marker genes T cell: CD2, CD3, CD45 B cell: CD19, CD20, CD79A, CD45 Tumor cell (epithelial): EPCAM Count matrix for Fibroblast: COL1A1, ACTA2, THY90 heterogeneous data Binarization CD19 CD79A CD20 CD3 CD45 COL1A1 CellAssign: automated probabilistic assignment of cells to known cell types Cell type assignments **Probabilities**

Prior knowledge of