Supplemental Figure 2. Top DEGs in OPSCC subgroups as identified by NanoString Pancancer IO360. A, B) Volcano plots of upregulated DEGs identified by NanoString Pancancer IO360 between HPV- and HPV16⁺ IR (A) and HPV⁺ and HPV16⁺ IR⁺ (B) OPSCC. Only one statistically significant DEG was found for the latter. C) Two-dimensional UMAP plots (top) displaying single cell transcriptomics of total 28,296 cells (left). Each dot represents a single cell.

Expression levels of CD19, MS4A1 (CD20) and BLK are depicted in color code. Violin plot (right) displaying expression of BLK within B cells from HPV16⁺ IR⁺ (blue; left) and HPV16⁺ IR⁻ (orange; right) OPSCC. D) Kaplan-Meier survival curves based on high/low BLK or CXCL12 expression (classification based on median BLK or CXCL12 expression) upregulated in HPV16⁺ IR⁺ compared to HPV16⁺ IR⁻ OPSCC patients for all OPSCC patients analyzed by NanoString Pancancer IO360 (n=21; left), for the HPV16⁺ patients within this cohort (n=13; middle), and for a large independent TCGA cohort of HPV16⁺ OPSCC (n=69; right). E) Kaplan-Meier survival curves based on high/low expression of the top 3 DEGs (CCL20, BMP2 and CXCL3) upregulated in HPV16⁺ IR⁺ compared to HPV16⁺ IR⁻ OPSCC patients for all OPSCC patients analyzed by NanoString Pancancer IO360 (n=21, left), for the HPV16⁺ patients within this cohort (n=13; middle), and for a large independent TCGA cohort of HPV16⁺ OPSCC (n=69; right). F) Linear regression analysis of top upregulated DEGs BLK and CXCL12 in HPV16⁺ IR⁺ compared to HPV16⁺ IR⁻ OPSCC versus cell type profiles of CD8 (CD8A), CD4, Tbet⁺ T cells (TBX21) and DC (ITGAX, CD11c). Upper 2 panels display all OPSCC patients analyzed by NanoString Pancancer IO360 (n=21). Each patient is represented by a colored dot: HPV (red), HPV16⁺ IR⁺ (blue) and HPV16⁺ IR⁻ (green). The lower 2 panels show the regression analysis of the 69 HPV16⁺ OPSCC patients of the independent TCGA cohort. G) Linear regression analysis of LTB versus indicated genes involved in tumor cell migration (metastases) and cell activation.