

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: TCGA Cancer type abbreviations and sample counts

File Name: Supplementary Data 2

Description: Description of IP Components

File Name: Supplementary Data 3

Description: TCGA IP component within cancer type rank-normalized values

File Name: Supplementary Data 4

Description: Genome-wide Complex Trait Analysis (GCTA) results for full TCGA

File Name: Supplementary Data 5

Description: Genome-wide Complex Trait Analysis (GCTA) results for BRCA

File Name: Supplementary Data 6

Description: Significant TIME Associations from GWAS Analysis of 157 IP Components

File Name: Supplementary Data 7

Description: Significant TIME Associations from conditional GWAS Analysis of HLA-DRB5 using only individuals with HLA-DRB1*15 and HLA-DRB1*16 alleles

File Name: Supplementary Data 8

Description: IP components contributing most to loadings for the first 10 PCs from PCA analysis of 157 IP components across TCGA samples

File Name: Supplementary Data 9

Description: TIME eQTL association with cancer type

File Name: Supplementary Data 10

Description: Literature SNP Significant TIME Associations

File Name: Supplementary Data 11

Description: UKBioBank PheWAS Results for TIME eQTLs

File Name: Supplementary Data 12

Description: Kaplan-Meier Survival Analysis of TIME eQTLs

File Name: Supplementary Data 13

Description: Covariates included for CoxPH survival analysis by tumor type

File Name: Supplementary Data 14

Description: TCGA exome-imputed versus SNP Array measured mismatch frequency

File Name: Supplementary Data 15

Description: METAL Immune-Checkpoint Blockade (ICB) association analysis results

File Name: Supplementary Data 16

Description: Association of TIME eQTLs and Immune-Checkpoint Blockade (ICB) markers with ICB Response

File Name: Supplementary Data 17

Description: DESeq2 analysis of ICB variant TIME genes

File Name: Supplementary Data 18

Description: Selection criteria for prioritizing ICB TIME genes for validation studies

File Name: Supplementary Data 19

Description: CTSS primer sequences

File Name: Supplementary Data 20

Description: GREGOR histone mark enrichment analysis of TIME eQTLs

File Name: Supplementary Data 21

Description: Significant cell-type associations of TIME eQTLs