

SUPPLEMENTAL MATERIAL**Supplemental Table S1.** Methods of incident heart failure ascertainment and diagnosis in the four cohorts

	ARIC	CHS	FHS	RS
Source of information				
Self-report, care-giver report	No	Yes	Yes	Yes
Administrative records	Yes	Yes	Yes	Yes
Inclusion of non-hospitalized events	Yes*	Yes	Yes	Yes
Review criteria applied	None	CHS	Framingham	ESC**
Event characteristics considered				
ICD 9/10 code	Yes	No	No	Yes
Signs and symptoms [†]	No	Yes	Yes	Yes
Cardiac structure and function [‡]	No	Yes	Yes	Yes
Physician diagnosis	No	Yes	Yes	Yes
Pharmaceutical treatment [§]	No	Yes	Yes	Yes

*Included non-hospitalized deaths but not morbid events.

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[†]Signs and symptoms included in Framingham criteria.

[‡]Cardiac structure and function including cardiomegaly, dilated ventricle, decreased systolic function, or segmental wall-motion abnormalities.

[§]Pharmaceutical treatments include the prescribing of diuretics, digoxin, or vasodilator.

Supplemental Table S2. Cohort specific results for the top index loci associated with mortality among individuals with incident HF

POP	RS number	CHR	ARIC			CHS			RS			FHS		
			Beta	P	OEV*	Beta	P	OEV	Beta	P	OEV	Beta	P	OEV
Genome-wide significant ($P < 5.0 \times 10^{-7}$)														
EA	rs12638540	3	0.418	1.43×10^{-2}	0.981	0.339	1.48×10^{-2}	0.921	0.538	3.18×10^{-4}	1.000	-0.047	9.29×10^{-1}	0.970
High-signal ($P < 1.0 \times 10^{-5}$)														
EA	rs4528684	19	0.299	1.78×10^{-1}	0.263	0.433	1.23×10^{-5}	1.016	0.174	1.80×10^{-1}	0.979	0.658	2.78×10^{-2}	0.257
EA	rs2125623	15	-0.231	1.22×10^{-2}	0.909	-0.219	5.76×10^{-3}	0.704	-0.179	1.07×10^{-2}	0.929	-0.290	4.20×10^{-2}	0.881
EA	rs7965445	12	0.305	1.25×10^{-2}	0.974	0.236	1.37×10^{-2}	0.976	0.192	5.55×10^{-2}	0.982	0.452	2.44×10^{-3}	0.897
EA	rs7687921	4	NA	NA	NA	0.502	3.53×10^{-2}	0.334	0.459	1.15×10^{-2}	0.966	0.923	3.04×10^{-4}	0.917
EA	rs7120489	11	0.487	1.61×10^{-3}	0.959	0.149	2.40×10^{-1}	0.814	0.243	2.44×10^{-2}	0.929	0.657	4.02×10^{-3}	0.934
EA	rs4979906	10	0.367	4.15×10^{-4}	0.981	0.108	1.49×10^{-1}	0.972	0.227	7.36×10^{-3}	0.998	0.183	1.73×10^{-1}	0.969
EA	rs17159640	7	0.402	4.01×10^{-2}	0.639	0.495	1.52×10^{-2}	0.392	0.656	4.17×10^{-4}	0.768	-0.387	3.02×10^{-1}	0.609
EA	rs9885413	5	0.241	9.11×10^{-2}	0.999	0.401	1.74×10^{-4}	0.986	0.154	2.37×10^{-1}	1.000	0.358	5.34×10^{-2}	0.857
AA	rs6868223	5	0.415	2.60×10^{-4}	N/A	0.559	1.29×10^{-3}	0.892	NA	NA	NA	NA	NA	NA
AA	rs12733856	1	0.452	8.06×10^{-6}	N/A	0.397	1.15×10^{-1}	0.392	NA	NA	NA	NA	NA	NA
AA	rs8017423	14	-0.476	4.99×10^{-5}	N/A	-0.547	4.04×10^{-2}	0.411	NA	NA	NA	NA	NA	NA
AA	rs6573013	14	0.440	2.47×10^{-3}	N/A	0.854	3.18×10^{-4}	0.662	NA	NA	NA	NA	NA	NA

EA = European ancestry; AA = African ancestry; POP = population; CHR = chromosome; P = p-value; OEV = observed-expected variance; NA = data not available. *Estimated using r^2 . N/A not applicable, no imputed data.