

**Supplemental Table 1: Incidence Rates and Hazard Ratios for the Association of Obesity Phenotypes and Incident Coronary Heart Disease, N= 9, 477**

Metabolic status	Obesity status	Events/n	IR/1000 PY (95% CI)	Model 1, HR (95% CI)	Model 2, HR (95% CI)
Metabolically healthy	Normal weight	138/1943	3.2 (2.7-3.8)	1(Ref)	1(Ref)
	Overweight	152/1726	3.9 (3.4-4.6)	1.09 (0.87-1.38)	1.09 (0.86-1.37)
	Obese	60/696	3.8 (2.9-4.9)	1.26 (0.93-1.71)	1.34 (0.98-1.82)
Metabolically Unhealthy	Normal weight	160/1073	7.2 (6.2-8.4)	<b>2.09 (1.67-2.63)</b>	<b>1.86 (1.48-2.34)</b>
	Overweight	375/2212	7.9 (7.1-8.7)	<b>2.06 (2.1.69-2.51)</b>	<b>1.94 (1.59-2.37)</b>
	Obese	274/1827	7.2 (6.4-8.1)	<b>2.41 (1.96-2.96)</b>	<b>2.39 (1.94-2.94)</b>
Model 1: Adjusted for age, sex and race-center; Model 2: Adjusted for Model 1+ smoking status, physical activity, hs-CRP, eGFR, NT-proBNP, <b>bold</b> -p<0.05					

**Supplemental Table 2: Incidence Rates and Hazard Ratios for the Association of Obesity Phenotypes and Incident Heart Failure, N= 9, 477**

Metabolic status	Obesity status	Events/n	IR/1000 PY (95% CI)	Model 1 HR (95% CI)	Model 2 HR (95% CI)
Metabolically healthy	Normal weight	201/1943	4.7 (4.1-5.4)	1(Ref)	1(Ref)
	Overweight	196/1726	5.2 (4.5-6.0)	1.01 (0.83-1.24)	1.05 (0.86-1.28)
	Obese	109/696	7.1 (5.9-8.6)	<b>1.48 (1.17-1.88)</b>	<b>1.65 (1.30-2.09)</b>
Metabolically Unhealthy	Normal weight	176/1073	8.2 (7.1-9.5)	<b>1.50 (1.22-1.84)</b>	<b>1.33 (1.08-1.63)</b>
	Overweight	418/2212	9.2 (8.3-10.1)	<b>1.60 (1.35-1.90)</b>	<b>1.57 (1.32-1.86)</b>

	Obese	431/1827	12.0 (10.9-13.2)	<b>2.39 (2.31-3.09)</b>	<b>2.45 (2.07-2.91)</b>
Model 1: Adjusted for age, sex and race-center; Model 2: Adjusted for Model 1+ smoking status, physical activity, hs-CRP, eGFR, NT-proBNP , <b>bold</b> -p<0.05					

**Supplemental Table 3. Incidence Rates (IR) and Adjusted Hazard Ratios (HR) for Incident Coronary Heart Disease According to Cross-Categories of Obesity Phenotypes and Hs-cTnT Levels, N=9, 477**

Metabolic status <sup>B</sup>	Obesity Status	Hs-cTnT level, ng/L	Events/n	IR/1000 person years (95% CI)	Adjusted* HR (95% CI)
<b>Metabolically Healthy</b>	<b>Normal weight</b>	<6 ng/L	101/1606	2.8 (2.3-3.4)	1 (Reference)
		≥ 6 ng/L	37/337	5.4 (3.9-7.5)	<b>1.55 (1.06-2.27)</b>
	<b>Overweight</b>	<6 ng/L	101/1364	3.3 (2.7-4.0)	1.09 (0.82-1.43)
		≥ 6 ng/L	51/362	6.6 (5.0-8.7)	<b>1.61 (1.14-2.27)</b>
	<b>Obese</b>	<6 ng/L	41/545	3.2 (2.4-4.3)	1.38 (0.96-1.99)
		≥ 6 ng/L	19/151	5.8 (3.7-9.1)	<b>1.75 (1.07-2.88)</b>
<b>Metabolically Unhealthy</b>	<b>Normal weight</b>	<6 ng/L	102/788	6.1 (5.0-7.3)	<b>1.92 (1.46-2.54)</b>
		≥ 6 ng/L	58/285	10.9 (8.4-14.1)	<b>2.51 (1.79-3.51)</b>
	<b>Overweight</b>	<6 ng/L	229/1571	6.6 (5.8-7.6)	<b>1.94 (1.53-2.46)</b>
		≥ 6 ng/L	146/641	11.3 (9.6-13.3)	<b>2.82 (2.17-3.67)</b>
	<b>Obese</b>	<6 ng/L	140/1244	5.1 (4.4-6.1)	<b>2.07 (1.60-2.69)</b>
		≥ 6 ng/L	134/583	12.1 (10.2-14.3)	<b>3.81 (2.93-4.97)</b>

\*Adjusted for age, sex, and race-center, smoking status, physical activity, high-sensitivity c-reactive protein, estimated glomerular filtration rate, N-terminal pro B-type natriuretic peptide <sup>B</sup>- Metabolic healthy: < 2 of Adult Treatment Panel (ATP) III Criteria; Metabolically unhealthy: ≥ 2 of Adult Treatment Panel (ATP) III Criteria; Hs-cTnT- High-sensitivity cardiac troponin T, **bold**-p<0.05

**Supplemental Table 4. Incidence Rates (IR) and Adjusted Hazard Ratios (HR) for Incident Heart Failure According to Cross-Categories of Obesity Phenotypes and Hs-cTnT Levels, N=9, 477**

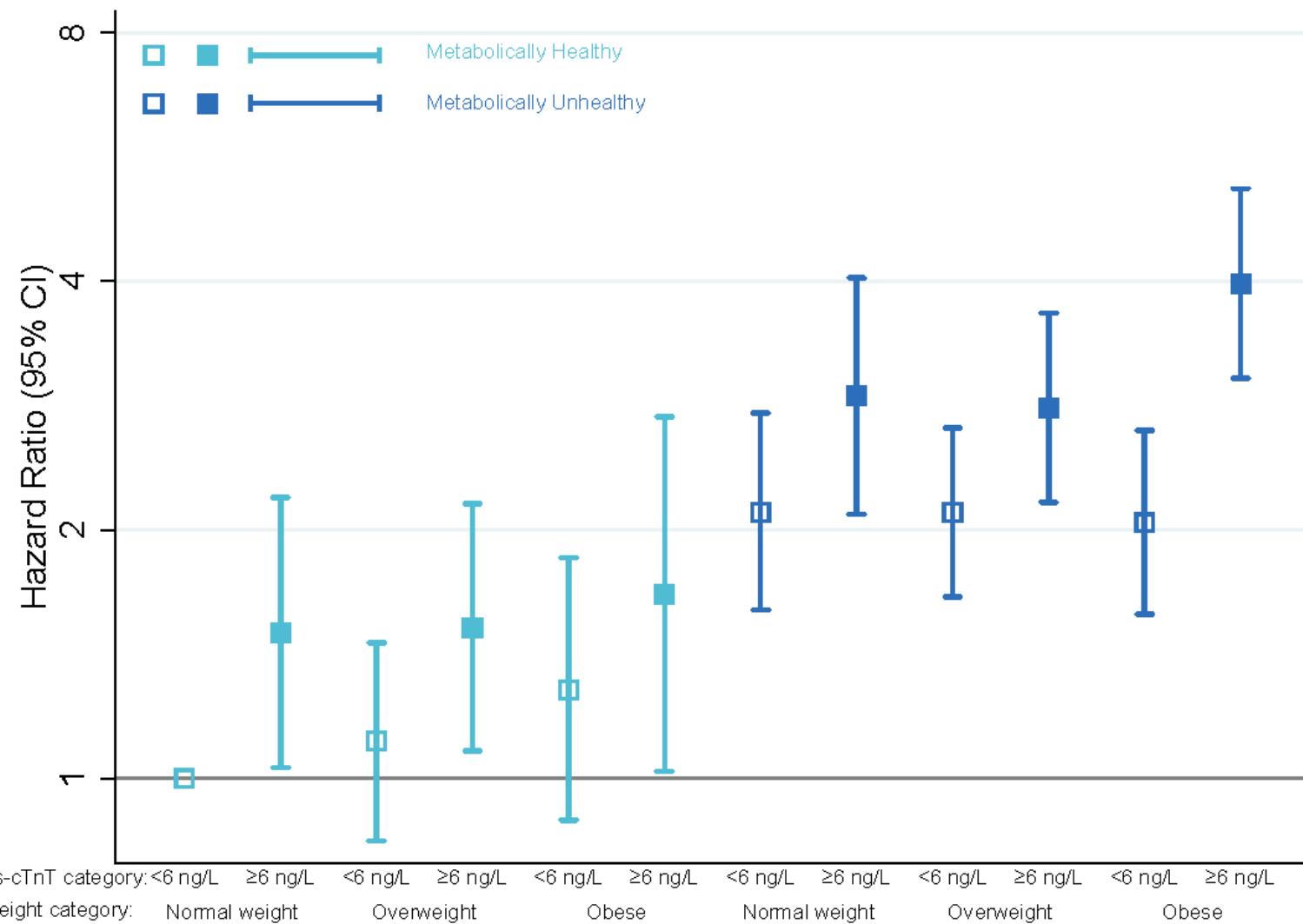
Metabolic status <sup>β</sup>	Obesity Status	Hs-cTnT level, ng/L	Events/n	IR/1000 person years (95% CI)	Adjusted* HR (95% CI)
<b>Metabolically Healthy</b>	<b>Normal weight</b>	<6 ng/L	144/1606	4.0 (3.4-4.7)	1 (Reference)
		≥ 6 ng/L	57/337	8.5 (6.6-11.1)	<b>1.63 (1.20-2.23)</b>
	<b>Overweight</b>	<6 ng/L	142/1364	4.7 (3.9-5.5)	1.14 (0.90-1.43)
		≥ 6 ng/L	54/362	7.2 (5.5-9.4)	<b>1.38 (1.00-1.89)</b>
	<b>Obese</b>	<6 ng/L	73/545	6.0 (4.8-7.5)	<b>1.66 (1.25-2.20)</b>
		≥ 6 ng/L	36/151	11.7 (8.4-16.2)	<b>2.48 (1.71-3.60)</b>
<b>Metabolically Unhealthy</b>	<b>Normal weight</b>	<6 ng/L	106/788	6.5 (5.4-7.8)	<b>1.34 (1.04-1.72)</b>
		≥ 6 ng/L	70/285	13.9 (11.0-17.5)	<b>2.01 (1.48-2.73)</b>
	<b>Overweight</b>	<6 ng/L	247/1571	7.4 (6.5-8.4)	<b>1.52 (1.23-1.87)</b>
		≥ 6 ng/L	171/641	14.1 (12.1-16.4)	<b>2.51 (1.99-3.16)</b>
	<b>Obese</b>	<6 ng/L	253/1244	9.8 (8.7-11.1)	<b>2.44 (1.98-3.01)</b>
		≥ 6 ng/L	178/583	17.6 (15.2-20.3)	<b>3.52 (2.81-4.41)</b>

\*Adjusted for age, sex, and race-center, smoking status, physical activity, high-sensitivity c-reactive protein, estimated glomerular filtration rate, N-terminal pro B-type natriuretic peptide <sup>β</sup>- Metabolic healthy: < 2 of Adult Treatment Panel (ATP) III Criteria; Metabolically unhealthy: ≥ 2 of Adult Treatment Panel (ATP) III Criteria; Hs-cTnT- High-sensitivity cardiac troponin T, **bold**-p<0.05

**Supplemental Table 5: Association between Waist Circumference, Hip Circumference and high-sensitivity cardiac troponin T (hs-cTnT)**

	hs-cTnT		
Mean(±SD)	<6 ng/L	6-<14 ng/L	≥14 ng/L
Waist circumference, cm			
Men	99.1 (10.2)	100.3 (11.0)	102.7 (12.5)
Women	94.2 (14.8)	98.8 (16.4)	103.4 (18.1)
Hip circumference, cm			
Men	102.9 (7.5)	103.9 (8.2)	105.6 (9.9)
Women	106.6 (11.0)	108.9 (13.2)	111.8 (14.3)

**Supplemental Figure 1:** Adjusted Hazard Ratios (95% CIs) for the Association of Obesity Phenotypes and Incident Coronary Heart Disease by Hs-cTnT Levels



**Supplemental Figure 2:** Adjusted Hazard Ratios (95% CIs) for the Association of Obesity Phenotypes and Incident Heart Failure by Hs-cTnT Levels

