inflated while palpating the radial or brachial artery, and the stethoscope should be used after blood pressure has risen to 20-30 mmHg or more above the pulse rate disappearing level. The cuff should be slowly deflated (2 mmHg per second). Staff should record the 1st and 5th Korotkoff sounds, rounding the pressure in mmHg to the nearest even number and recording it.
- 6.** The measurements should be performed two times at an interval of ≥ 1 min, and the mean value of two measurements that provide stable values (difference in the values: <5 mmHg) should be used for the analyses.

Data S2. ICD-10 Codes

Heart Failure: I500, I501, I509, and I110

Myocardial Infarction: I210–I214, and I219

Angina Pectoris: I200, I201, I208, and I209

Stroke: I630, I631–I636, I638, I639, I600–I611, I613–I616, I619, I629, and G459

Atrial Fibrillation: I480–I484, and I489

Table S1. Relative Risk Reduction of Hypertension Subtype for Heart Failure and Other Cardiovascular Disease

	20-49 Years (n=1,825,756)	50-59 Years (n=571,574)	60-75 Years (n=215,240)
Heart Failure			
Stage 1 Hypertension	26.1 (23.5-28.6)	21.7 (18.5-24.7)	12.2 (7.0-17.1)
Isolated Diastolic Hypertension	50.7 (47.3-53.8)	38.7 (34.2-43.0)	26.3 (16.2-35.2)
Isolated Systolic Hypertension	48.9 (44.9-52.6)	41.7 (37.5-45.7)	30.6 (25.1-35.8)
Systolic Diastolic Hypertension	67.7 (66.1-69.2)	52.9 (50.4-55.3)	41.8 (37.3-45.9)
Myocardial Infarction			
Stage 1 Hypertension	26.2 (18.3-33.4)	35.9 (28.3-42.6)	17.4 (2.0-30.4)
Isolated Diastolic Hypertension	45.2 (33.6-54.8)	38.3 (24.3-49.7)	50.9 (32.8-64.2)
Isolated Systolic Hypertension	54.9 (44.4-63.4)	47.4 (35.6-57.0)	24.7 (4.2-40.9)
Systolic Diastolic Hypertension	59.0 (52.6-64.5)	47.5 (38.8-55.0)	40.1 (25.1-52.1)
Angina Pectoris			
Stage 1 Hypertension	18.0 (15.3-20.6)	15.7 (12.4-18.8)	10.5 (5.1-15.5)
Isolated Diastolic Hypertension	33.7 (29.0-38.0)	28.6 (23.3-33.5)	14.0 (1.2-25.1)
Isolated Systolic Hypertension	39.5 (34.7-43.9)	30.6 (25.5-35.4)	14.9 (7.6-21.7)
Systolic Diastolic Hypertension	47.5 (44.7-50.2)	37.5 (34.1-40.7)	23.0 (16.5-29.0)
Stroke			
Stage 1 Hypertension	28.6 (24.8-32.2)	21.9 (17.7-25.9)	13.9 (7.5-19.9)
Isolated Diastolic Hypertension	55.4 (50.9-59.5)	41.5 (35.7-46.7)	33.3 (22.0-43.0)
Isolated Systolic Hypertension	42.6 (35.0-49.3)	29.6 (22.1-36.3)	23.3 (15.4-30.5)
Systolic Diastolic Hypertension	70.6 (68.5-72.6)	56.1 (53.1-58.9)	45.5 (40.4-50.2)
Atrial Fibrillation			
Stage 1 Hypertension	19.7 (13.6-25.5)	17.5 (11.0-23.5)	3.7 (-6.6 - +13.0)

Isolated Diastolic Hypertension	29.8 (18.3-39.6)	31.1 (21.2-39.8)	37.0 (23.4-48.3)
Isolated Systolic Hypertension	35.1 (22.4-45.7)	35.3 (25.5-43.9)	15.2 (2.2-26.5)
Systolic Diastolic Hypertension	50.5 (44.6-55.8)	37.3 (30.4-43.5)	25.9 (15.3-35.2)

The relative risk reduction (%) of hypertension subtypes for heart failure and other cardiovascular events was calculated after adjusting for covariates including age, sex, obesity, diabetes mellitus, dyslipidemia, cigarette smoking, and alcohol consumption.

Table S2. Relative Risk Reduction of Hypertension Subtype for Heart Failure Stratified by Sex

	Men			Women		
	20-49 Years (n=1,003,021)	50-59 Years (n=313,155)	60-75 Years (n=121,082)	20-49 Years (n=822,735)	50-59 Years (n=258,419)	60-75 Years (n=94,158)
Heart Failure						
Stage 1 Hypertension	26.1 (22.9-29.0)	21.7 (17.8-25.3)	9.8 (3.1-15.9)	26.9 (22.3-31.3)	22.4 (16.8-27.7)	16.3 (7.7-24.1)
Isolated Diastolic Hypertension	50.8 (47.1-54.3)	38.2 (33.1-42.9)	21.5 (9.1-32.2)	49.6 (41.4-56.7)	43.2 (32.9-52.0)	40.8 (22.4-54.8)
Isolated Systolic Hypertension	49.6 (44.8-54.0)	44.2 (39.0-49.0)	30.0 (22.8-36.5)	48.6 (41.4-55.1)	37.4 (29.5-44.3)	31.1 (22.0-39.2)
Systolic Diastolic Hypertension	68.3 (66.5-70.0)	53.6 (50.8-56.3)	41.7 (36.4-46.5)	65.9 (62.4-69.0)	50.9 (45.8-55.6)	40.5 (31.4-48.3)

The relative risk reduction (%) of hypertension subtypes for heart failure and other cardiovascular events was calculated after adjusting for covariates including age, obesity, diabetes mellitus, dyslipidemia, cigarette smoking, and alcohol consumption.

Figure S1A. Hypertension Subtype and Heart Failure Event in Men

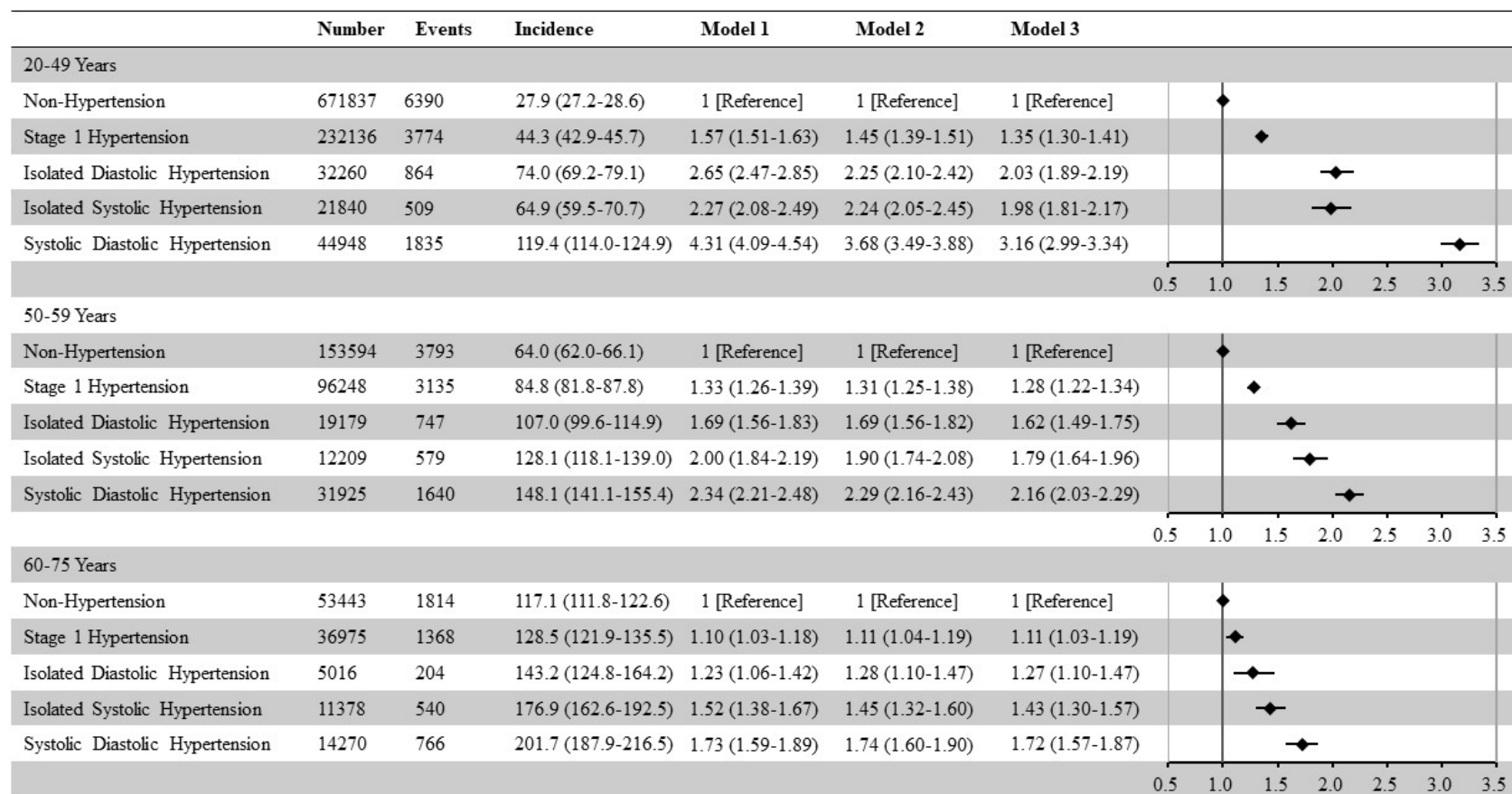


Figure S1B. Hypertension Subtype and Heart Failure Event in Women

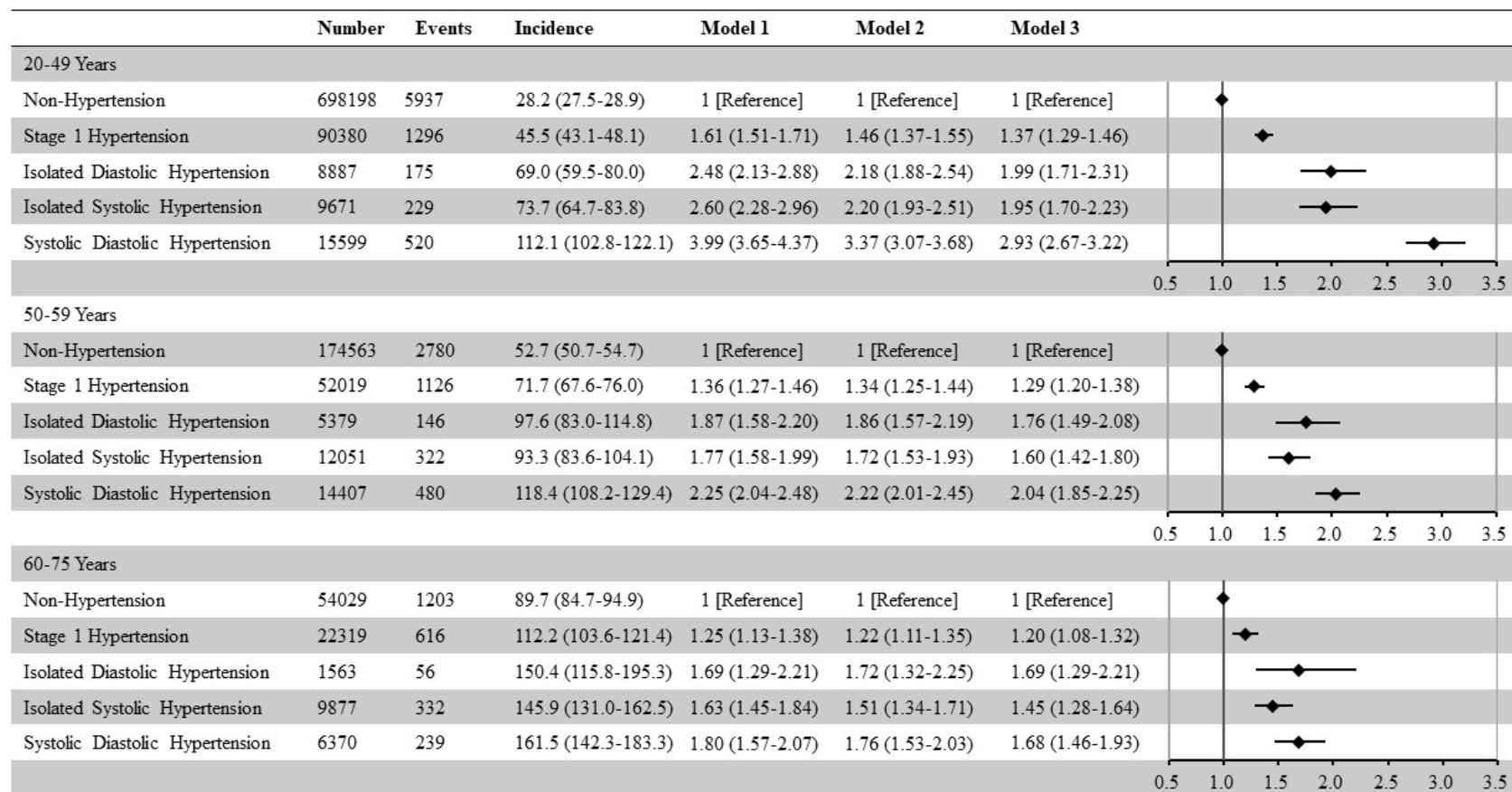


Figure S2. Hypertension Subtype and Heart Failure Event

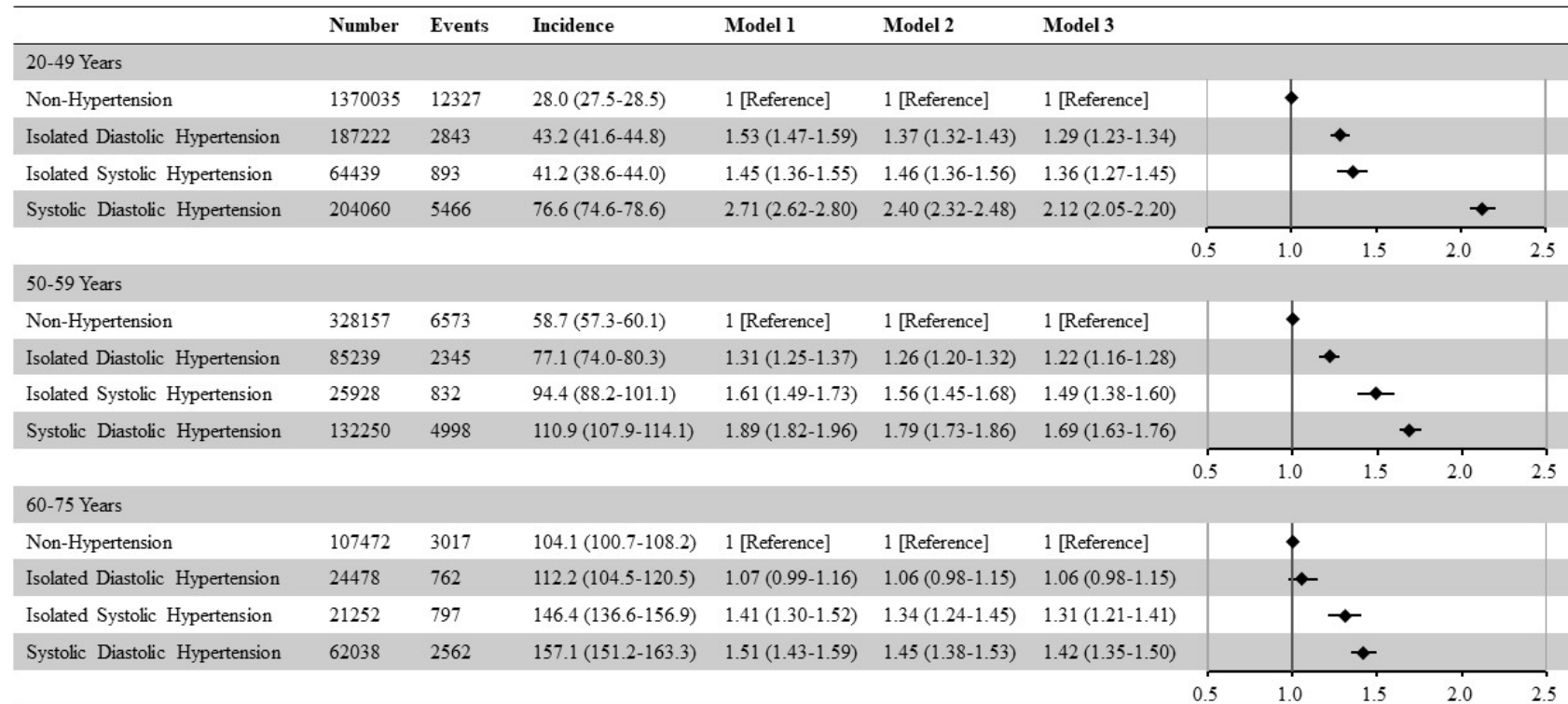


Figure S3. Hypertension Subtype and Heart Failure Event

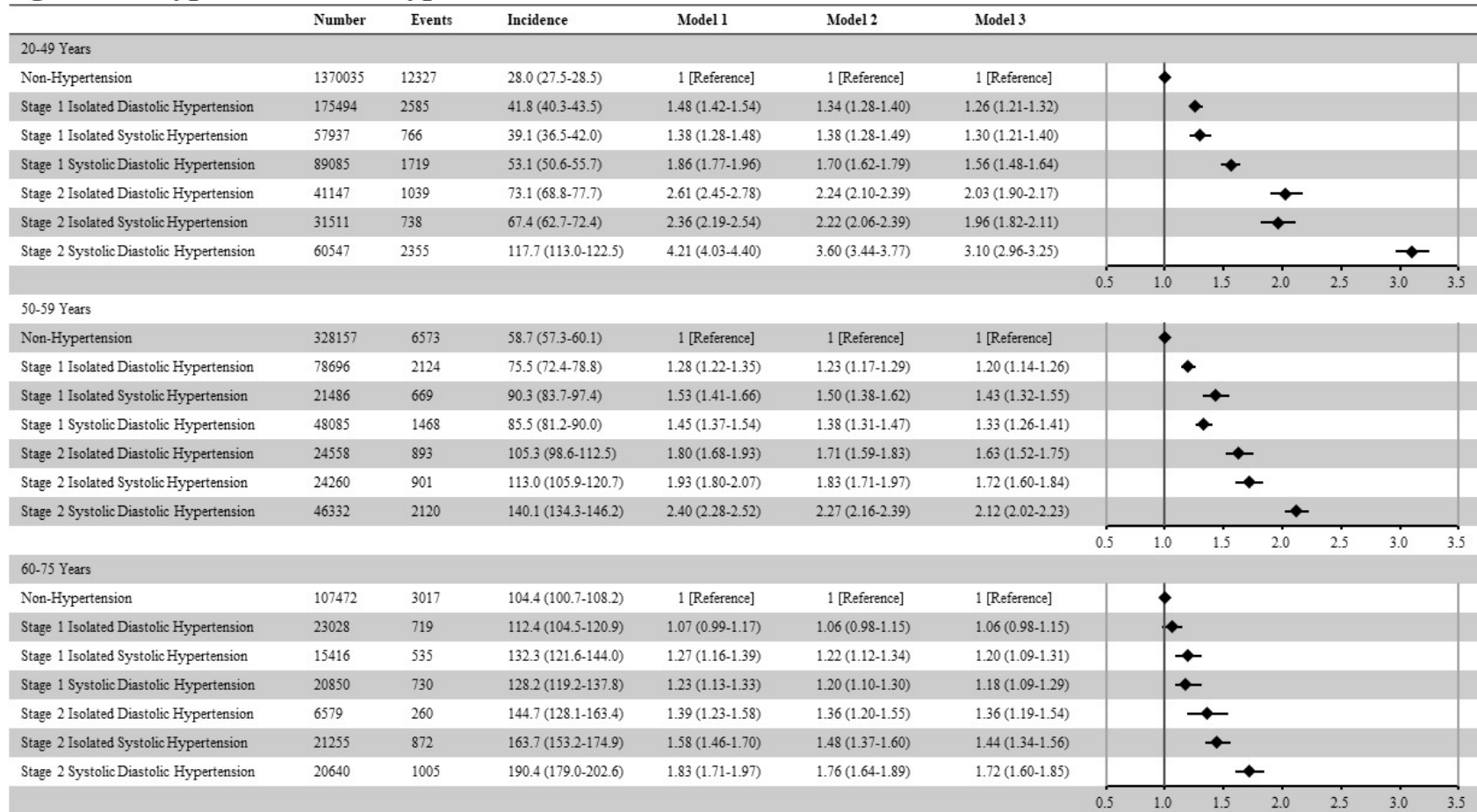


Figure S4. Hypertension Subtype and Heart Failure Event

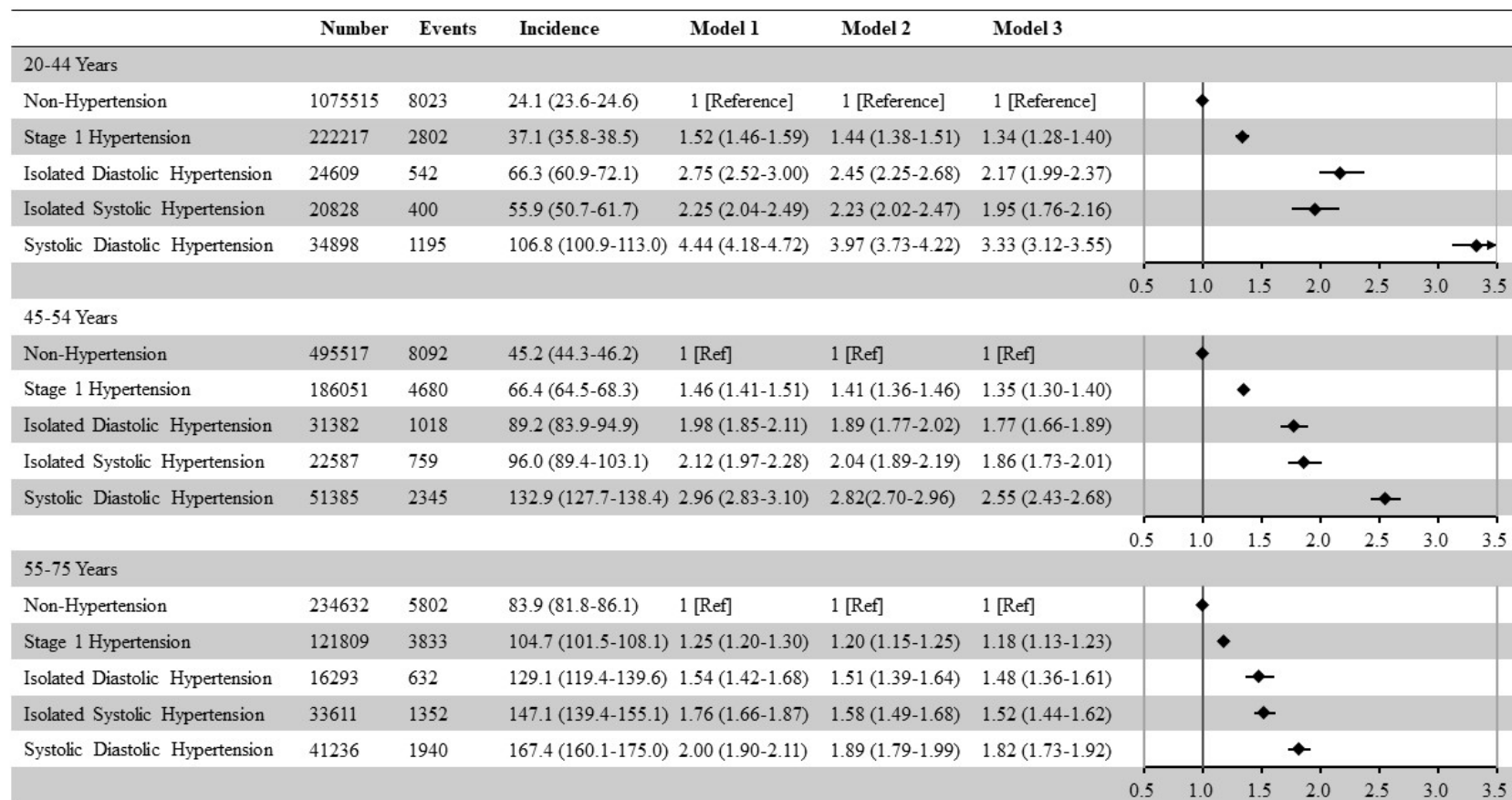


Figure S5. Hypertension Subtype and Heart Failure Event

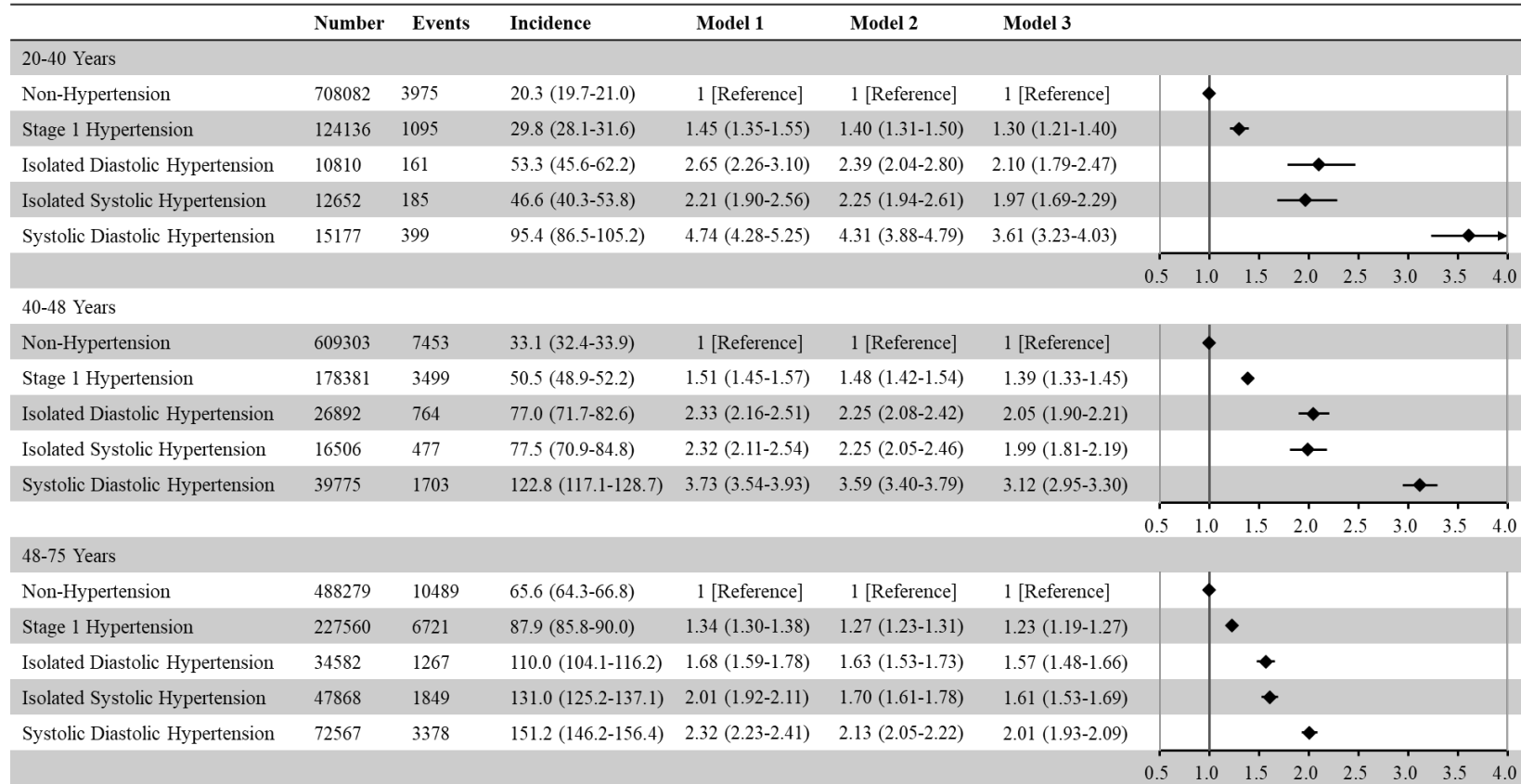


Figure S6. Hypertension Subtype and Heart Failure Event (adjusted for estimated glomerular filtration rate)

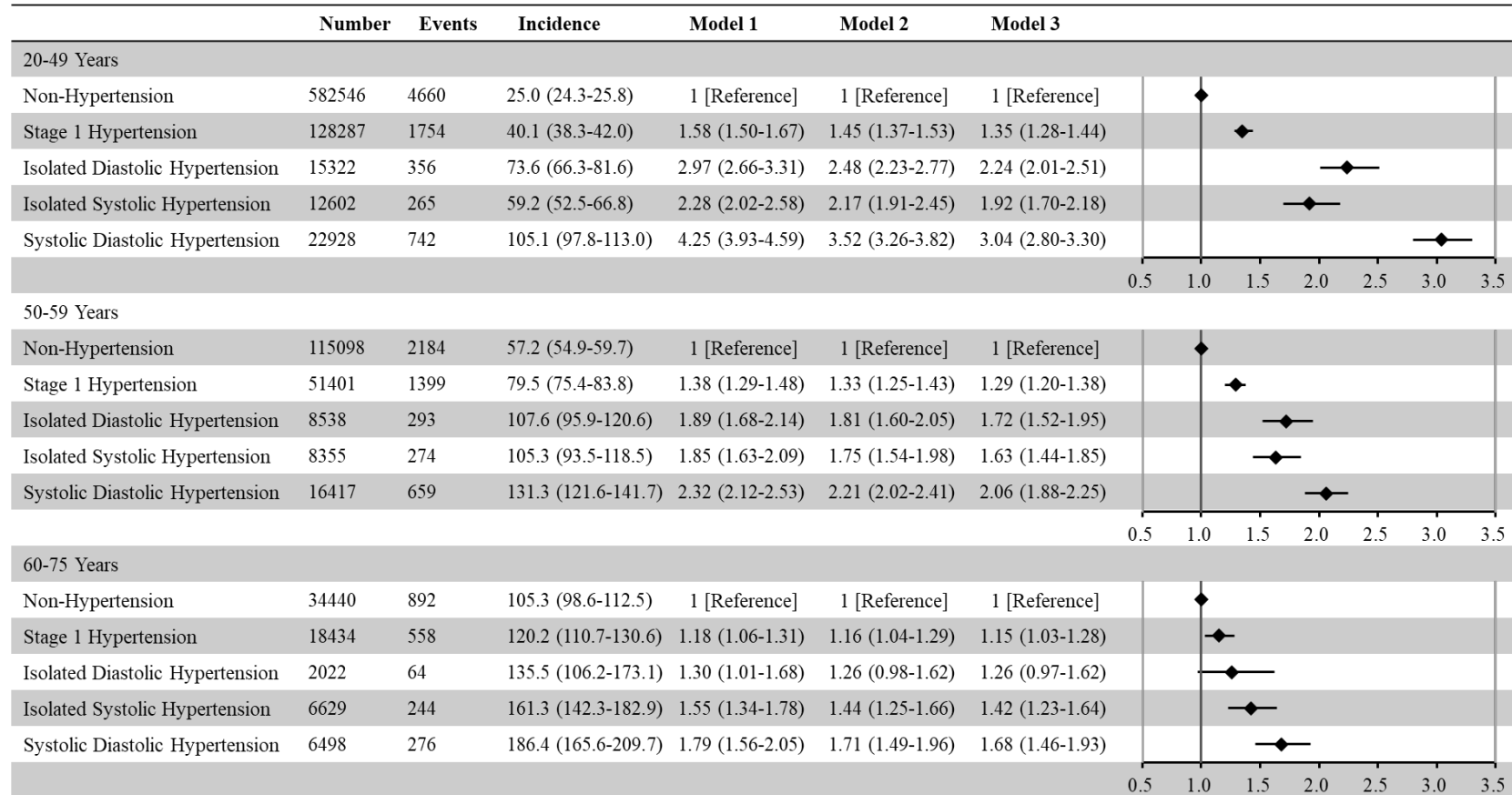


Figure S7. Hypertension Subtype and All-Cause Death

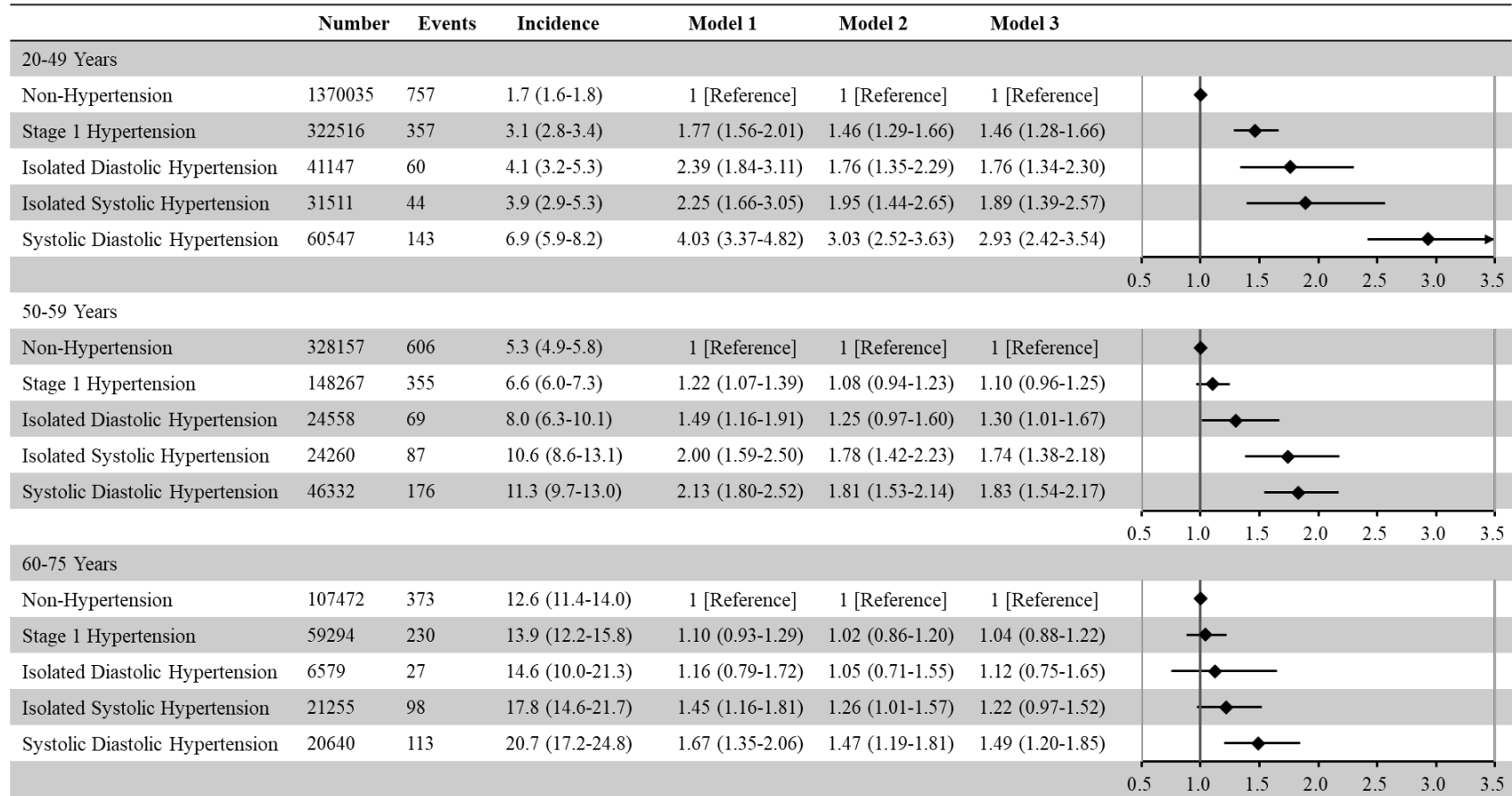


Figure S8. Population Attributable Fraction

