**Supplementary Data 1:** Descriptive characteristics of sample stratified by gender (men and women) and by regions (West, South and East)

**Supplementary Data 2:** Analysis of top SNPs variants in the combined analysis by regions (West, South and East)

**Supplementary Data 3:** Summary of SNPs with p-value <10-4 in at least one of the analysis

**Supplementary Data 4:** Selected SNPs (p<1E-06) for the sex-difference test

Supplementary Data 5: Summary of look-up from previously reported variants for cIMT

**Supplementary Data 6:** Summary of regions indicative of local replication from previously reported loci for cIMT

**Supplementary Data 7:** Look-up in Gwas Catalog for all SNPs with p-value <10-4 in at least one of the analysis

**Supplementary Data 8a:** Functional annotation for selected SNPs associated (p<1E-05) with cIMT in the combined analysis

**Supplementary Data 8b:** Functional annotation for selected SNPs associated (p<1E-05) with cIMT in the Female analysis

**Supplementary Data 8c:** Functional annotation for selected SNPs associated (p<1E-05) with cIMT in the Male analysis

**Supplementary Data 9a:** Genes implicated by positional, eQTL, or chromatin interaction mapping of SNPs associated with cIMT in the combined analysis

**Supplementary Data 9b:** Genes implicated by positional, eQTL, or chromatin interaction mapping of SNPs associated with cIMT in the Female analysis

**Supplementary Data 9c:** Genes implicated by positional, eQTL, or chromatin interaction mapping of SNPs associated with cIMT in the Male analysis

**Supplementary Data 10a:** Gene-sets with significant enrichment for genes associated with gene-smoking interaction for cIMT based on positional, eQTL, or chromatin interaction of suggestive SNPs (p<1E-05) with cIMT in the combined analysis.

**Supplementary Data 10b:** Gene-sets with significant enrichment for genes associated with gene-smoking interaction for cIMT based on positional, eQTL, or chromatin interaction of suggestive SNPs (p<1E-05) with cIMT in the female analysis.

**Supplementary Data10c:** Gene-sets with significant enrichment for genes associated with gene-smoking interaction for cIMT based on positional, eQTL, or chromatin interaction of suggestive SNPs (p<1E-05) with cIMT in the male analysis.

Supplementary Data 11: Post-hoc power calculations based on Gwas significant results