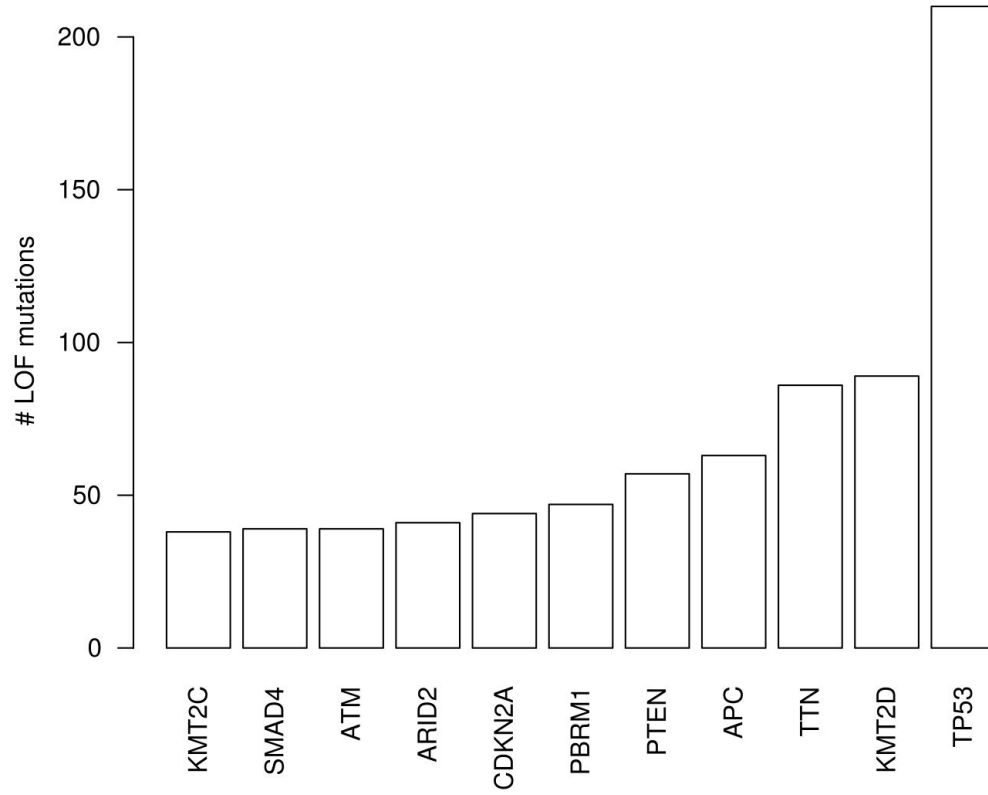
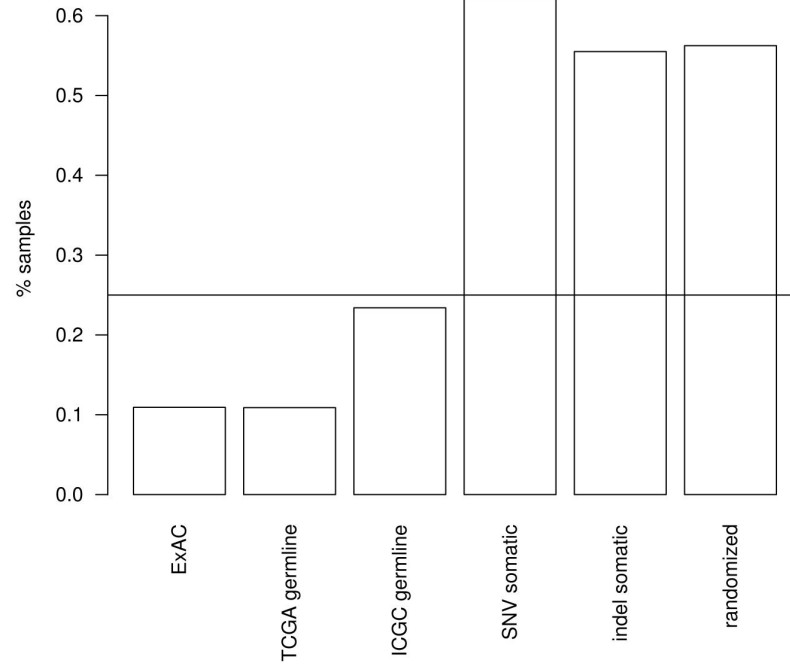


ALoFT is a tool for classifying protein truncating events according to their probable impact. We used ALoFT to identify key gene loss of function events (LOFs) across all cancers, and in particular cancer types. Germline and somatic LOFs are correlated, clarifying how loss of gene function in germline influences subsequent somatic burdening in cancer. We show that cancer LOFs are enriched in genes essential to organismal survival and cellular processes. Examination of individual tumor samples with high burden of LOF events, gives insight into how cancerous processes test the limits of cell biology.

### Top 10 LOF genes, all cancers (indel/SNP combined)



### top 100 pLOFs in SHet essential genes



### Indels vs. SNPs per Sample

