Supplemental table S1: Risk allele frequencies of 19 reported CHD SNP in Afro-Caribbean cases and controls

SNP	Chromosome	Gene	Alleles	Call rate	Risk allele frequency		
			Risk/reference	%	**Cases N=178**	**Controls N=359**	**p**
rs4341	17q23	*ACE*	**G**/C	95	0.58	0.60	0.66
rs662799	11q23	*APOA5*	**G**/A	95	0.14	0.13	0.75
rs1042031	2p23-24	*APOB*	**A**/G	95	0.18	0.15	0.37
rs429358	19q13.2	*APOE*	**C**/T	96	0.24	0.23	0.79
rs7412	19q13.2	*APOE*	**C**/T	97	0.91	0.93	0.41
rs10757274	9p21	*CDKN2A/CDKN2B*	**G**/A	94	0.24	0.21	0.43
rs599839	1p13.3	*CELSR2/PSRC1/SORT1*	**A**/G	95	0.35	0.25	0.015
rs708272	16q21	*CETP*	**C**/T	95	0.74	0.76	0.61
rs1746048	10q11.2	*CXCL12*	**C**/T	95	0.63	0.53	0.028
rs7025486	9q33	*DAB2IP*	**A**/G	96	0.26	0.32	0.15
rs10455872	6q26	*LPA*	**G**/A	94	0.01	0.01	NA
rs3798220	6q26	*LPA*	**C**/T	96	0.01	0.01	NA
rs1801177	8p22	*LPL*	**A**/G	96	0	0.001	0.88
rs328	8p22	*LPL*	**C**/G	97	0.94	0.94	NA
rs17465637	1q41	*MIA3*	**C**/A	95	0.31	0.24	0.08
rs9818870	3q23.3	*MRAS*	**T**/C	95	0.11	0.08	0.25
rs1799983	7q35-36	*NOS3*	**T**/G	95	0.16	0.12	0.2
rs11591147	1p32.3	*PSCK9*	**G**/T	94	0.99	1	NA
rs17228212	15q22	*SMAD3*	**C**/T	98	0.13	0.12	0.74

Supplemental table S2: Association between GRS and CHD in Afro-Caribbeans.

	Cases N=178	**Controls N=359**	**P**
Non-weighted GRS19	13.90 (±2.07)	13.17 (±2.10)	$1.6x10^{-4}$
Weighted GRS19	1.74 (±0.24)	1.68 (±0.20)	$1.4x10^{-2}$
Non-weighted GRS14	10.28 (±1.68)	9.69 (±1.70)	$1.6x10^{-4}$
Weighted GRS14	1.66 (±0.23)	1.61 (±0.21)	$9x10^{-3}$

Data are presented as mean (SD)

Supplemental table S3: Association between the 19-SNP GRS and cardiovascular risk factors in Afro-Caribbeans without CHD

Afro-Caribbean Controls N=359	**Status** (number)	**Mean weighted GRS**	**P**	**Mean non-weighted GRS**	**P**
Hypertension	No (251) Yes (108)	2.54 (0.46) 2.61 (0.50)	0.21	13.08 (2.14) 13.32 (2.06)	0.32
Diabetes	No (306) Yes (53)	2.56 (0.47) 2.56 (0.51)	0.94	13.18 (2.13) 13.04 (2.06)	0.66
Dyslipidaemia	No (305) Yes (54)	2.56 (0.46) 2.61 (0.56)	0.42	13.14 (2.10) 13.22 (2.24)	0.80
Smoking	No (310) Yes (49)	2.57 (0.48) 2.55 (0.45)	0.83	13.15 (2.13) 13.18 (2.09)	0.92

Data are presented as number (SD)

Supplemental table S4: Association between the 19-SNP GRS and cardiovascular risk factors in Afro-Caribbeans with CHD

Afro-Caribbean cases N=178	**Status** (number)	**Mean weighted GRS**	**P**	**Mean non-weighted GRS**	**P**
Hypertension	No (38)	2.69 (0.52)	0.80	13.87 (2.46)	0.92
	Yes (140)	2.66 (0.48)		13.91 (2.09)	
Diabetes	No (82)	2.65 (0.48)	0.66	13.77 (2.25)	0.46
	Yes (96)	2.68 (0.50)		14.01 (2.11)	
Dyslipidaemia	No (84)	2.59 (0.49)	0.04	13.40 (2.17)	0.004
	Yes (94)	2.74 (0.48)		14.34 (2.08)	
Smoking	No (129)	2.67 (0.50)	0.79	13.94 (2.10)	0.70
	Yes (49)	2.65 (0.45)		13.80 (2.35)	

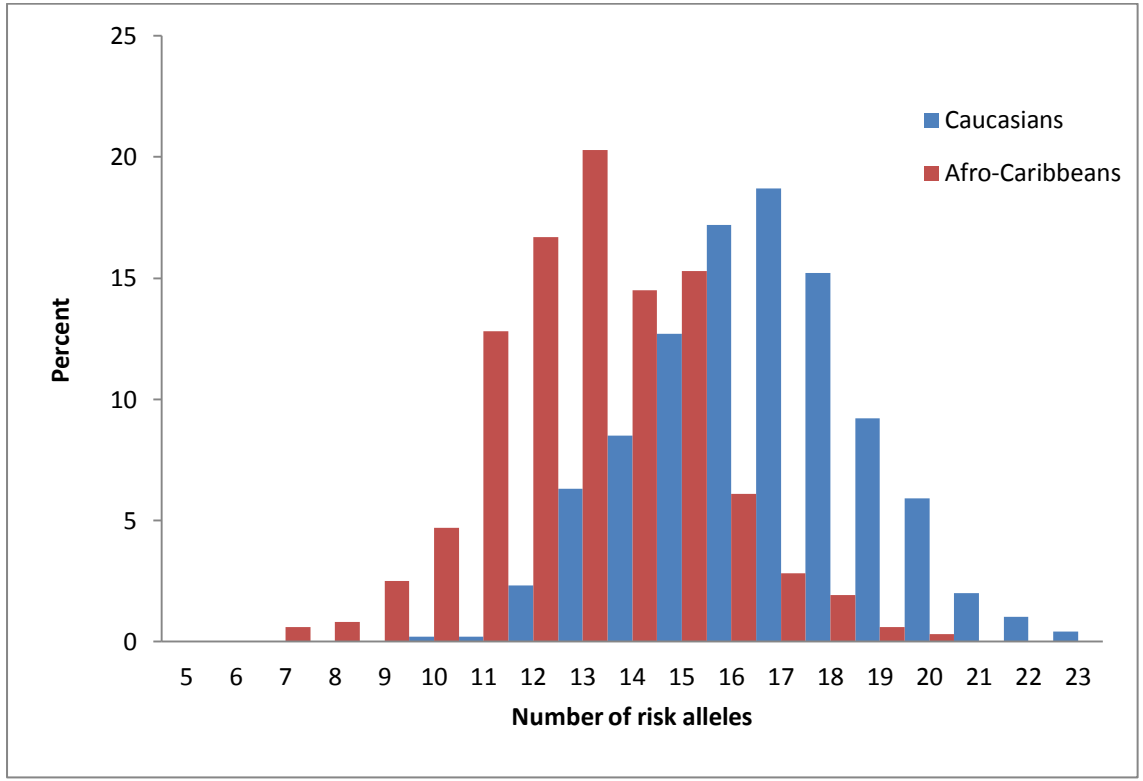
Data are presented as number (SD)

Supplemental table S5: Risk allele frequencies of the 19 SNPs in the control group of the two study samples and in other populations of European or African ancestry

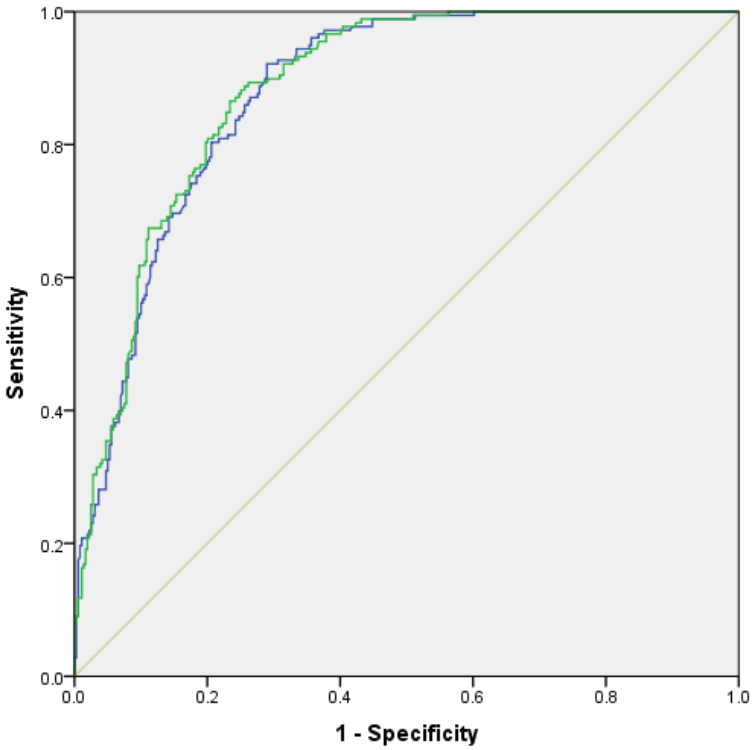
Gene	SNP	Risk Allele	RAF in Caucasians from NPHS (95%CI)		RAF in Caucasians from HapMAP or 1000 Genomes*	RAF in Afro-Caribbeans (95% CI)		RAF in Afro-Caribbeans from 1000 Genomes	RAF in Africans from HapMap or 1000 Genomes*	RAF in African-Americans from 1000 Genomes
ACE	**rs4341**	**G**	0.52	(0.50-0.53)	0.49*	0.60	(0.55-0.65)	0.58	0.59*	0.55
APOA5	**rs662799**	**G**	0.06	(0.05-0.07)	0.02	0.13	(0.10-0.17)	0.16	0.13	0.12
APOB	**rs1042031**	**A**	0.18	(0.17-0.19)	0.20	0.15	(0.12-0.19)	0.17	0.16	0.20
APOE	**rs429358**	**C**	0.17	(0.16-0.18)	0.18*	0.23	(0.19-0.28)	0.25	0.24*	0.20
APOE	**rs7412**	**T**	0.09	(0.08-0.10)	0.07	0.07	(0.04-0.10)	0.12	0.09	0.13
CDKN2A	**rs10757274**	**G**	0.48	(0.47-0.50)	0.45	0.21	(0.17-0.25)	0.19	0.14	0.29
PSRC1/*SORT1*	**rs599839**	**A**	0.78	(0.76-0.80)	0.72	0.25	(0.20-0.30)	0.25	0.17	0.20
CETP	**rs708272**	**C**	0.56	(0.53-0.59)	0.59*	0.76	(0.72-0.80)	0.75	0.81*	0.75
CXCL12	**rs1746048**	**C**	0.86	(0.84-0.88)	0.85	0.53	(0.48-0.58)	0.44	0.47	0.52
DAB2IP	**rs7025486**	**A**	0.26	(0.24-0.28)	0.32	0.32	(0.27-0.37)	0.33	0.42	0.27
LPA	**rs3798220**	**C**	0.02	(0.01-0.03)	0.03	0.01	(0-0.03)	0.00	0	0.05
LPA	**rs10455872**	**G**	0.07	(0.07-0.08)	0.08	0.01	(0-0.03)	0.00	0	0.02
LPL	**rs328**	**C**	0.90	(0.09-0.11)	0.88	0.94	(0.91-0.96)	0.91	0.97	0.93
LPL	**rs1801177**	**A**	0.01	(0.01-0.02)	0.02*	0.001	(0-0.003)	0.06	0.06*	0.03
MIA3	**rs17465637**	**C**	0.71	(0.69-0.72)	0.73	0.24	(0.20-0.28)	0.21	0.15	0.29
MRAS	**rs9818870**	**T**	0.16	(0.15-0.17)	0.17	0.08	(0.05-0.11)	0.08	0.05	0.10
NOS3	**rs1799983**	**T**	0.33	(0.32-0.35)	0.34	0.12	(0.09-0.15)	0.08	0.07	0.11
PCSK9	**rs11591147**	**G**	0.99	(0.99-100)	0.97	1	—	0.00	1	1
SMAD3	**rs17228212**	**C**	0.31	(0.30-0.32)	0.30	0.12	(0.09-0.15)	0.08	0.14	0.12

Data from HapMap are from HapMap-YRI (Yoruba in Ibadan, Nigeria) for Africans and HapMAP–CEU (western and northern Europe) for Caucasians
Data from 1000 Genomes (marked with an asterix*) are from British population for Caucasians and Yoruba population in Nigeria for Africans.
For African-Americans, all data are from 1000 genomes (South West USA).
RAF: risk allele frequency

Supplemental figure S1: Distribution of 19-SNP GRS categories in Afro-Caribbean and Caucasian controls



Supplemental figure S2: Incremental contribution of GRS19 to CHD discrimination in Afro-Caribbeans (N=537)



TCRFs + GRS AUC=0.883 (0.856-0.911)

TCRFs alone AUC=0.878 (0.850-0.906)

p=0.19

Predictions are based on logistic regression models incorporating TCRFs (age, sex, hypercholesterolemia, diabetes, hypertension, and smoking) alone or with the addition of the non-weighted GRS19.
The area under the curve (AUC) measures the ability of the model to discriminate between subjects with CHD and subjects without CHD