

**SUPPLEMENTAL MATERIAL**

**Table S1.** Univariate analyses and multivariate associations between AHF and HV/W

quartiles

Risk factors	Univariate logistic regression			Multivariate logistic regression		
	OR	95% CI	p-value	OR	95% CI	p-value
HV/W ratio Q2 vs. Q1	8.14	1.01–65.42	0.049	5.97	0.73–48.88	0.096
HV/W ratio Q3 vs. Q1	9.80	1.25–76.98	0.030	5.90	0.73–47.68	0.096
HV/W ratio Q4 vs. Q1	18.42	2.44–139.23	0.005	9.90	1.27–77.12	0.029
Age, years	1.05	1.02–1.09	0.004	1.02	0.98–1.06	0.302
Congestive heart failure	13.01	6.19–27.34	0.000	10.62	5.00–22.56	0.000
Hypertension	1.72	0.80–3.70	0.161	1.61	0.73–3.58	0.241

AHF = acute heart failure; HV/W = ratio of hydration volume to body weight; OR = odds ratio; CI = confidence interval; Q = quartile.

**Table S2.** Univariate analyses and multivariate associations between AHF and HV/W >25 mL/kg

Risk factors	Univariate logistic regression			Multivariate logistic regression		
	OR	95% CI	p-value	OR	95% CI	p-value
HV/W ratio >25 mL/kg	3.18	1.42–7.14	0.005	2.15	0.91–5.09	0.081
Age, years	1.05	1.02–1.09	0.004	1.03	0.99–1.07	0.150
Congestive heart failure	13.01	6.19–27.34	0.000	11.54	5.43–24.52	0.000
Hypertension	1.72	0.80–3.70	0.161	1.49	0.67–3.31	0.322

AHF = acute heart failure; HV/W = ratio of hydration volume to body weight; OR = odds ratio; CI = confidence interval.