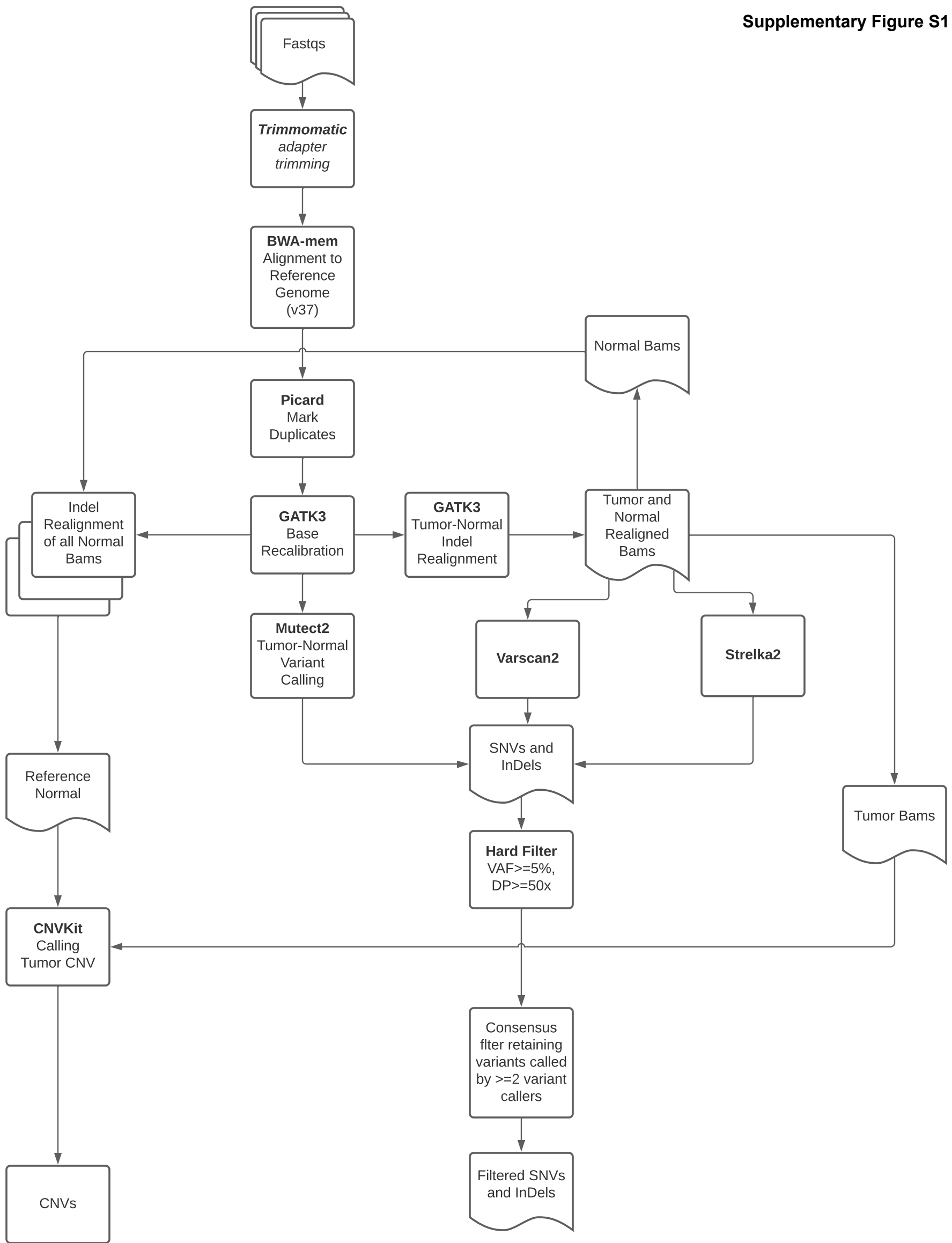


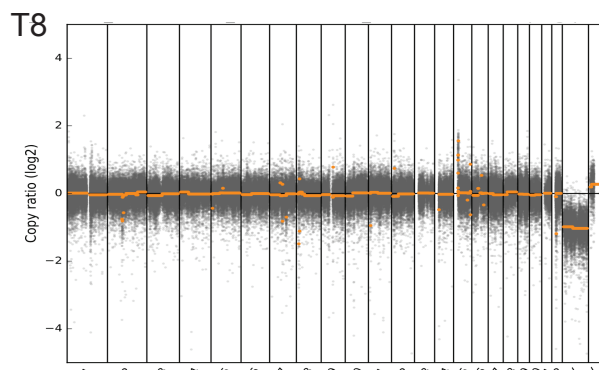
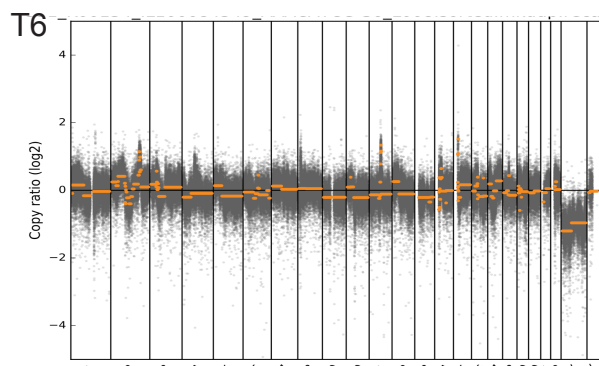
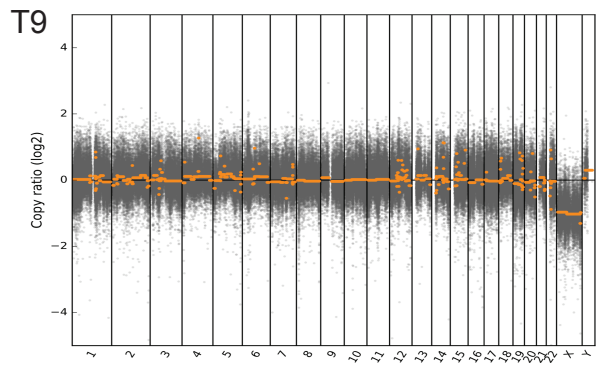
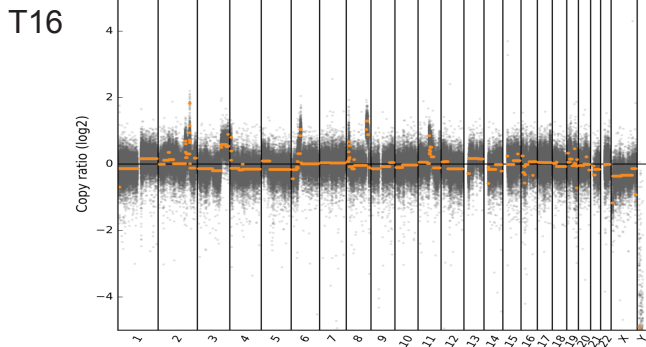
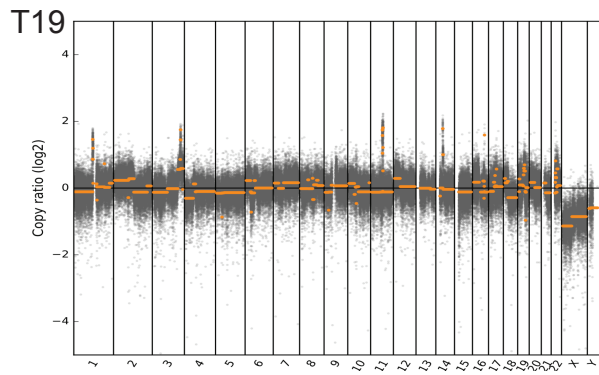
**Exome Sequencing Identifies Novel Somatic Variants in African
American Esophageal Squamous Cell Carcinoma**

Hayriye Verda Erkizan, Shrey Sukhadia, Thanemozhi G. Natarajan,
Gustavo Marino, Vicente Notario, Jack H. Lichy, Robert Wadleigh

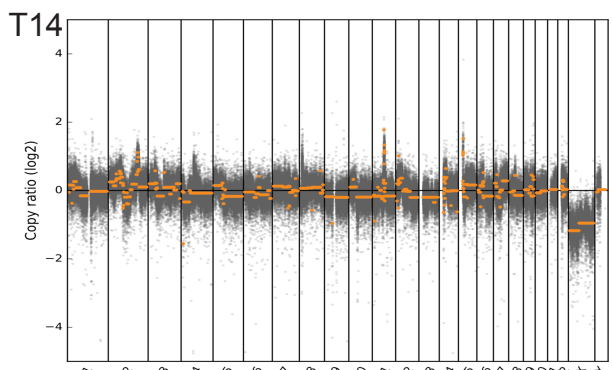
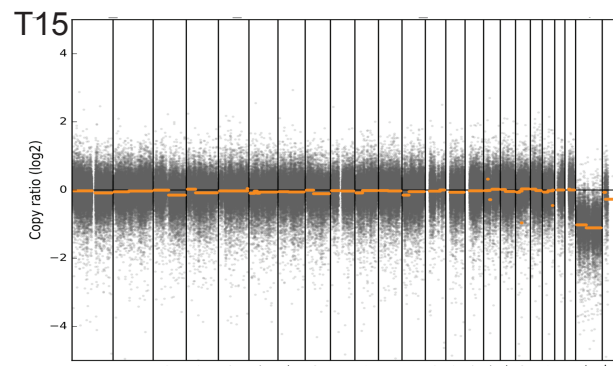
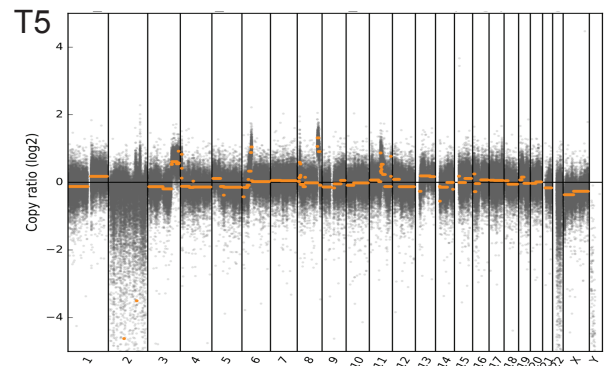
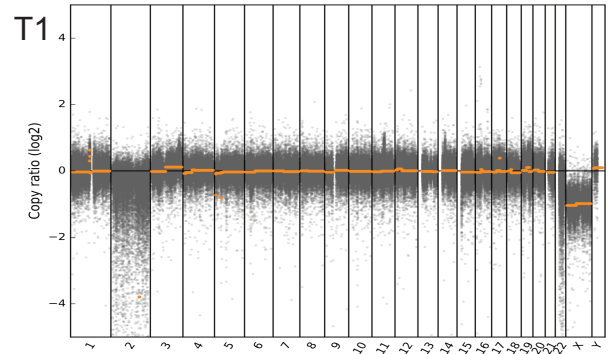
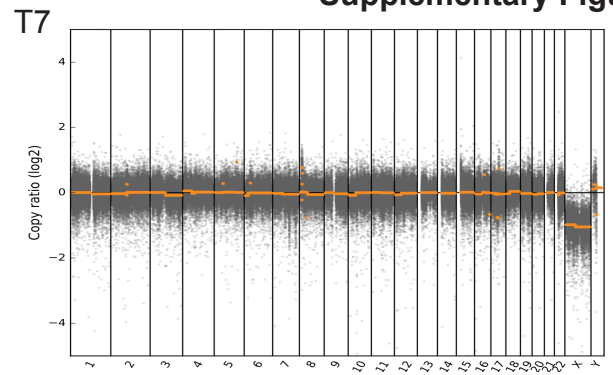


Supplementary Figure S1: Bioinformatic Analysis pipeline used in the study.

After preprocessing and mapping reads to the reference genome, somatic Single Nucleotide Variants (SNVs) and short InDels were called by using Mutect2, VarScan2 and Strelka 2. CNVKit was used for calling copy number variations.



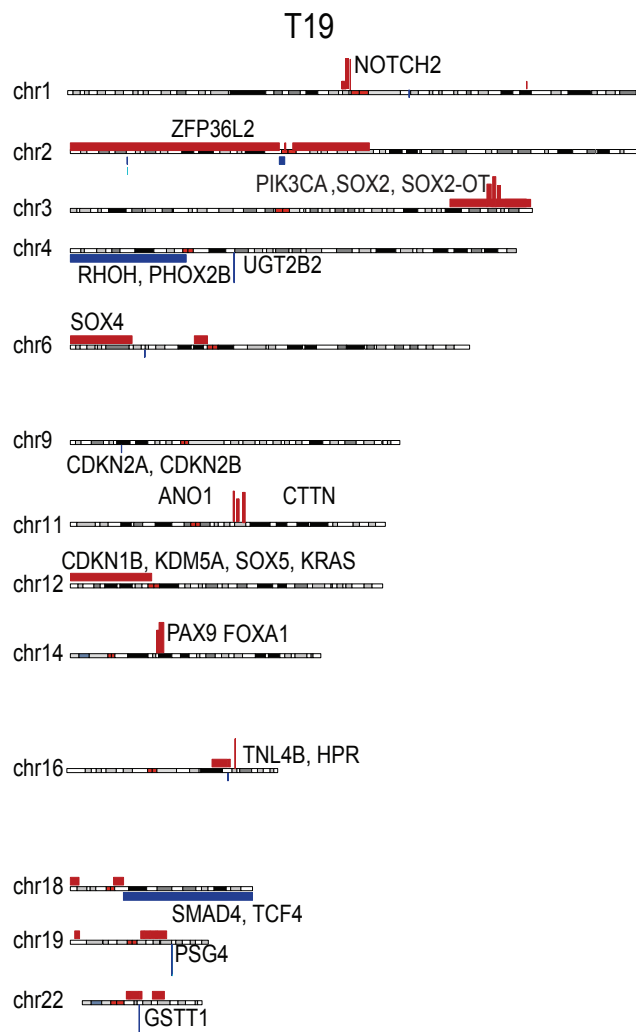
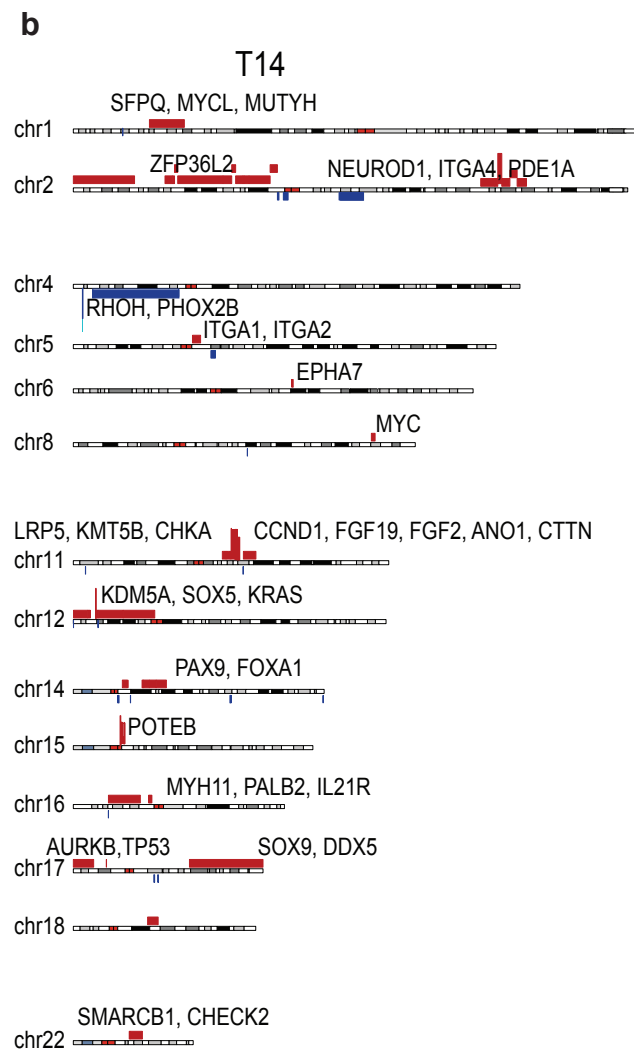
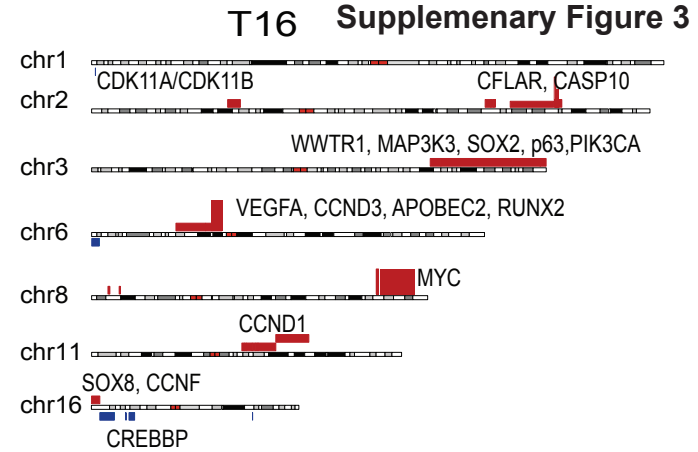
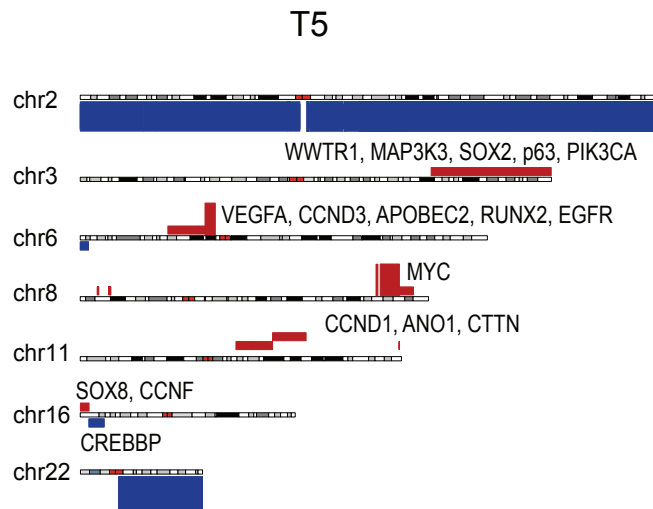
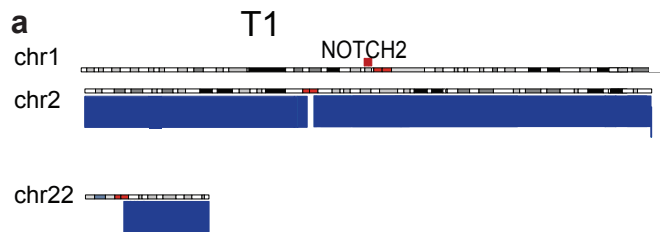
Chromosomes



Chromosomes

Supplementary Figure S2: Scatter plots of copy number aberrations in AA ESCC

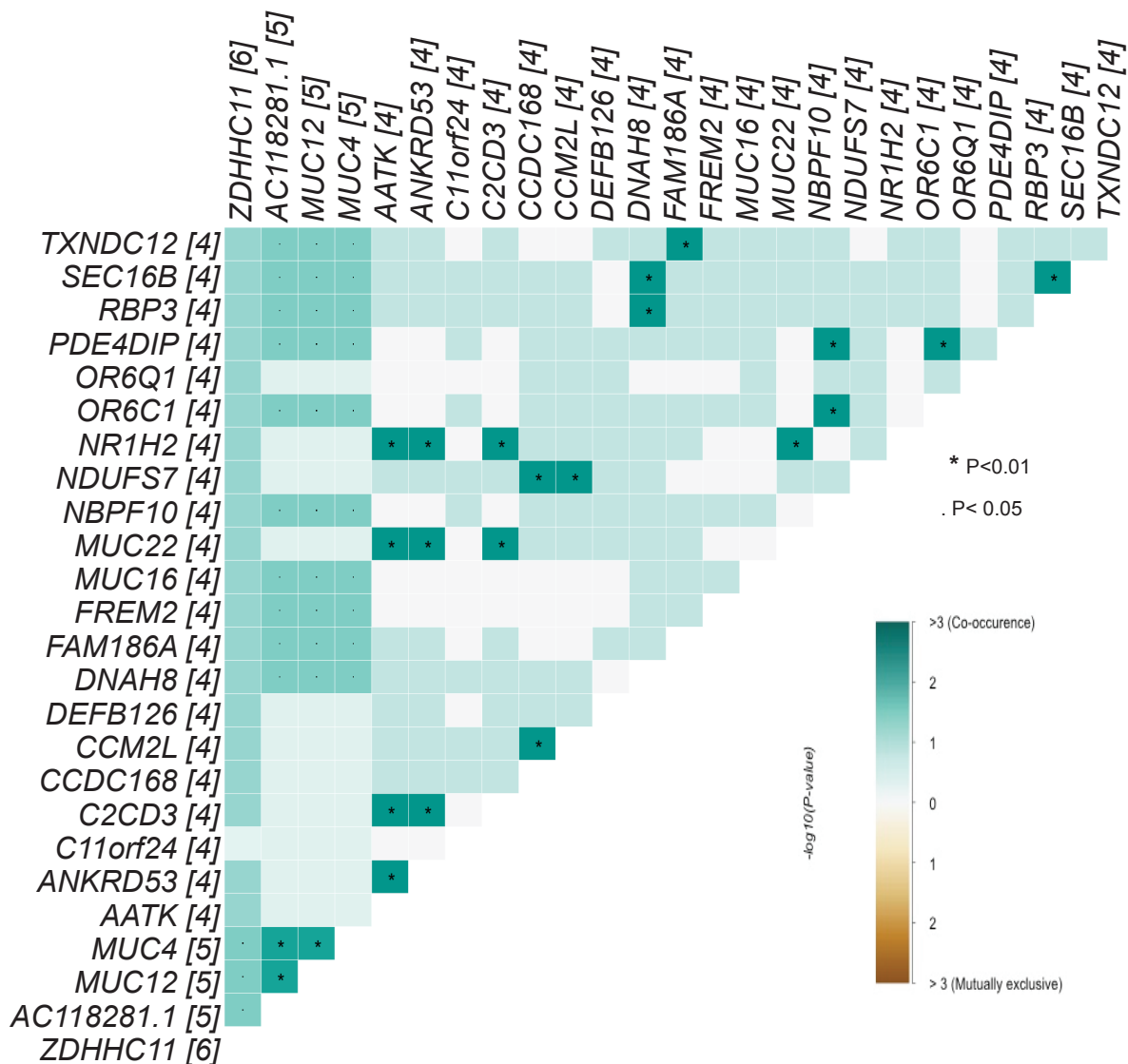
The scatter plots of CNVKit results indicate the copy number changes across the genome. Y-axis represents copy number ratio, (\log_2).



Supplementary Figure S3: Representative significant somatic copy number changes in AA ESCC

a. Samples T1 and T5 harbored whole chromosome 2 and chromosome 22q deletions.

b. SCNAs in AA ESCC genomic regions encode cancer-related genes.



Supplementary Figure S4: Co-occurrence of mutations in AA-ESCC. The somatic interactions function of maftools detected co-occurring set of genes by performing pair-wise Fisher’s Exact test.