## Supplemental material: GSEA of glandular epithelial cells

In the GSEA of glandular epithelial cells, six patients with SjS with heavy immune infiltrations in salivary glands were first used as the case group, while those from non-SjS individuals were regarded as controls (S6 vs. C3). Gene sets with a normalized enrichment score (NES) more than 1 and FDR q value less than 0.05 in any comparison were considered as candidate functional pathways involved in the glandular injuries of SjS. A pre-ranked gene list from differential expression analyses using limma package was used in the GSEA of transcriptome data of salivary epithelial cells. The outcomes of the first comparison (S6 vs. C3) were further validated through two additional sensitivity analyses. In sensitivity analysis, six patients with SjS with heavy immune infiltrations in salivary glands were used as the case group, and three patients with SjS with moderate immune infiltrations together with three non-SjS individuals were used as the control group (S6 vs. M3 + C3). In another sensitivity analysis, six patients with SjS with heavy immune infiltrations in salivary glands were used as the case group, while three patients with SjS with moderate immune infiltrations were regarded as controls (S6 vs. M3).