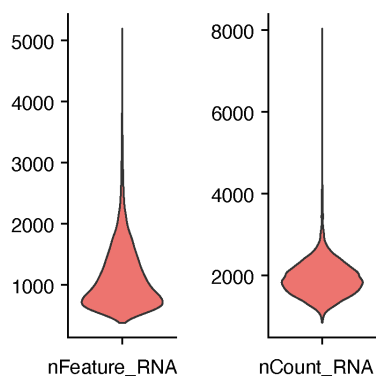


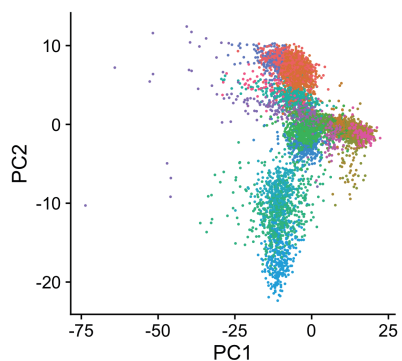
Supplementary Figure 1

a

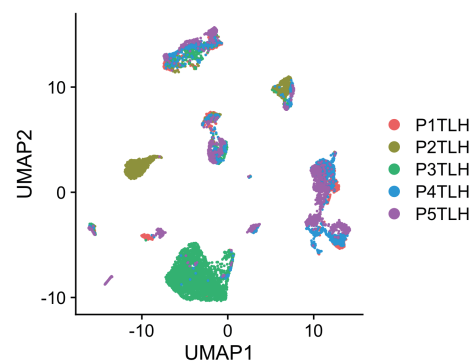
Quality control



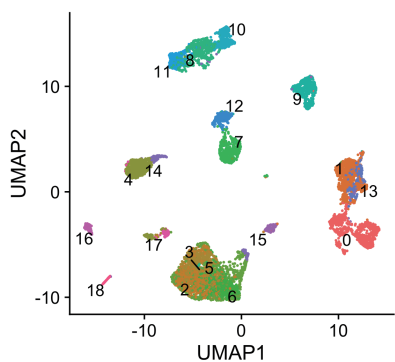
PCA



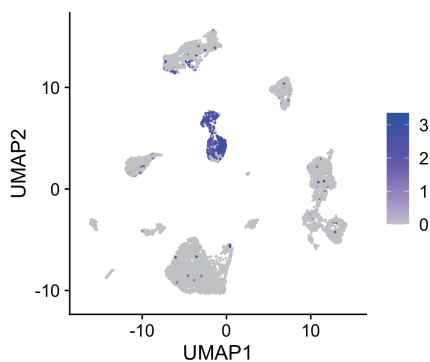
Batch removal
Within dataset



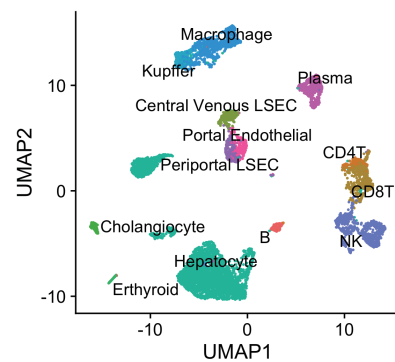
Clustering



Marker checking

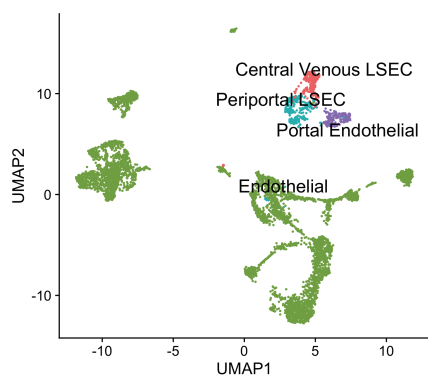


Annotation

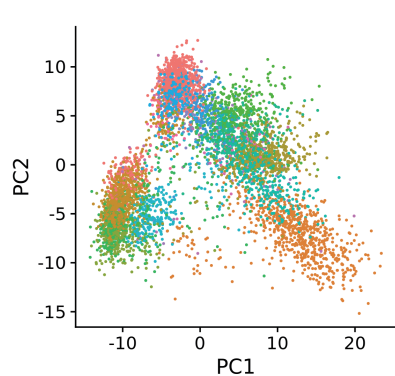


b

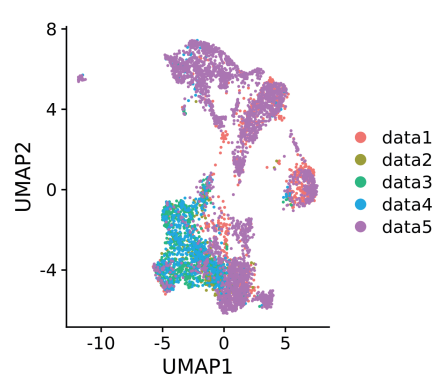
Lineage extraction



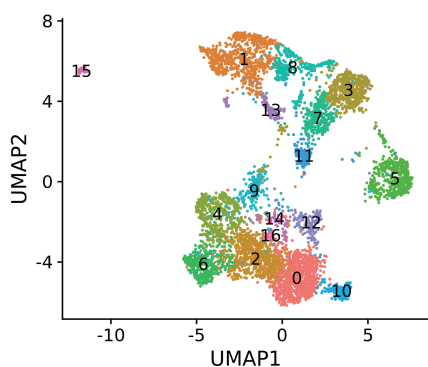
PCA



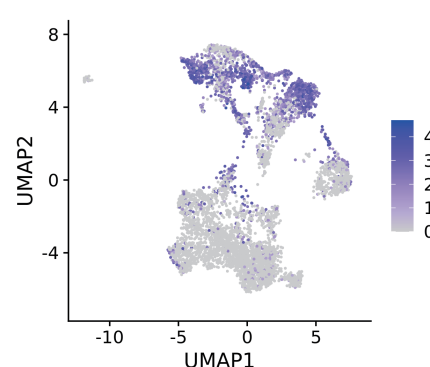
Batch removal
Among datasets



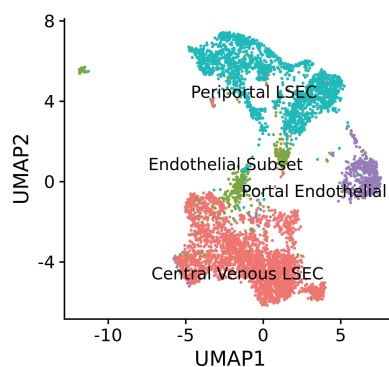
Re-clustering



Marker checking

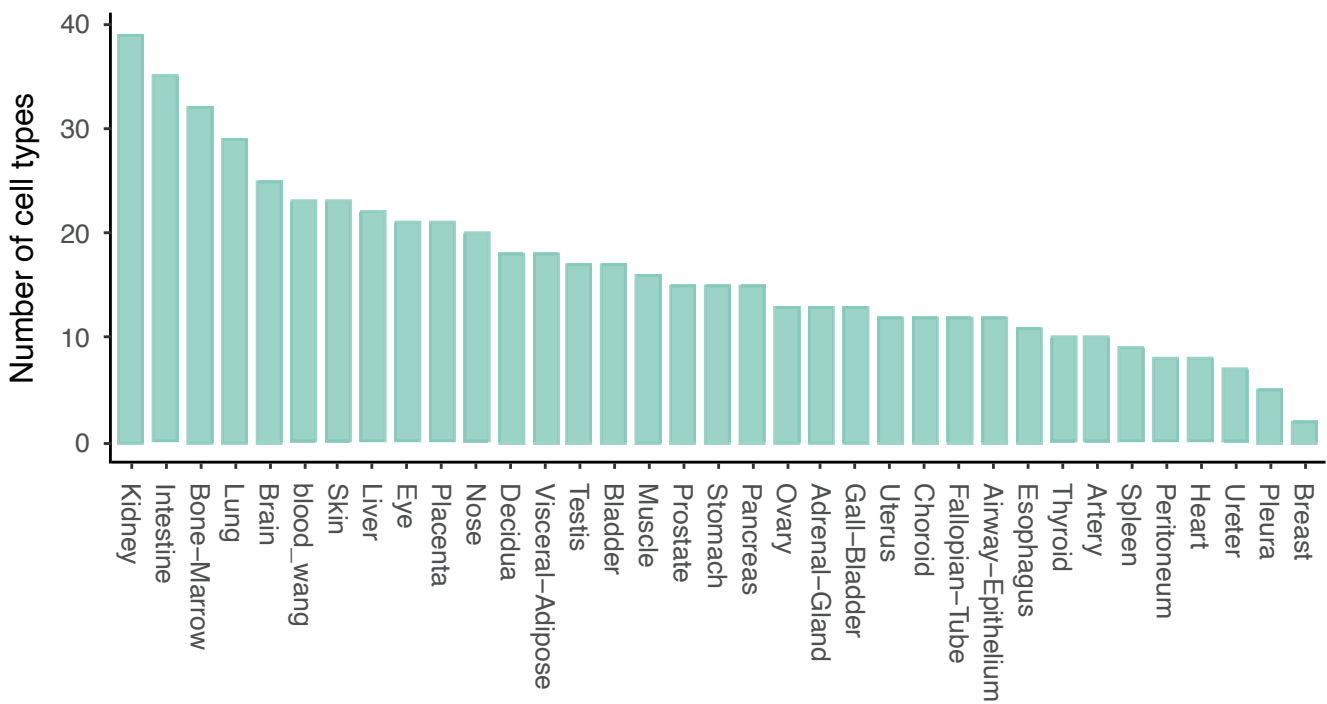


Re-annotation

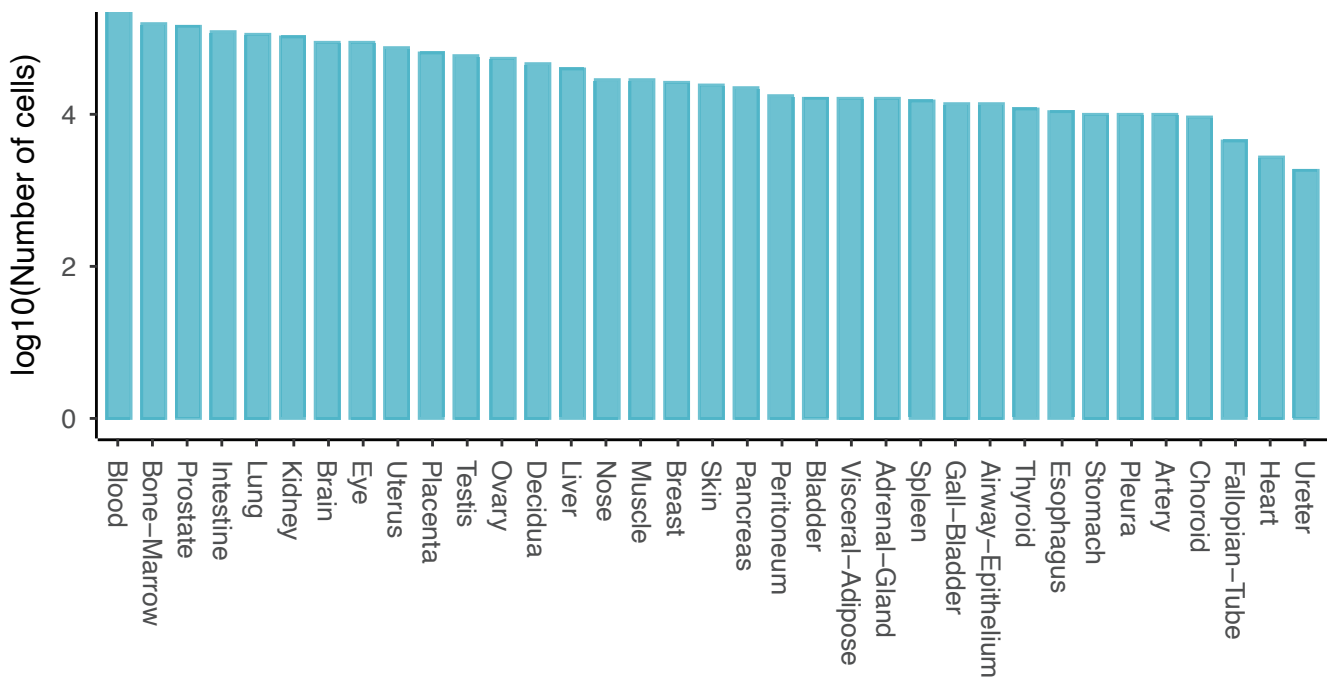


Supplementary Figure 2

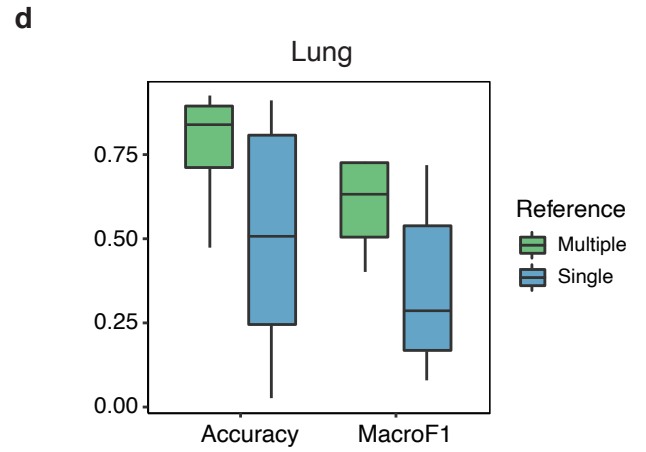
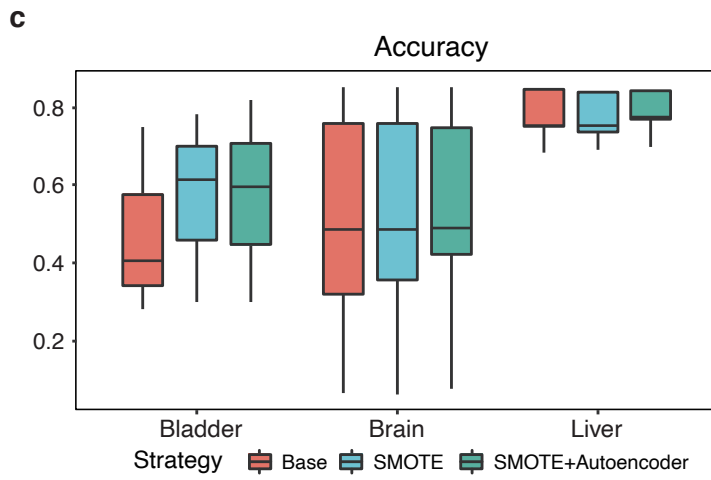
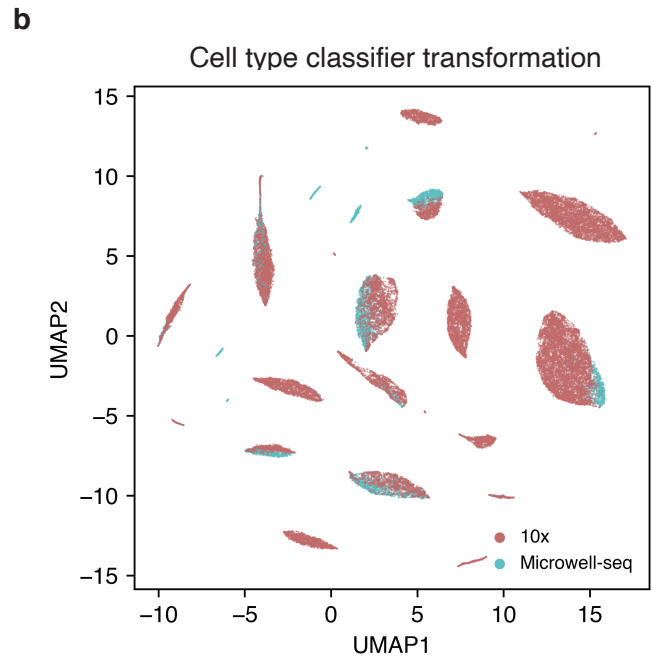
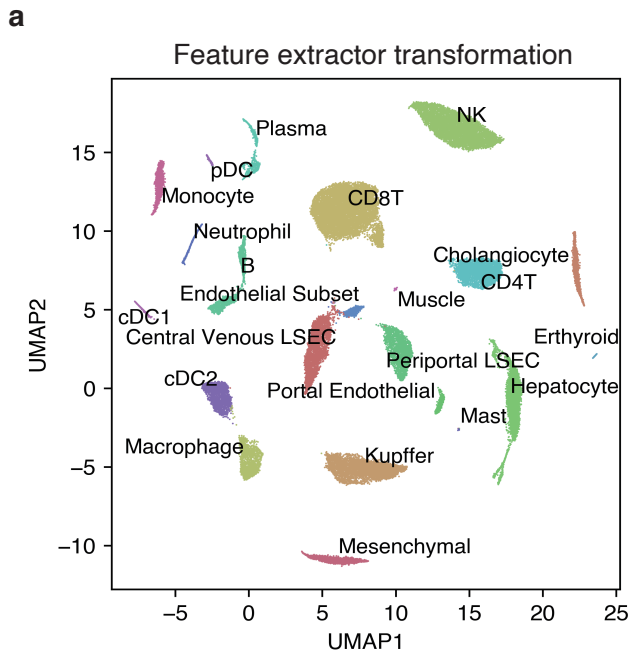
a



b



Supplementary Figure 3



Supplementary Figure 4

