UMAP after GSVA with pathway activities (upregulated) HALLMARK MYC HALLMARK AND Replication Telom HALLMARK MITC KEGG CELL CY( KEGG AMINO SI NUCLEOTIDE SU 2 -Pathway Pathway Pathway Pathway Pathway **Pathway** activity activity activity activity activity activity 0.8 0.6 0.5 0.4 0.5 0.4 0.3 0.4 0.0 0.0 0.0 0.0 0.0 0.0

