



Supplementary Figure 1: A. Terminal Tumor volume of MOC2 WT/KO-Gal1 tumors in Rag2^{-/-} IL2rg^{-/-} mice. **B.** Gating strategy used for analyses of PMN-MDSCs and M-MDSCs in tumor and lung tissues. **C.** Unsupervised tSNE clustering of live cells in MOC2 WT/KO-Gal1 tumor showing the proportion of M-MDSC, PMN-MDSC, and CD8⁺ T cells. **D.** Visual representation of the spleens isolated from either naïve mice or mice bearing WT- or KO-Gal1 tumors. **E.** Comparison of MDSC enrichment scores between smaller T1-2 and larger T3-4 tumors in the HNSCC TCGA cohort. The student's t-test was used to assess the significance of the difference between the two groups. **F.** Heat map showing gene expression clustering based on the MDSC enrichment score in the HNSCC TCGA cohort. Differentially expressed genes (DEGs) were defined by a false discovery rate smaller than 0.05 and fold change higher than 1.5. **G.** Representative images showing low and high staining Gal1 or LOX1 (OLR1, established marker of PMN-MDSCs) using immunohistochemistry (IHC). **H.** Table showing the distribution of tumors expressing high or low Gal1 and high or low LOX1 (PMN-MDSCs) in 81 patients with oral cavity tumors. Gal1 and LOX1 staining distribution was analyzed using a chi-square test and was not statistically significant.