

# Machine Learning Final Project

## Supplementary Materials

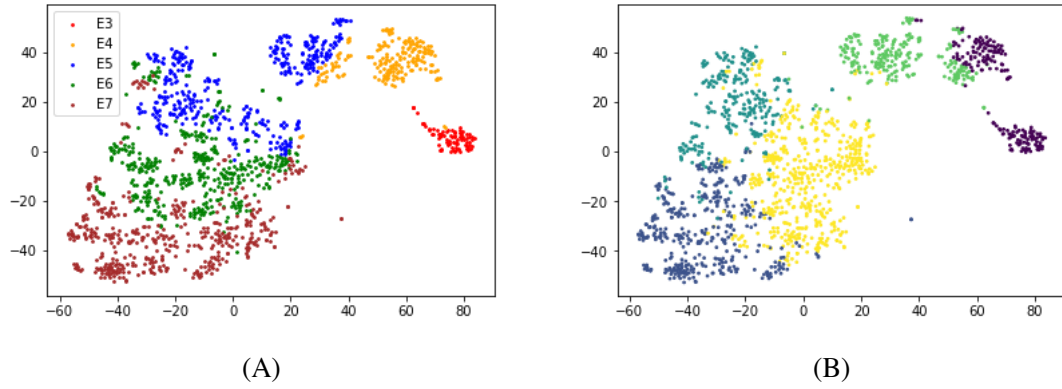


Figure S1 Clustering in day. (A) result of colored clustering. (B) result of unsupervised learning

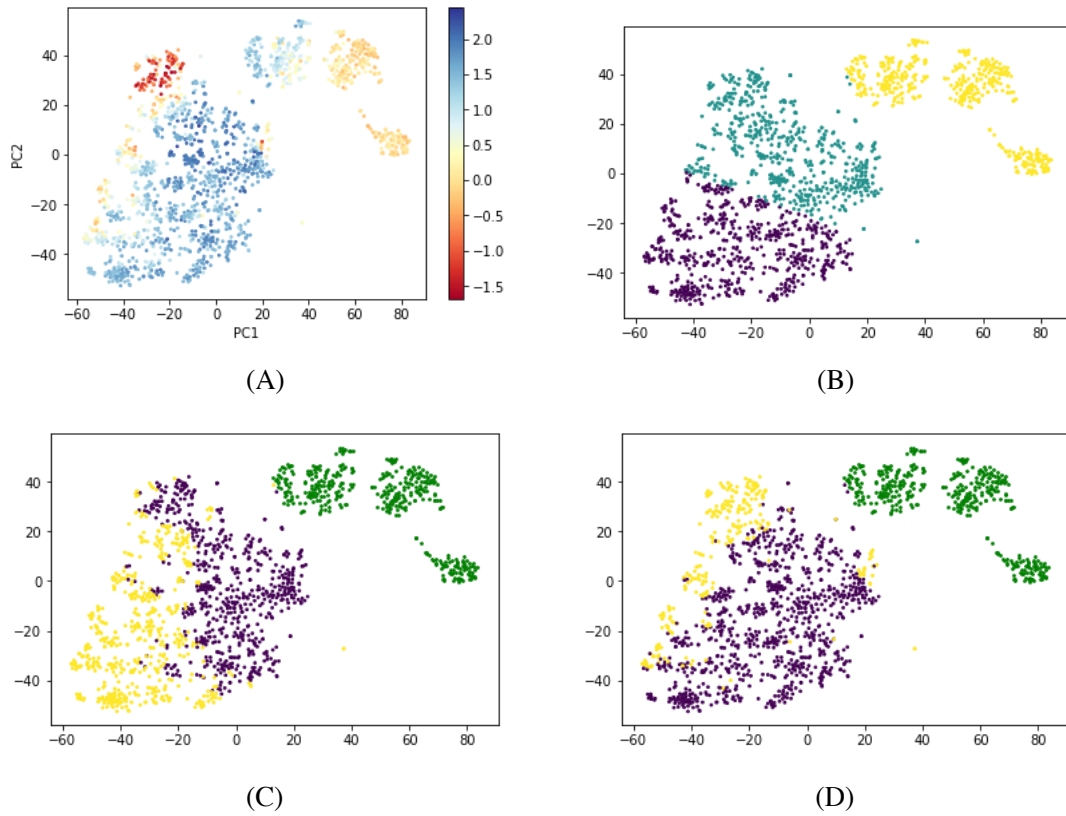
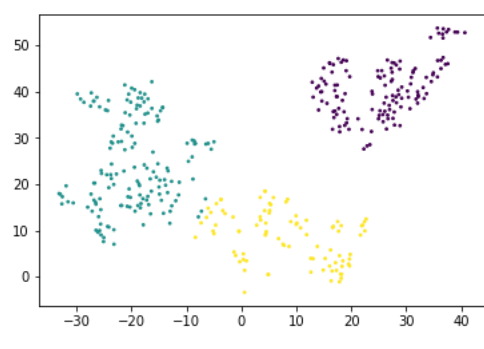
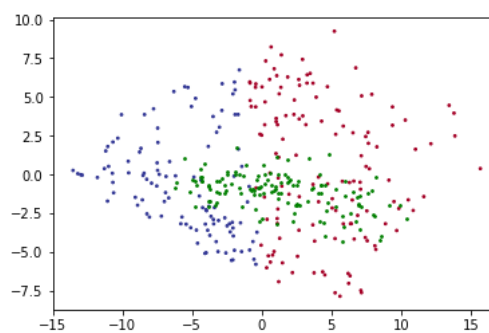


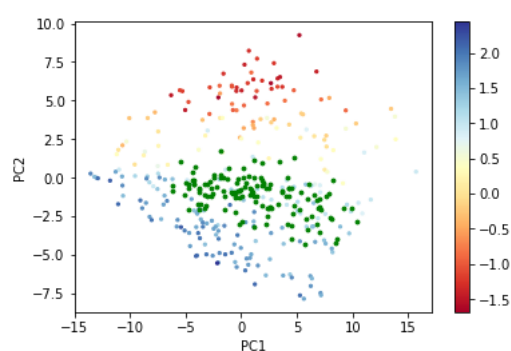
Figure S2 Segregation of ICM and TE. (A) ICM-TE expression across all cells; (B) clustering across all cell with  $k = 3$ ; (C) clustering in non-pre-lineage PCA subspace; (D) clustering in ICM-TE marker genes RPKM PCA subspace (green dots are pre-lineage cells).



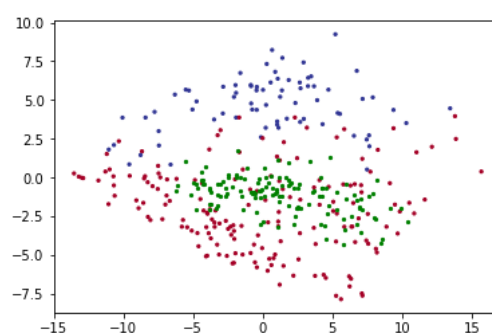
(A)



(B)

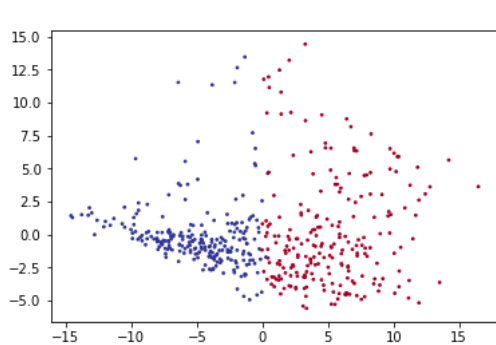


(C)

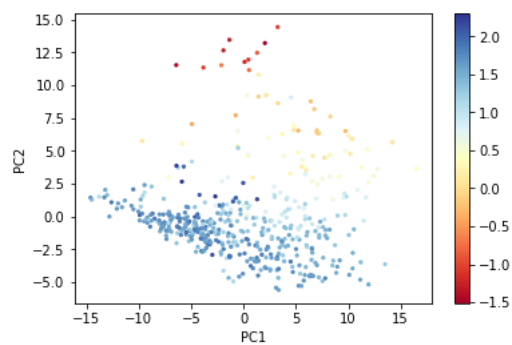


(D)

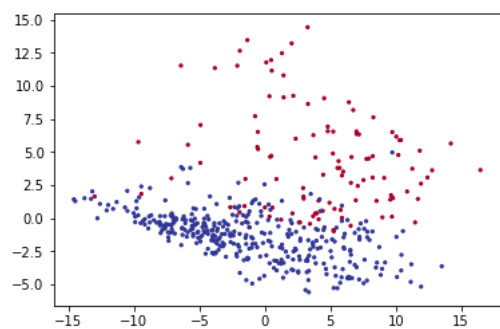
*Figure S3 Segregation of ICM and TE on E5. (A) clustering in E5 t-SNE subspace; (B) clustering in E5 non-pre-lineage cells PCA subspace; (C) ICM-TE expression in E5 non-pre-lineage cells; (D) clustering in ICM-TE marker genes RPKM PCA subspace. (green dots are pre-lineage cells)*



(A)



(B)



(C)

Figure S4 Segregation of ICM and TE on E7. (A) clustering in E7 PCA subspace; (B) ICM-TE expression in E7 cells; (C) clustering in ICM-TE marker genes RPKM PCA subspace on E7.

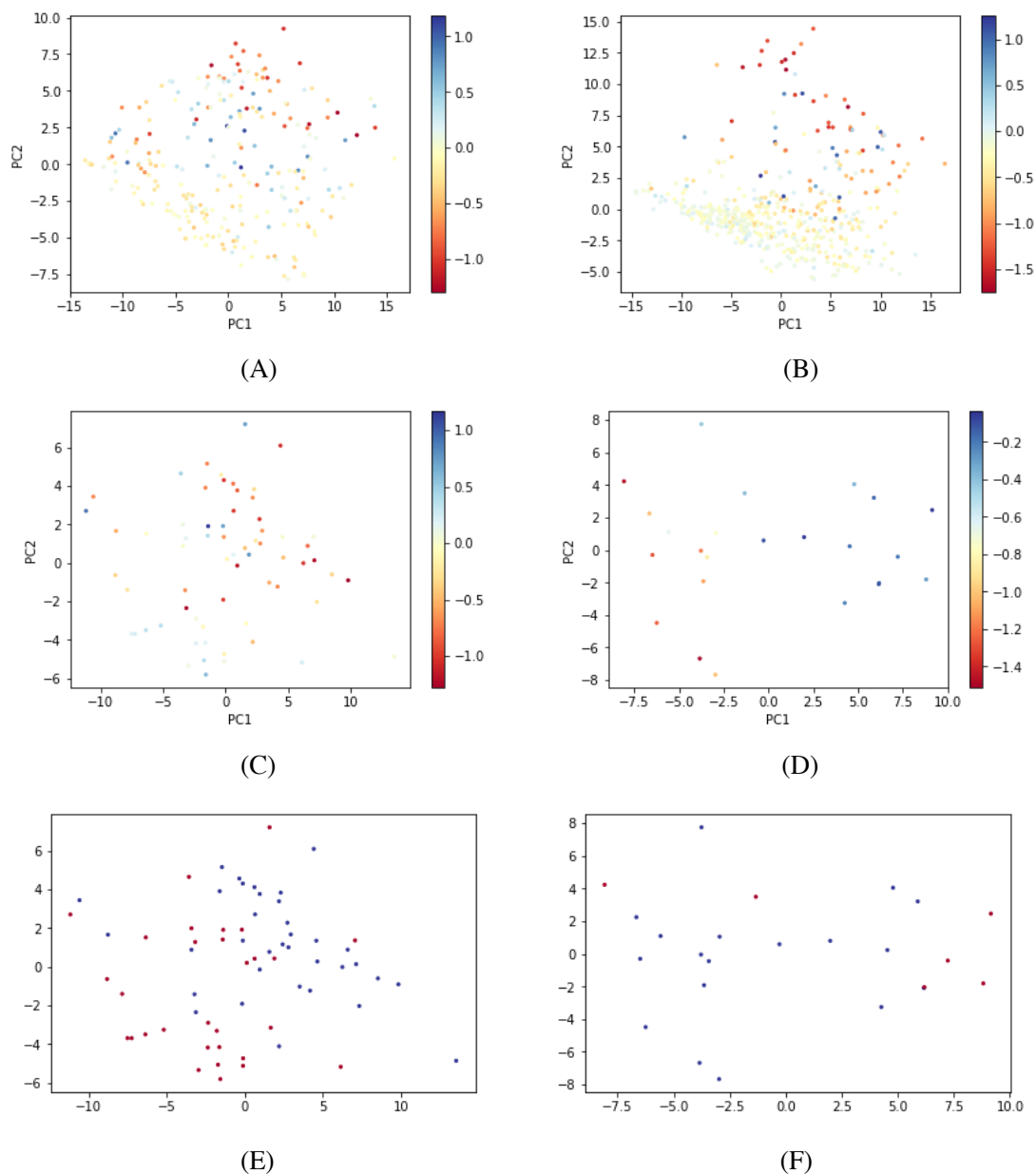


Figure S5 Segregation of EPI and PE on E5 and E7. (A)EPI-PE marker genes expression on E5 non-pre-lineage cells; (B) EPI-PE marker genes expression on E7 cells; (C) EPI-PE marker genes expression on E5 ICM cells; (D) EPI-PE marker genes expression on E7 ICM cells; (E) clustering in EPI-PE marker genes RPKM PCA subspace of E5 ICM cells; (F) clustering in EPI-PE marker genes RPKM PCA subspace of E7 ICM cells.