

## SUPPLEMENTAL MATERIAL

Supplemental Table 1

<b>Supplemental Table 1: The association of GlycA with total HF and its subtypes in the Multi-Ethnic Study of Atherosclerosis (2000 to 2015), after excluding participants with interim CVD events anytime during follow-up</b>					
GlycA in $\mu\text{mol/L}$ [Median (IQR)]	Quartile 1 [314 (294-327)]	Quartile 2 [358 (348-367)]	Quartile 3 [396 (386-407)]	Quartile 4 [450 (434-475)]	Per 1 SD (60 $\mu\text{mol/L}$ ) increment
Incidence rates (95% CI) and Hazard ratios (95% CI) of any HF (n=117) by GlycA: N= 5,614 §					
N	1,464	1,371	1,414	1,365	5,614
Cases	19	31	30	37	117
Incidence rate†	1.0 (0.6-1.6)	1.8 (1.2-2.5)	1.7 (1.2-2.4)	2.2 (1.6-3.1)	1.7 (1.4-2.0)
Hazard Ratio‡					
Model 1	1 (reference)	1.72 (0.97-3.05)	1.77 (0.99-3.17)	2.62 (1.47-4.65)*	1.45 (1.21-1.73)*
Model 2	1 (reference)	1.55 (0.87-2.75)	1.51 (0.84-2.72)	2.00 (1.10-3.63)*	1.35 (1.11-1.63)*
Model 3	1 (reference)	1.53 (0.85-2.74)	1.48 (0.81-2.68)	1.88 (1.02-3.45)*	1.30 (1.07-1.57)*
Model 4	1 (reference)	1.48 (0.82-2.67)	1.39 (0.75-2.56)	1.67 (0.86-3.24)	1.27 (1.02-1.59)*
Incidence rates (95% CI) and Hazard ratios (95% CI) of HFpEF (n=54) by GlycA: N= 5,614 §					
N	1,464	1,371	1,414	1,365	5,614
Cases	8	16	13	17	54
Incidence rate†	0.4 (0.2-0.9)	0.9 (0.6-1.5)	0.7 (0.4-1.3)	1.0 (0.6-1.6)	0.8 (0.6-1.0)
Hazard Ratio‡					
Model 1	1 (reference)	2.07 (0.88-4.86)	1.70 (0.70-4.16)	2.56 (1.07-6.15)*	1.41 (1.10-1.82)*
Model 2	1 (reference)	1.84 (0.78-4.34)	1.41 (0.57-3.47)	2.02 (0.82-4.96)	1.32 (1.00-1.75)*
Model 3	1 (reference)	1.75 (0.73-4.18)	1.43 (0.57-3.57)	1.97 (0.79-4.96)	1.30 (0.99-1.72)
Model 4	1 (reference)	1.65 (0.69-3.97)	1.27 (0.50-3.25)	1.46 (0.53-4.00)	1.18 (0.86-1.64)
Incidence rates (95% CI) and Hazard ratios (95% CI) of HFrEF (n=53) by GlycA: N= 5,614 §					
N	1,464	1,371	1,414	1,365	5,614
Cases	11	12	15	15	53
Incidence rate†	0.6 (0.3-1.1)	0.7 (0.4-1.2)	0.8 (0.5-1.4)	0.9 (0.5-1.5)	0.8 (0.6-1.0)
Hazard Ratio‡					
Model 1	1 (reference)	1.20 (0.53-2.72)	1.64 (0.75-3.61)	2.04 (0.91-4.58)	1.39 (1.06-1.82)*
Model 2	1 (reference)	1.11 (0.48-2.54)	1.41 (0.64-3.14)	1.52 (0.65-3.54)	1.27 (0.95-1.70)
Model 3	1 (reference)	1.12 (0.49-2.59)	1.33 (0.59-2.99)	1.42 (0.60-3.67)	1.23 (0.91-1.65)
Model 4	1 (reference)	1.12 (0.48-2.59)	1.31 (0.56-3.05)	1.43 (0.55-3.73)	1.27 (0.90-1.79)
Abbreviations: HF, heart failure; HFpEF, HF with preserved ejection fraction; HFrEF, HF with reduced ejection fraction; CI, confidence interval					
* Statistically significant results at $P < 0.05$ are in bold font					
† Incidence rates reported are per 1000 person-years.					
‡ Hazard ratios are adjusted as follows:					
Model 1: adjusted for age, sex, and race/ethnicity, MESA site					
Model 2: model 1 plus education, health insurance, BMI, smoking status, pack-years of smoking, and physical activity.					
Model 3: model 2 plus systolic blood pressure, use of antihypertensive medication, total cholesterol, HDL- cholesterol, use of lipid-lowering medications, diabetes and eGFR					
Model 4: model 3 plus $\ln(\text{CRP})$ , $\ln(\text{IL-6})$ and $\ln(\text{Fibrinogen})$					
§ Using GlycA quartiles, $P = 0.23, 0.60$ and $0.52$ for interaction by sex for HF, HFpEF and HFrEF, respectively; $P = 0.79, 0.51$ and $0.82$ for interaction by age for HF, HFpEF and HFrEF, respectively; $P = 0.73, 0.36$ and $0.66$ for interaction by race for HF, HFpEF and HFrEF, respectively.					