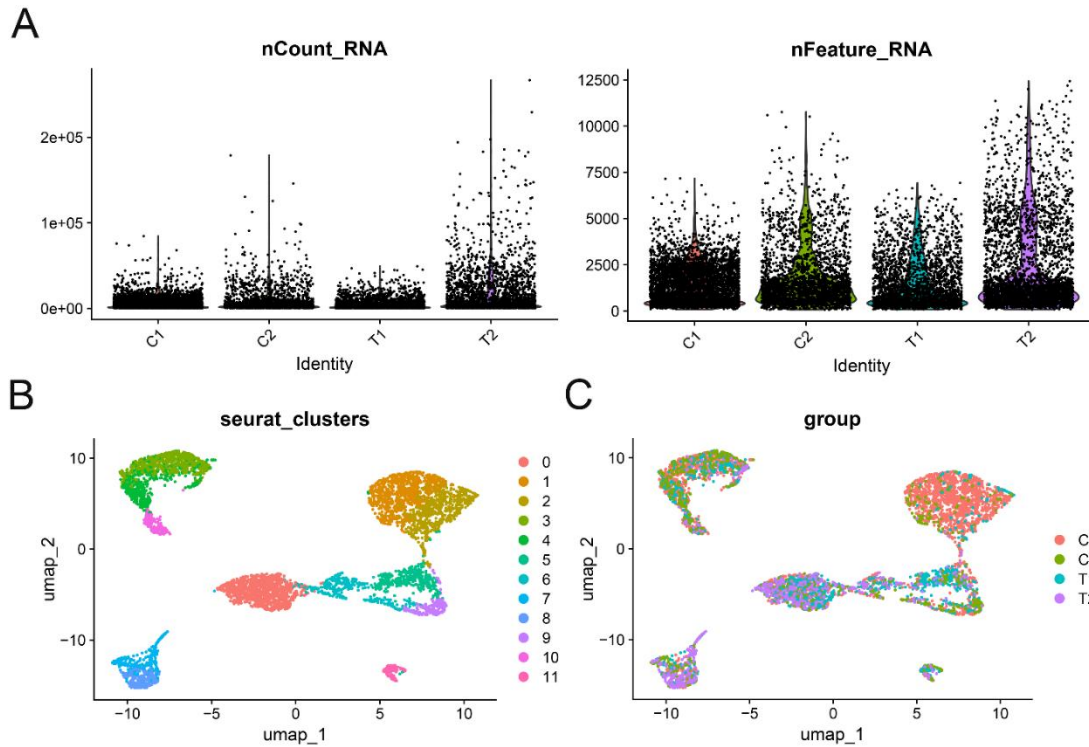




**Supplementary Figure 1 Quality control of single-cell sequencing data was performed.** A: Scatter plot showing the number of UMIs and genes per sample after filtering; B: Uniform Manifold Approximation and Projection (UMAP) visualization of filtered single cells, clustered into 12 cell types; C: UMAP projection of lung cancer tissue and normal control tissue samples.

**Supplementary Table 1 Summary of major findings associated with MED12 mutation and DAPT treatment**

| <b>Experimental platform</b> | <b>Readout</b> | <b>H322 <i>vs</i> PC9</b> | <b>DAPT effect</b> |
|------------------------------|----------------|---------------------------|--------------------|
| Sphere                       | Sphere number  | ↑                         | ↓                  |
| Flow                         | ALDH+          | ↓                         | ↑                  |
| Migration                    | Chemotaxis     | ↓                         | ↑                  |
| ELISA                        | IFN $\gamma$   | ↓                         | ↑                  |
| ELISA                        | TNF $\alpha$   | ↓                         | ↑                  |
| ELISA                        | Perforin       | ↓                         | ↑                  |
| ELISA                        | GzmB           | ↓                         | ↑                  |
| Flow                         | PD1            | ↑                         | ↓                  |
| Flow                         | PD-L1          | ↑                         | ↓                  |
| LDH                          | Cytotoxicity   | ↓                         | ↑                  |