

A

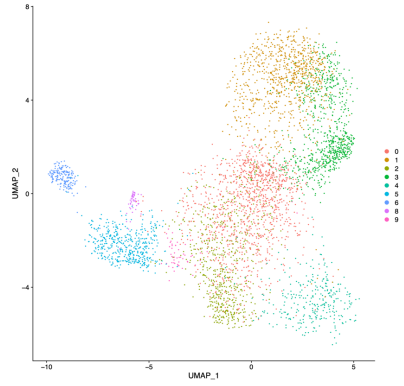


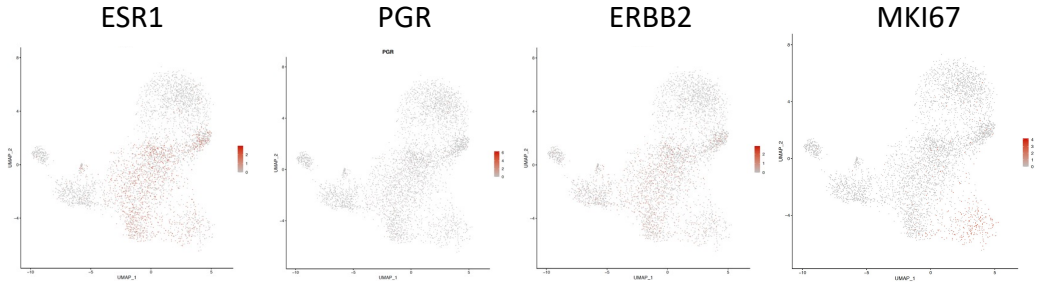
Figure S1. Single-cell analysis of the epithelial components of luminal-HER2 (ER-positive/HER2-positive) breast cancer

(A) A UMAP plot of epithelial cells in the luminal-HER2 breast samples.

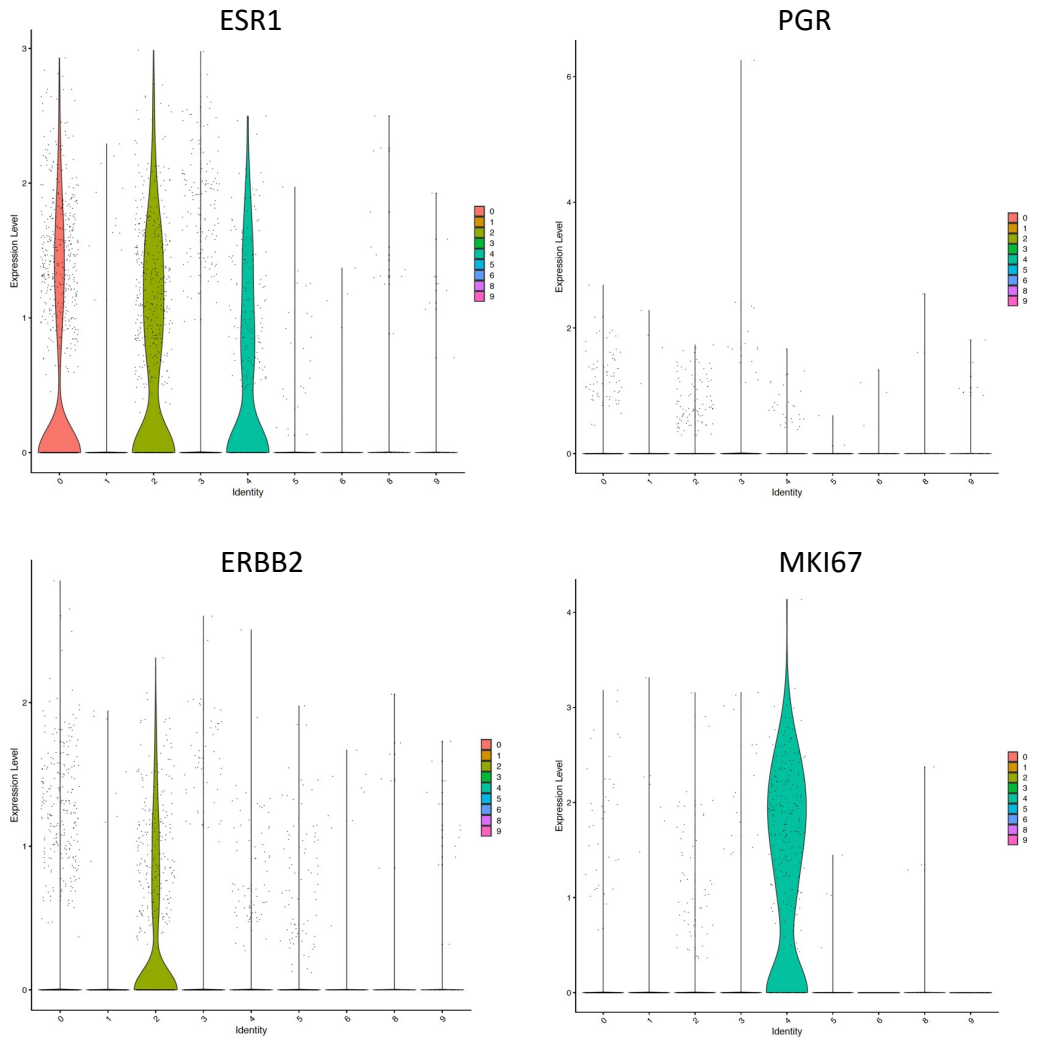
(B) UMAP plots with representative marker expression.

(C) Violin plots with representative marker expression.

B



C



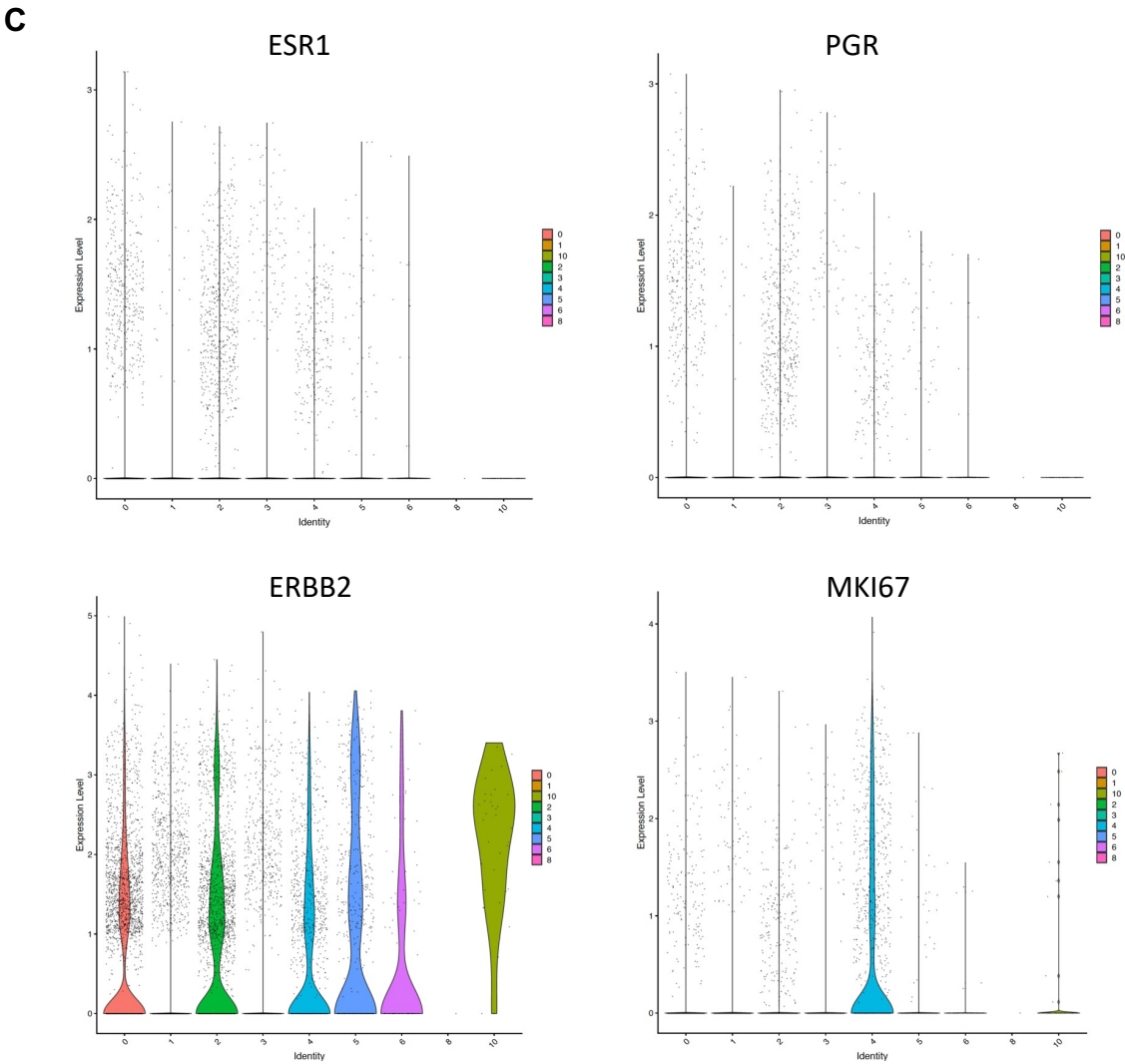
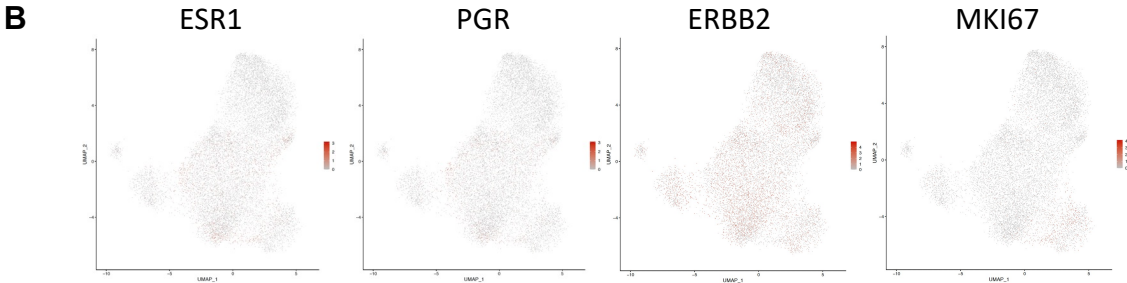
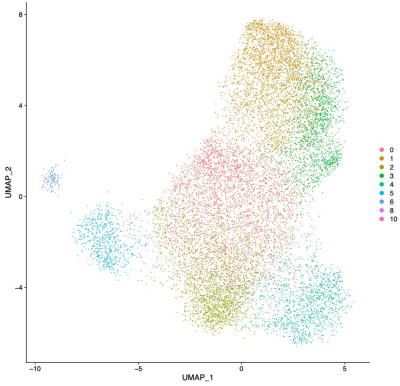
A

Figure S2. Single-cell analysis of the epithelial components of pure-HER2 (ER-negative/HER2-positive) breast cancer

(A) A UMAP plot of epithelial cells of the pure-HER2 breast samples.

(B) UMAP plots with representative marker expression.

(C) Violin plots with representative marker expression.



A

Figure S3. Single-cell analysis of the epithelial components of luminal (ER-positive/HER2-negative) breast cancer

(A) A UMAP plot of epithelial cells of the luminal breast samples.

(B) UMAP plots with representative marker expression.

(C) Violin plots with representative marker expression.

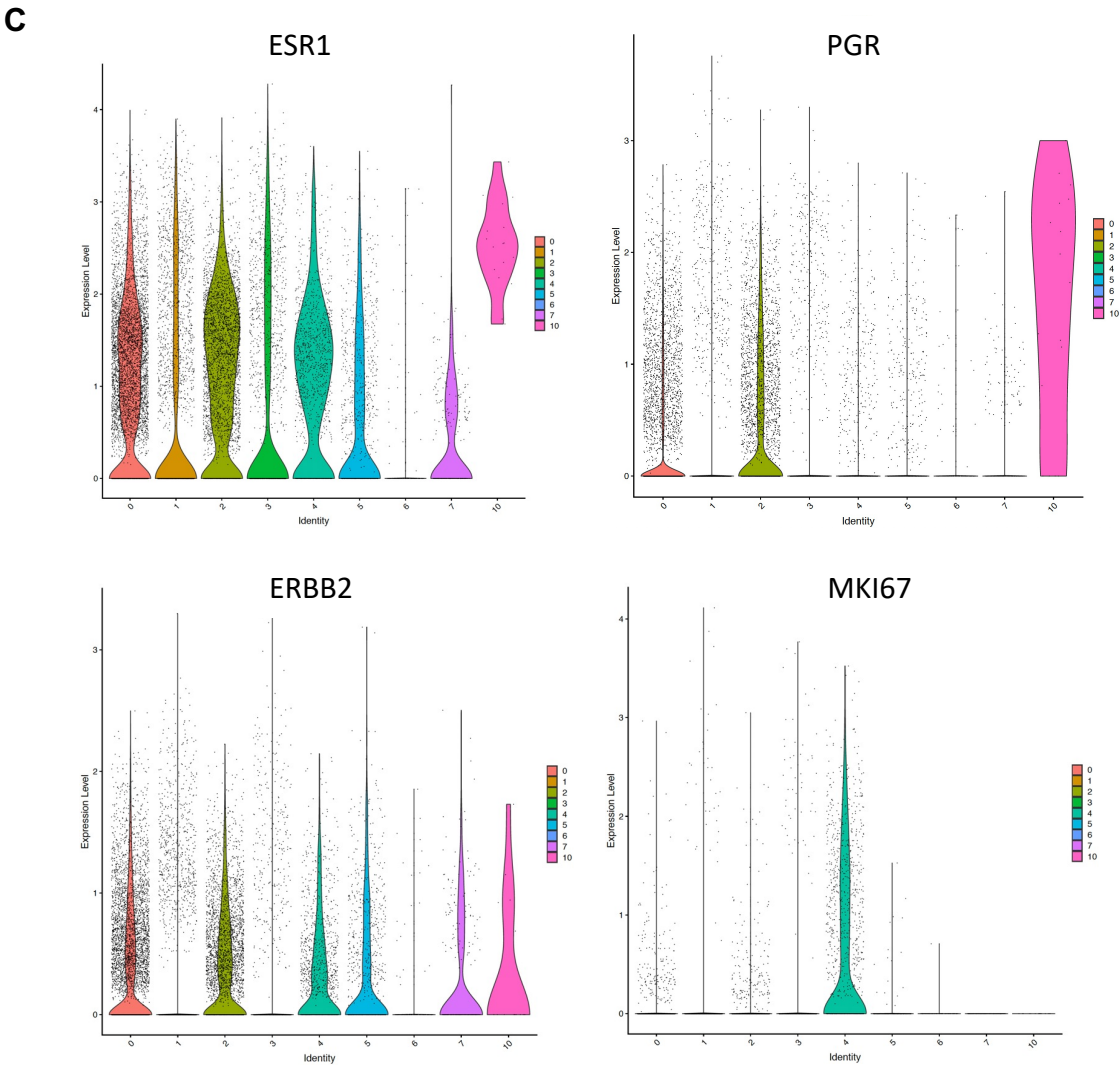
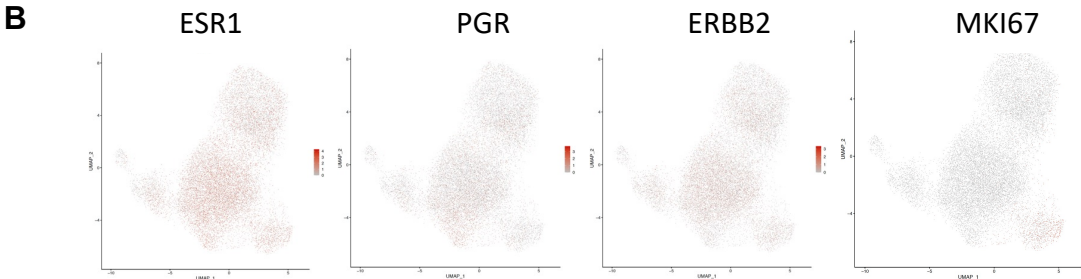
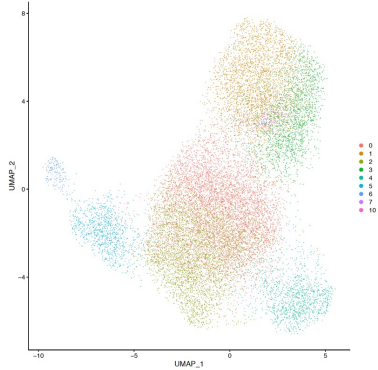


Figure S4. Comparison of gene expression levels of representative breast cancer markers among the Luminal-HER2 subtype, pure-HER2 subtype, and Luminal subtype

H: Luminal-HER2 subtype, L: pure-HER2 subtype, Luminal: Luminal subtype.
N: The presence of HER2 amplification but not available for hormone receptor status on IHC results (Details are shown as Table S1 (a row named “Subtype)).

