

Description of Additional Supplementary Files

Supplementary Data 1 | Complete list of SNPs identified using SPAGxECCT with G×E p values less than 5×10^{-8} for the highlighted four combinations of environmental factors and time-to-event traits. Tests conducted in the analysis were two-sided.

Supplementary Data 2 | Summary of 30 E-phenotype pairs in the SPAGxE+ analyses.

Supplementary Data 3 | Complete list of SNPs identified using SPAGxEmixCCT with G×E p values less than 5×10^{-8} for the highlighted four combinations of environmental factors and time-to-event traits. Tests conducted in the analysis were two-sided.

Supplementary Data 4 | Empirical type I error rates and ratios of empirical type I error rates / significance level of SPAGxEmixCCT, NormGxEmix, and SPAGE at a significance level 5×10^{-6} for time-to-event trait analysis (binary trait analysis for SPAGE) in a simulated admixed population under normal distributed environmental factor and scenario 1, that is, event rates in EUR and EAS are the same.

Supplementary Data 5 | Empirical type I error rates and ratios of empirical type I error rates / significance level of SPAGxEmixCCT, NormGxEmix, and SPAGE at a significance level 5×10^{-6} for time-to-event trait analysis (binary trait analysis for SPAGE) in a simulated admixed population under normal distributed environmental factor scenario 2, that is, event rate in EUR is higher than that in EAS.