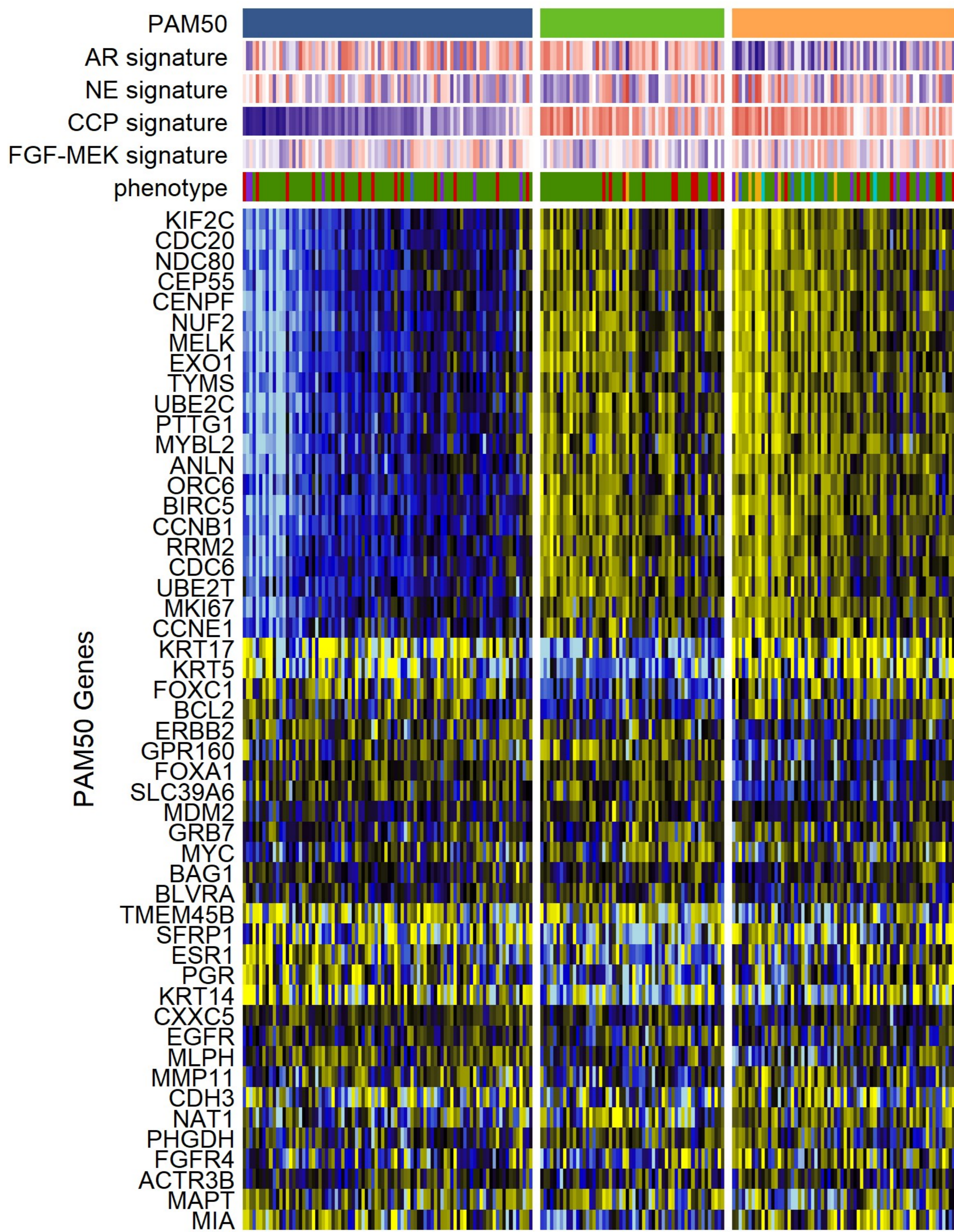


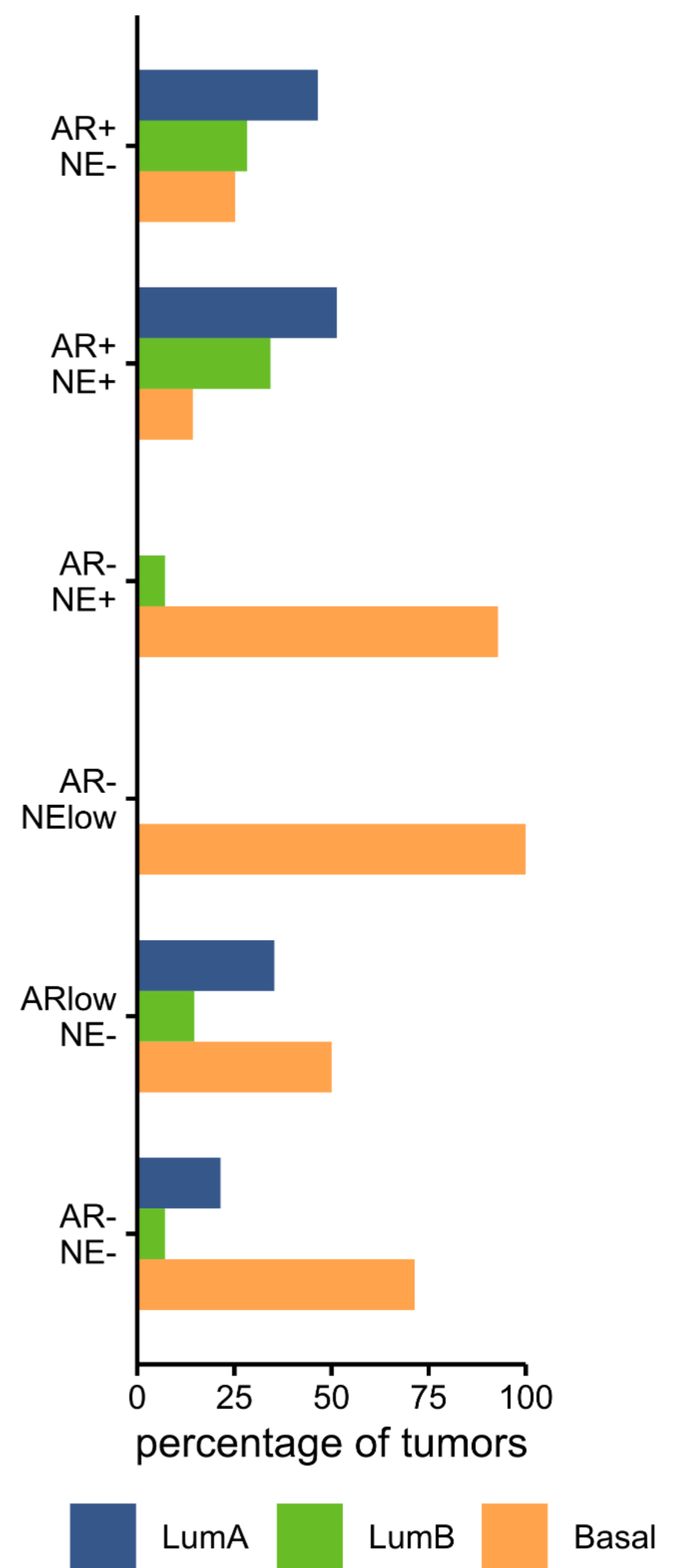
A

SU2C - capture (n=212)

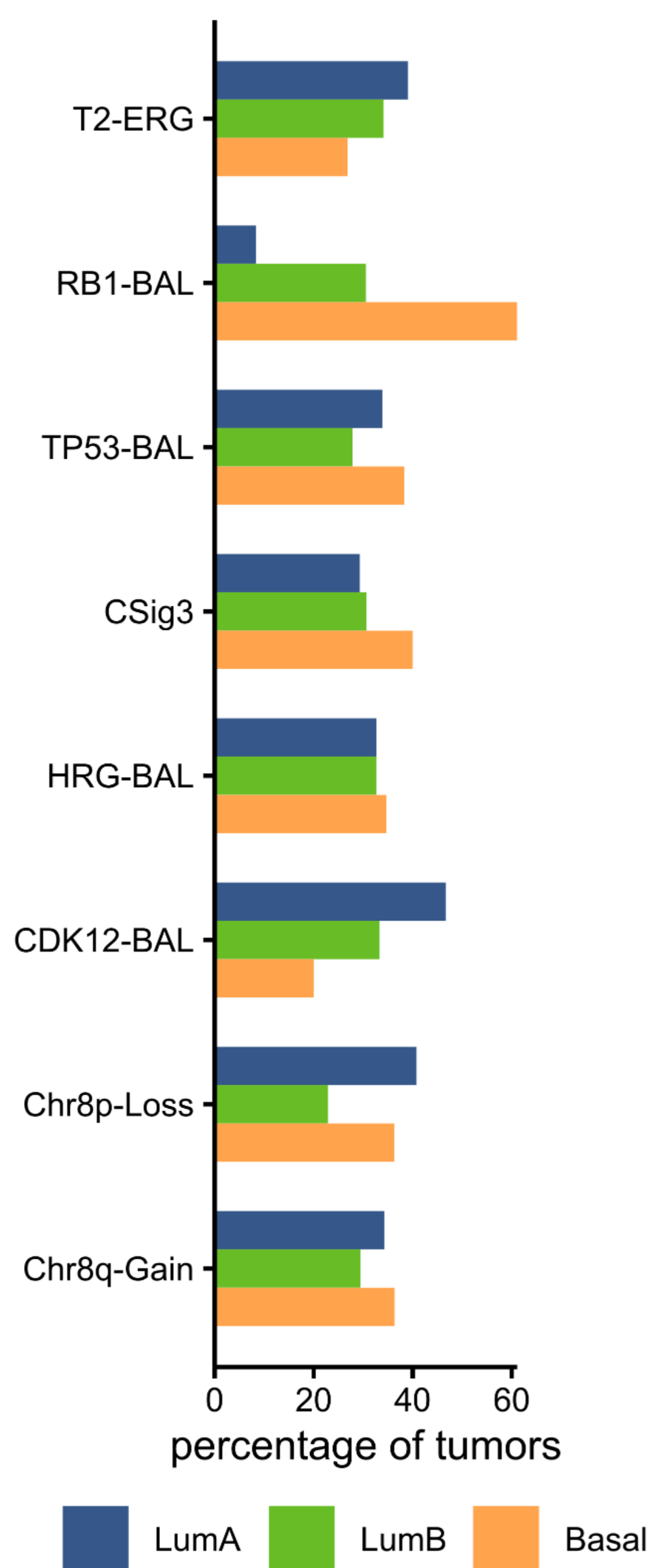
LumA LumB Basal



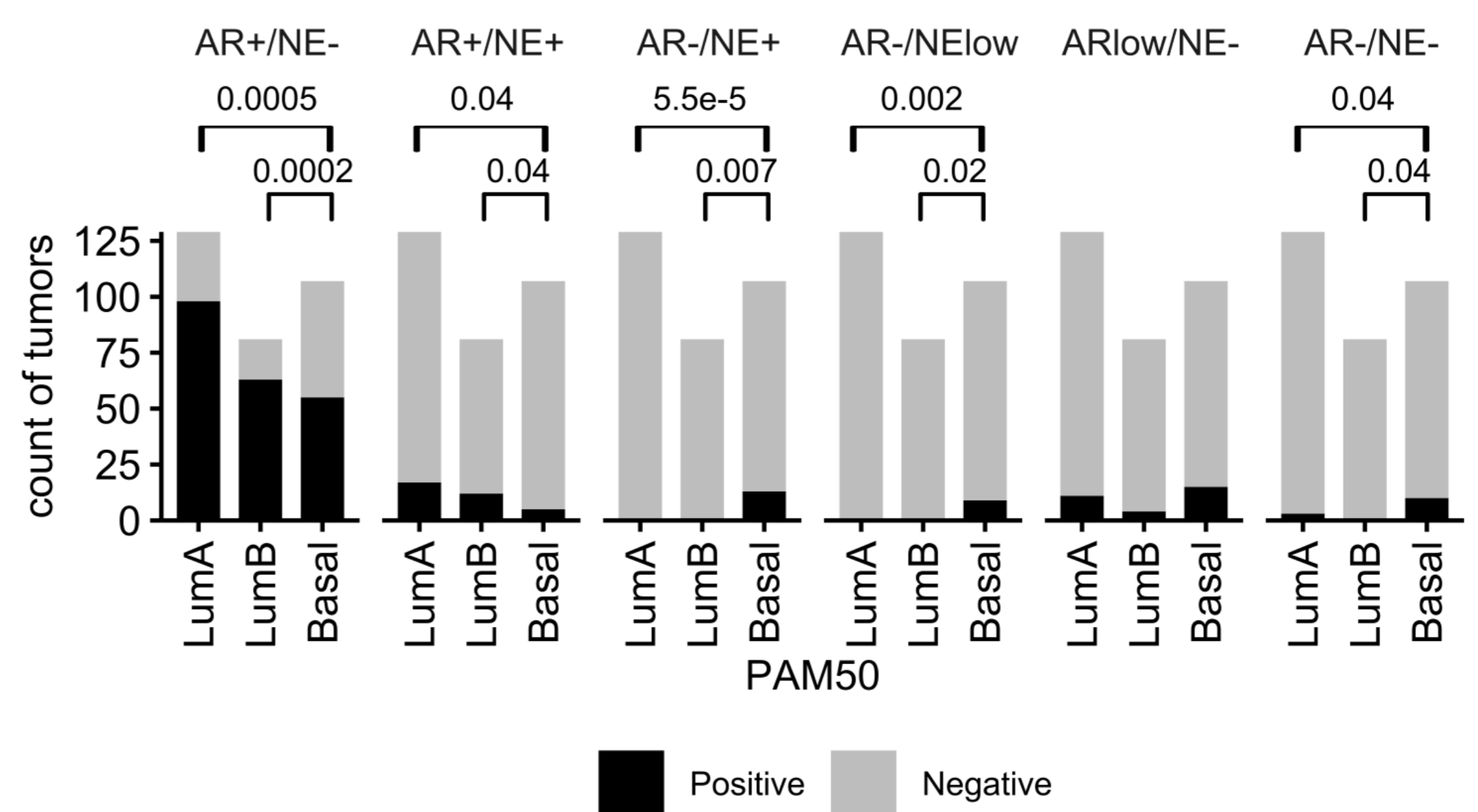
B



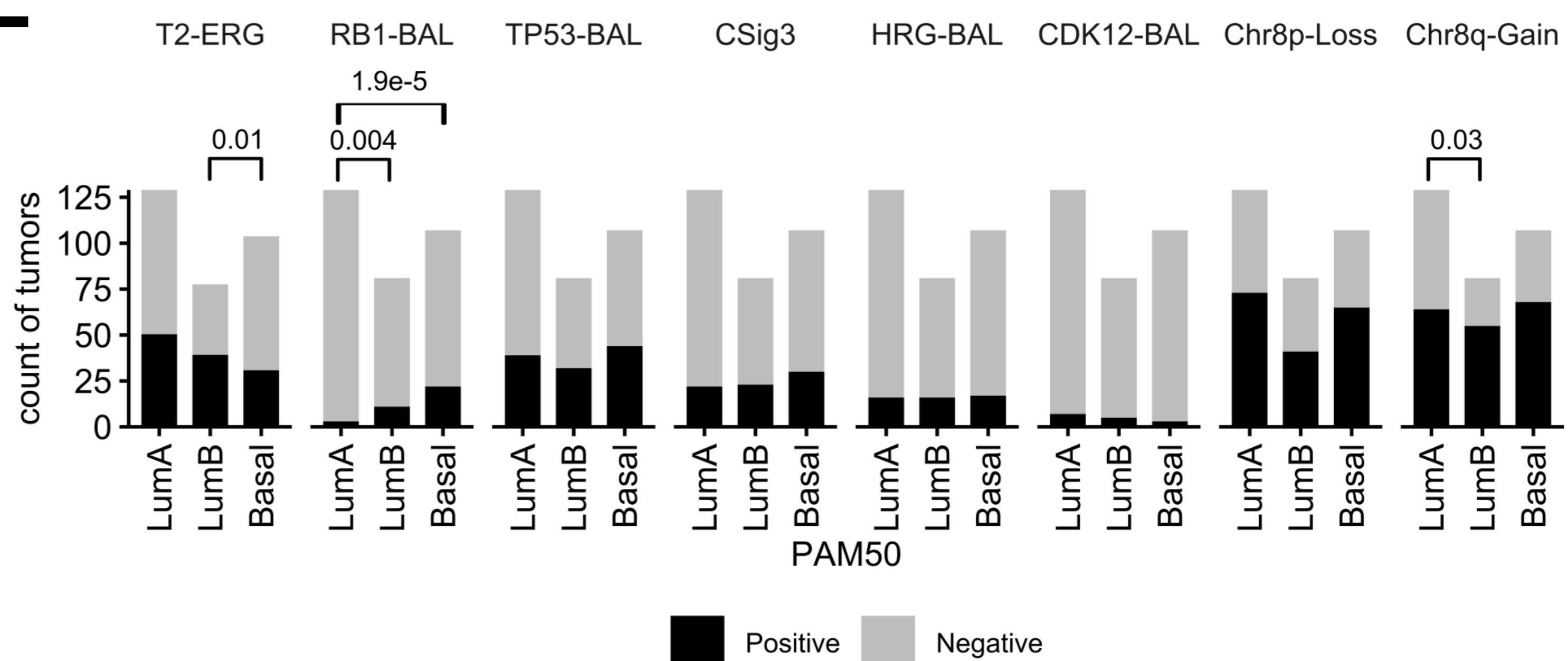
C



D



E



Supplemental Figure 1. PAM50 classification of metastatic prostate cancer associates with phenotypes and genotypes. (A) PAM50 classification using the SU2C RNAseq probe-capture dataset partitions mCRPC tumors into LumA, LumB and Basal subtypes. Fold difference scale reflects mean-centered log₂ FPKM values from RNAseq. Molecular signature scores and phenotypes shown at the top of plot and colored according to legends at the right side. (B,D) mCRPCs with neuroendocrine (NE) characteristics are predominantly classified into the PAM50 Basal subtype whereas the common AR active/NE negative mCRPCs are subclassified into LumA, LumB and Basal subtypes. (C,E) PAM50 subtypes are not associated with common genomic alterations observed in mCRPC except for *RB1* loss which is enriched in the PAM50 Basal subtype compared to LumA and LumB, *TMPRSS2-ERG* fusion event enrichment in LumB compared to Basal, and Chr8q-gain in LumB compared to LumA tumors. T2-ERG, *TMPRSS2-ERG* fusion; RB1-BAL, bi-allelic loss of *RB1*; TP53-BAL, bi-allelic loss of *TP53*; CSig3, COSMIC mutational ‘Signature 3’; HRG-BAL, bi-allelic loss of core homology directed DNA repair genes; CDK12-BAL, bi-allelic loss of *CDK12*.