

Supplemental Figure 1. Scatter plot for a principal component analysis comparing the STRUCTURE-defined EA study subjects with HAPMAP subjects. Principal components were fit for a data set that include eMERGE EA study population and the CEU, YRI and CHB/JPT HAPMAP populations. The graph shows the first 2 principal components. The eMERGE EAs are clustered tightly around the CEU population.



Supplemental Figure 2. Scatter plot for a principal component analysis comparing the STRUCTURE-defined AA study subjects with HAPMAP subjects. Principal components were fit for a data set that include eMERGE AA study population and the ASW, LWK, MKK, CEU, YRI and CHB/JPT HAPMAP populations. The graph shows the first 2 principal components. The eMERGE AAs are clustered around the ASW, LWK, MKK, and YRI populations.



Supplemental Figure 3. Scatter plot for a principal component analysis comparing the study subjects who did not fall into the EA or AA STRUCTURE-defined clusters with HAPMAP subjects. Principal components were fit for a data set that included the study subjects and the ASW, LWK, MKK, CEU, YRI and CHB/JPT HAPMAP populations. The graph shows the first 2 principal components.



Supplemental Figure 4. A QQ plot for SNP associations from a GWAS of ACE-inhibitor induced cough using an additive model adjusted for 10 PCs, birth year and sex.



Supplemental Figure 5. LocusZoom plot of most strongly associated SNPs from GWAS located in the region of *KCNIP4* (chr4:20330238–22350374), centered around SNP rs145489027 (shown in purple). Linkage disequilibrium (based on r² values) with respect to rs145489027 are based on a 1000 Genomes African reference population. Imputed SNPs are denoted by squares and genotyped SNPs by circles.



Supplemental Figure 6. Manhattan and QQ plots for SNP associations from a GWAS of ACE-inhibitor induced cough using an additive model adjusted for 10 PCs, birth year, sex, smoking status and cough risk factors.



Supplemental Figure 7. Manhattan and QQ plots for SNP associations from a GWAS of ACE-inhibitor induced cough using an additive model that excludes subjects with lung disease and is adjusted for 10 PCs, birth year, sex, smoking status and cough risk factors.