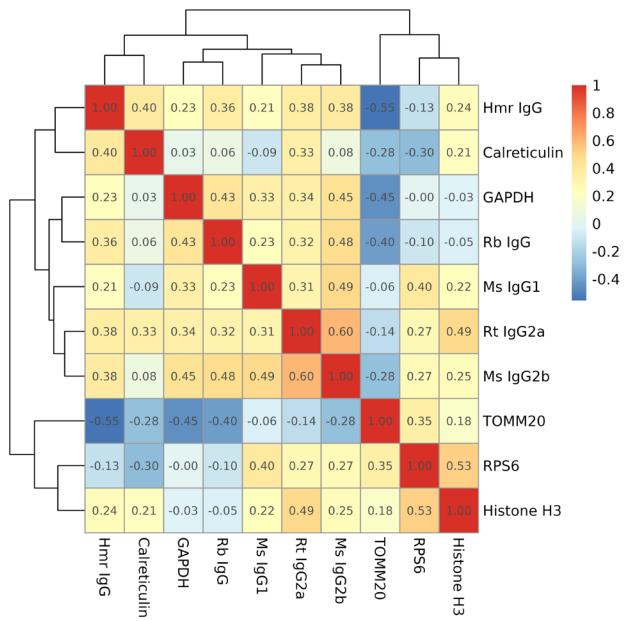


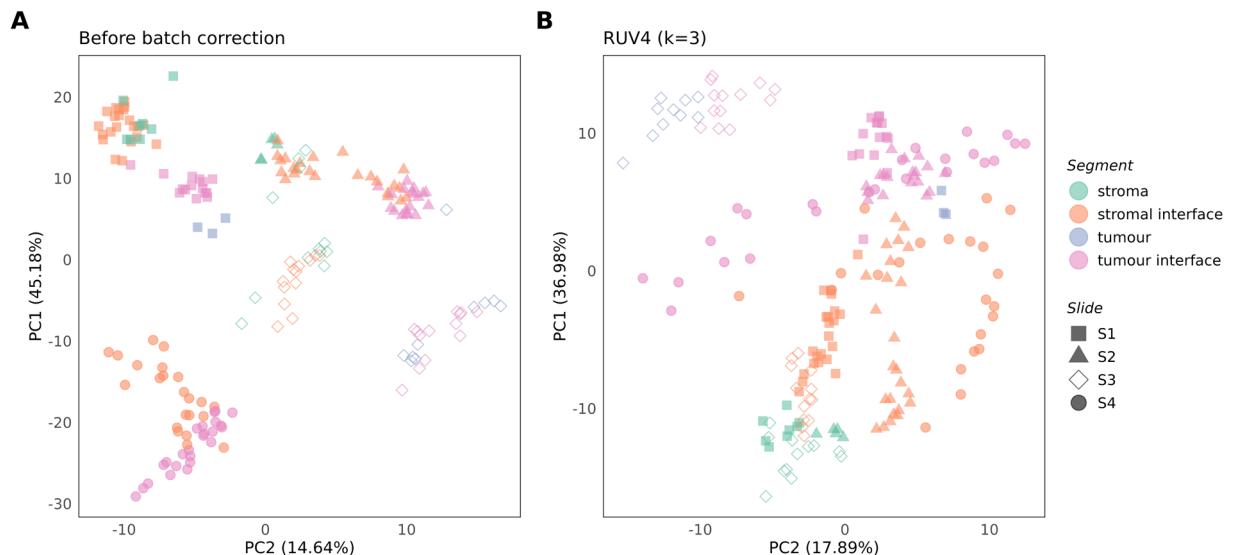
## **Supplementary Information**

Supplement to: Rahul L & Meg LD et al. Resolving tissue-level proteomic complexity in cutaneous squamous cell carcinoma (cSCC) with ultra high-plex spatial profiling

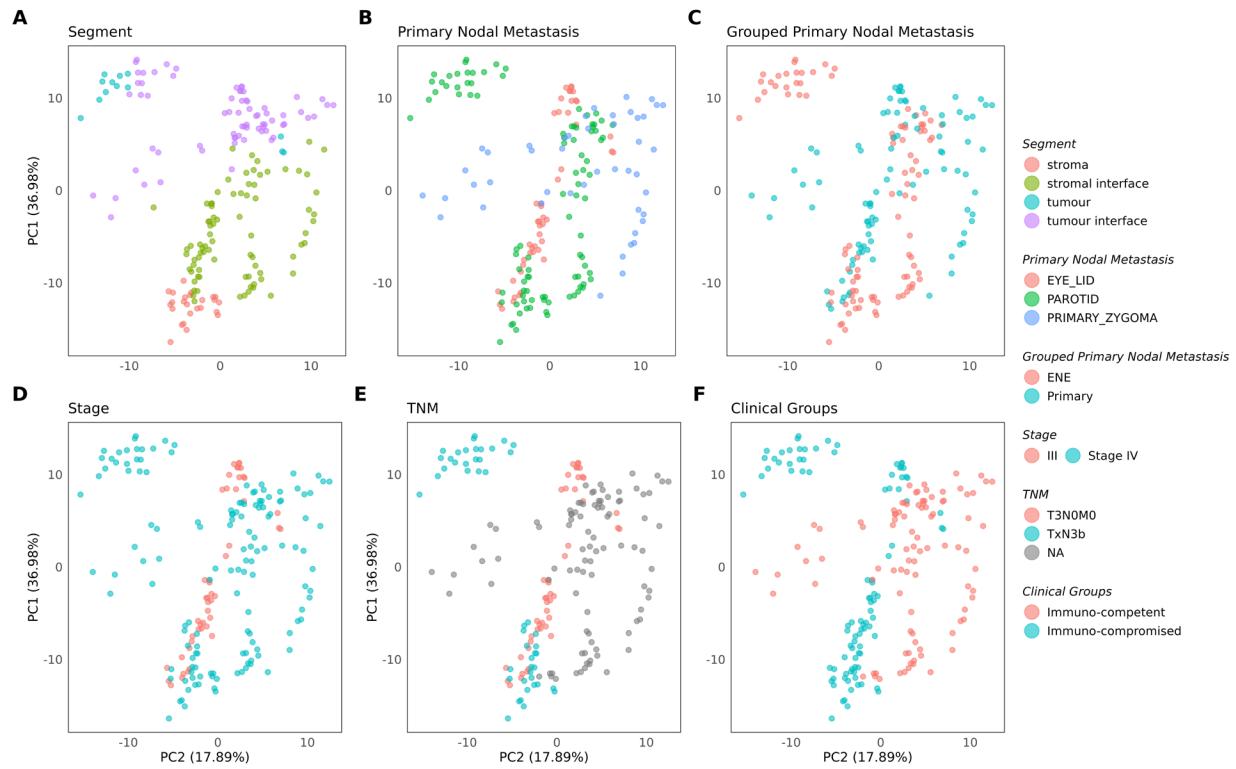
## Supplementary Figures



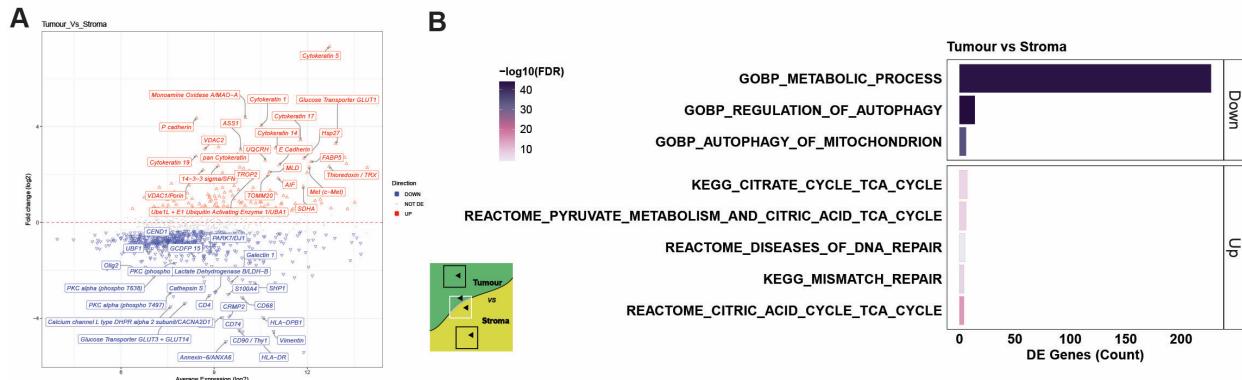
Supplemental Figure 1: Data quality assessment. Correlation matrix for the housekeeping and background control proteins in the assay.



Supplemental Figure 2: Batch effect correction. PCA plots stratified by ROI 'SegmentLabel' and 'Slide' before (A) and after (B) batch correction for slide (i.e. patient).



*Supplemental Figure 3. Quality control assessment. PCA plots stratified by different factors of interest including ROI 'label', 'Primary Nodal Metastasis', 'Grouped Mets', disease 'Stage', 'TNM' and 'Progress'.*



*Supplemental Figure 4. (A) DE analysis results presented as M (log ratio)-A (mean average) plots and (B) top enrichment pathways bar plots for tumour vs stroma samples. Limma-voom eBayes pipeline used in the DE analysis with DE markers identified using a cutoff based on an adjusted p-value of  $\leq 0.05$  using the Benjamini Hochberg procedure. Limma::fry function used for the pathway enrichment analysis, providing the gene counts in each gene-set and associated FDR.*