(a) Correlation of clustering scores - 0.8 corr(ARI-NMI) -0.87 0.93 0.84 0.92 0.97 0.93 0.89 0.89 0.9 0.93 0.91 0.87 0.91 - 0.6 - 0.4 0.03 0.47 -0.03 0.75 0.66 -0.26 0.04 0.56 0.32 0.54 0.27 0.9 corr(ARI-Silhouette) -0.77 - 0.2 - 0.0 0.29 -0.12 0.14 0.8 -0.34 0.39 corr(Silhouette-NMI) -0.5 0.45 0.71 0.49 0.47 0.83 -0.2cidr scvi raceid scrna dnos desc constrastive+KM scziDesk pca_kmeans scanpy-seurat scDeepCluster constrastive+LD scedar (b) Correlation between the ARI score and dataset properties -0.39 Nb of clusters --0.71 -0.7 0.06 -0.69 -0.56 -0.13 0.34 0.43 0.35 0.13 0.51 0.25 0.4 -0.41 -0.36 -0.08 -0.35 -0.27 -0.26 Sparsity (ratio of 0 values) - -0.21 -0.12 0.03 -0.3 -0.12 -0.01 - 0.2 Max value -0.22 0.25 -0.28 -0.55 0.07 0.08 -0.22 -0.29 0.42 -0.05 -0.01 - 0.0 -0.61 -0.43 -0.04 0.29 -0.18 0.34 -0.03 0.15 -0.12 -0.25 0.5 -0.05 Mean value -0.26 - -0.2 Median value -0.27 0.28 -0.22 -0.64 0.32 -0 -0.46 0.09 -0.19 -0.3 0.47 -0.1 -0.03 -0.4-0.06 Skew -0.26 0.21 -0.29 -0.64 -0.13 -0.54 0.29 -0.17 -0.23 0.09 0.03 -0.15 -0.6Kurtosis -0.18 0.18 -0.27 -0.48 -0.12 -0 -0.48 0.24 -0.17 -0.13 0.04 0.05 -0.16 cidr. desc . scedar dnos Scvi raceid scziDesk scrna scanpy-seurat scDeepCluster pca_kmeans constrastive+KM constrastive+LD