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Supplemental Data

Genome-wide Association and Population Genetic

Analysis of C-Reactive Protein in African American

and Hispanic American Women

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African Americans

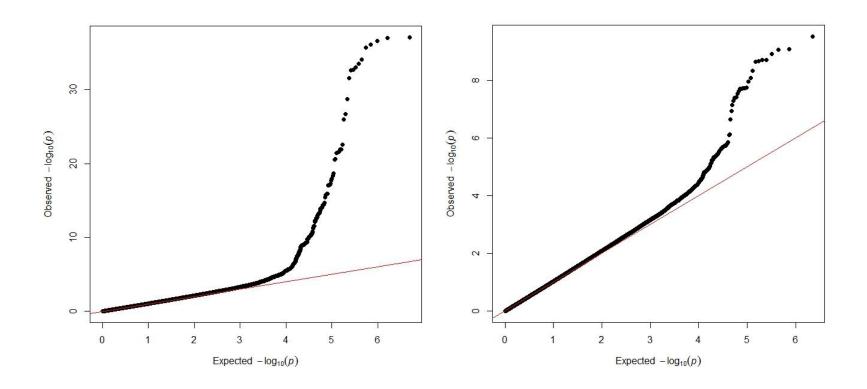


Figure S1. QQ Plot for Association of CRP in African Americans and Hispanic Americans

The inflation factors (λ_{GC}) were 1.053 for African Americans and 1.036 for Hispanic Americans, suggesting that the genome-wide association results were not markedly inflated by population stratification or other confounding factors.

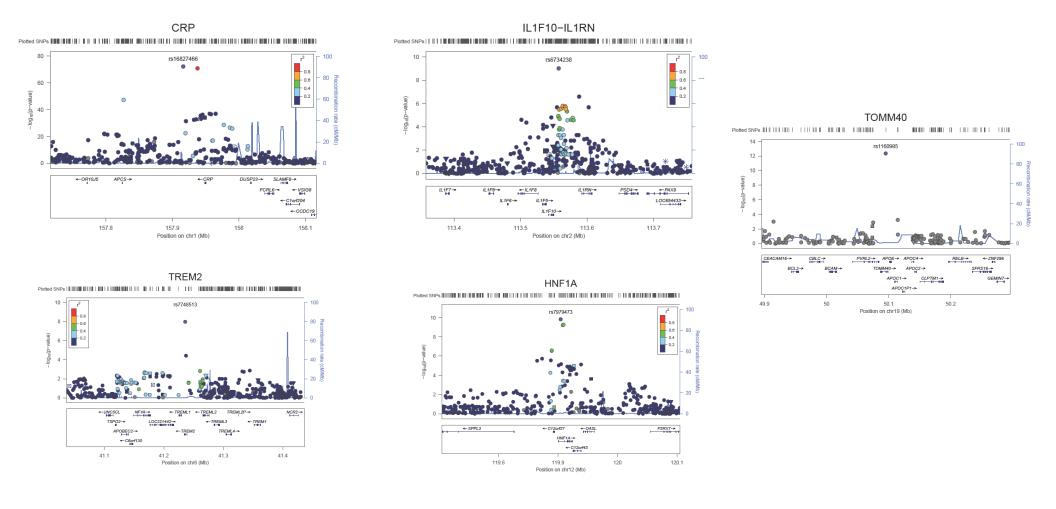
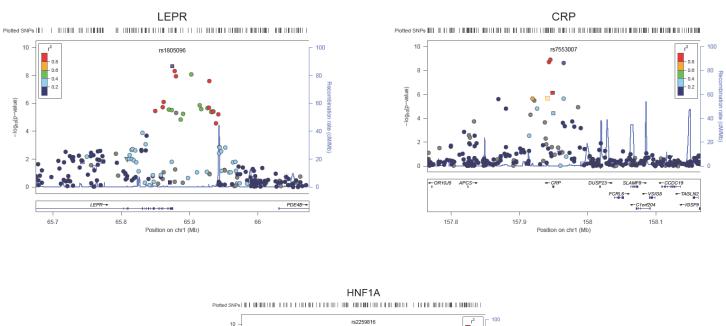


Figure S2. LD Regional Association Plots for CRP in African Americans

Shown are regional association plots generated using LocusZoom for the genome-wide significant regions (*CRP*, *IL1F10-IL1RN*, *TREM2*, *HNF1A*, and *TOMM40*). The index SNP in region is shown in purple. The color of the remaining SNPs indicates the level of pair-wise linkage disequilibrium (LD) based on r-squared relative to the index SNP. r-squared values were calculated from HapMap2 YRI. SNPs with missing LD information are shown in grey.



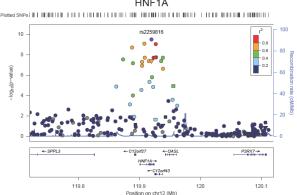
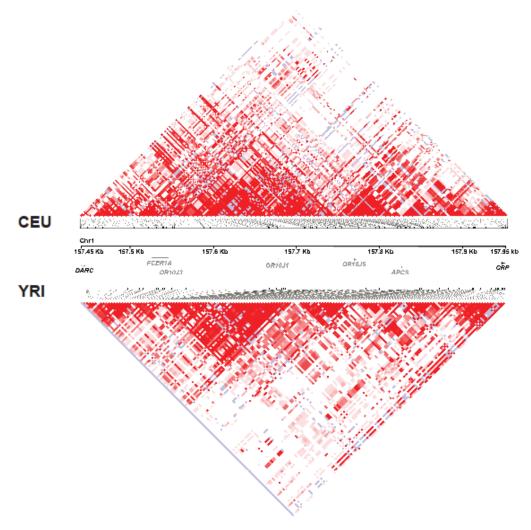


Figure S3. LD Regional Association Plots for CRP in Hispanic Americans

Shown are regional association plots generated using LocusZoom for the genome-wide significant regions (*LEPR*, *CRP*, and *HNF1A*). The index SNP in region is shown in purple. The color of the remaining SNPs indicates the level of pair-wise linkage disequilibrium (LD) based on r-squared relative to the index SNP. r-squared values were calculated from HapMap2 CEU. SNPs with missing LD information are shown in grey.



 $\textbf{Figure S4. Comparison of Linkage Disequilibrium (LD) between HapMap Populations in the Region of \textit{CRP} and \textit{DARC} } \\$

LD plots based on pair-wise r-squared between SNPs were generated separately for CEU and YRI using Haploview.

Table S1. Transferability of Previously Identified European and Asian CRP Loci to African American and Hispanic American Women in WHI-SHARe

Discovery Population [Ref.]	Chromosome	Locus		Original GWA	Original GWAS (in EA or Asians)			WHI-SHARe African Americans		WHI-SHARe Hispanics	
			Lead SNP	Effect Allele	EAF	Beta (SE)	EAF	BETA ± SE (P-value)	EAF	BETA ± SE (P-value)	
European [12]	1q23.2	CRP	rs2794520	Т	0.34	-0.160 (0.006)	0.22	$-0.275 \pm 0.021 (3.8 \times 10^{-37})$	0.35	-0.158 ± 0.026 (1.2x10 ⁻⁹)	
European [15]	19q13.32	APOC1	rs4420638	G	0.20	-0.236 (0.009)	0.20	-0.045 ± 0.023 (0.047)	0.19	-0.171 ± 0.040 (1.8x10 ⁻⁵)	
European [15]	12q24.31	HNF1A	rs1183910	Т	0.33	-0.149 (0.006)	0.13	-0.119 ± 0.026 (6.5x10 ⁻⁶)	NA	NA	
European [15]	1p31.3	LEPR	rs4420065	Т	0.39	-0.090 (0.005)	0.41	-0.079 ± 0.019 (2.7x10 ⁻⁵)	0.44	-0.145 (0.026) (2.6x10 ⁻⁸)	
European [15]	1q21.3	IL6R	rs4129267	Т	0.40	-0.079 (0.005)	0.15	-0.110 ± 0.025 (1.8x10 ⁻⁵)	0.48	-0.087 ± 0.025 (4.3x10 ⁻⁴)	
European [15]	2q13	GCKR	rs1260326	Т	0.41	0.072 (0.005)	0.17	0.058 ± 0.025 (0.019)	0.36	0.098 ± 0.026 (2.0x10 ⁻⁴)	
European [15]	1q44	NLRP3	rs12239046	Т	0.39	-0.047 (0.006)	0.50	-0.050 ± 0.018 (0.0047)	0.38	-0.055 ± 0.025 (0.031)	
European [15]	2p23.3	IL1F10	rs6734238	G	0.42	0.050 (0.006)	0.44	0.108 ± 0.018 (1.4 x10 ⁻⁹)	0.36	0.065 ± 0.026 (0.0097)	
European [15]	8p23.1	PPP1R3B	rs9987289	A	0.10	-0.069 (0.011)	0.19	-0.094 ± 0.024 (8.3 x10 ⁻⁵)	NA	NA	
European [15]	12q23.2	ASCL1	rs10745954	А	0.50	0.039 (0.006)	0.22	0.049 ± 0.022 (0.027)	NA	NA	
European [15]	20q13.12	HNF4A	rs1800961	Т	0.05	-0.088 (0.015)	0.008	-0.248 ± 0.100 (0.013)	0.04	-0.268 ± 0.061 (7.7 x10 ⁻⁶)	
European [15]	15q22.2	RORA	rs340029	С	0.38	-0.032 (0.006)	0.18	-0.021 ± 0.024 (0.38)	0.37	-0.033 ± 0.026 (0.18)	
European [15]	16q12.1	SALL1	rs10521222	Т	0.06	-0.104 (0.015)	NA	NA	0.03	-0.224 ± 0.108 (0.039)	
European [15]	1p32.4	PABPC4	rs12037222	A	0.24	0.045 (0.007)	NA	NA	NA	NA	
European [15]	7q11.23	BCL7B	rs13233571	Т	0.14	-0.054 (0.009)	0.05	-0.079 ± 0.041 (0.057)	0.07	-0.038 ± 0.048 (0.43)	
European [15]	21q22.2	PSMG1	rs2836878	A	0.28	-0.032 (0.006)	0.12	-0.129 ± 0.041 (0.0017)	0.26	-0.055 ± 0.032 (0.089)	
European [15]	14q24.2	RGS6	rs4903031	G	0.21	0.032 (0.007)	0.15	0.007 ± 0.029 (0.81)	0.20	0.053 ± 0.032 (0.095)	
Japanese	7p15	IL6	rs2097677	A	0.19	0.101 (0.015)	0.20	0.0124 ± 0.022 (0.58)	NA	NA	

EAF = effect allele frequency. EA = European Americans.

Genomic positions and annotations are given using NCBI build 36.1. Effect allele is always on the forward strand. Effect size (BETA) and standard error (SE) are given a natural logtransformed CRP. NA indicates genotype data not available due to QC or imputation failure. Based on the number of SNPs tested, the Bonferroni-corrected significance threshold is *P*<0.0028.