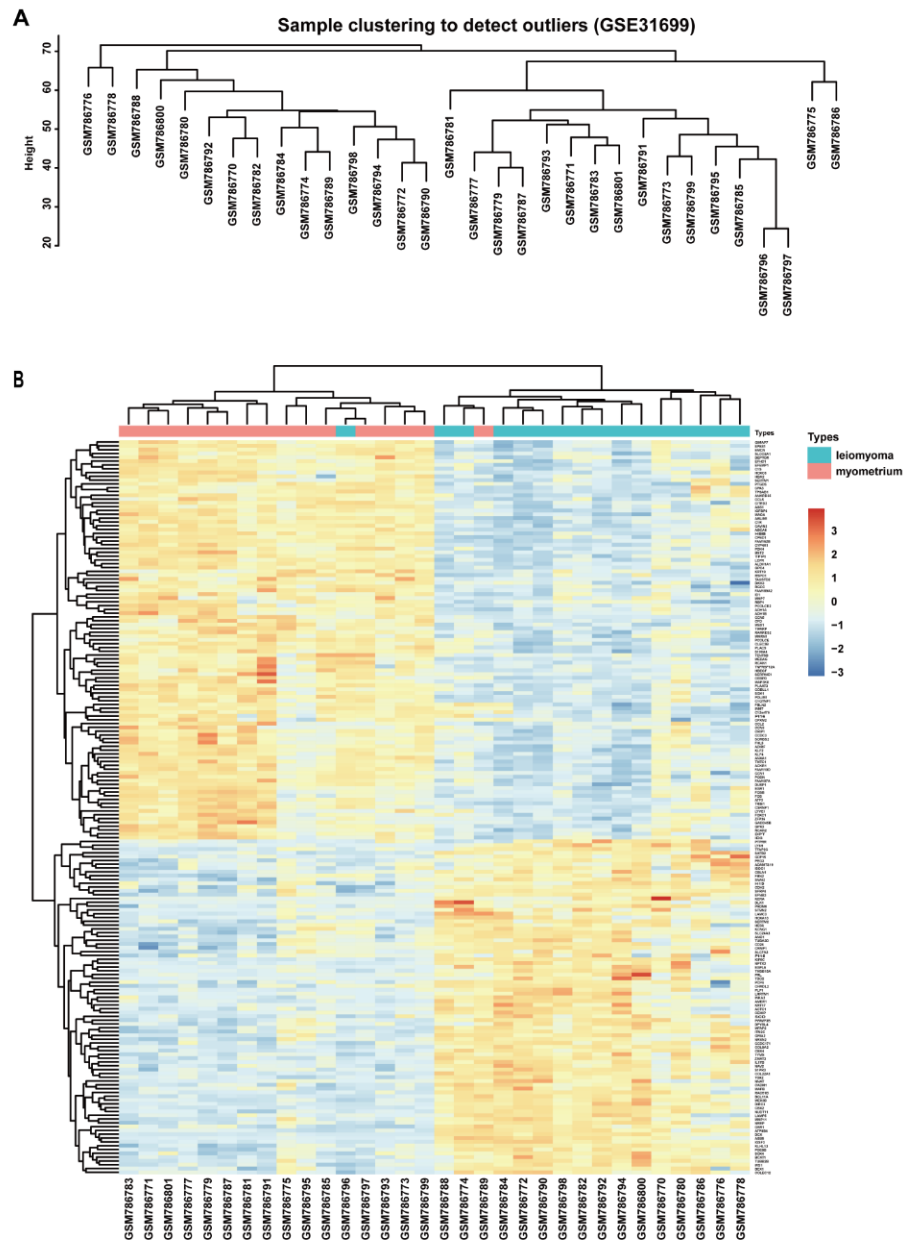


1



2

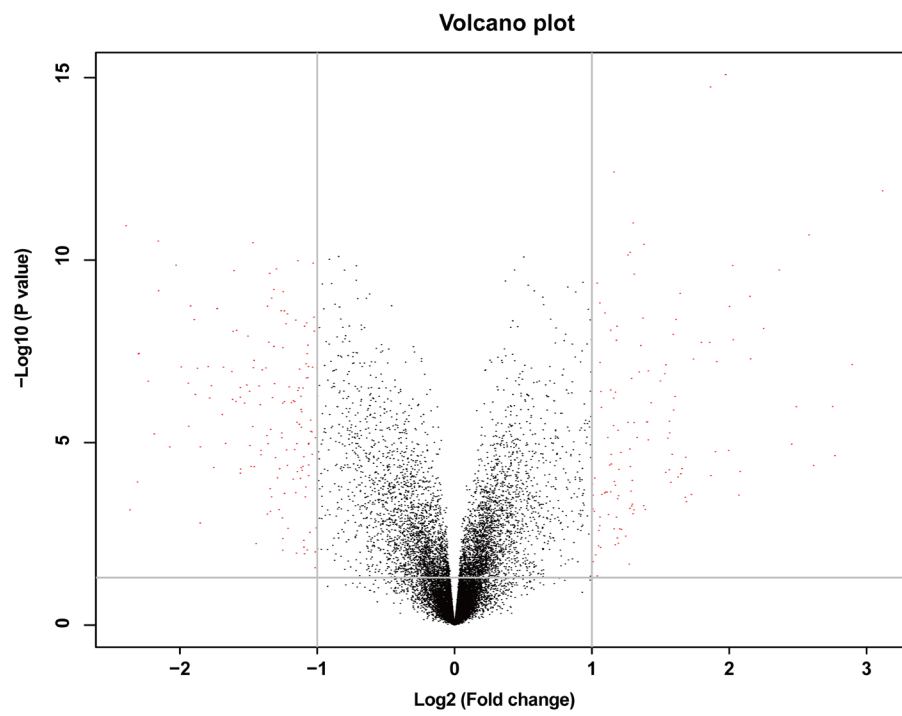
3 **Figure S1** Microarray quality was evaluated by sample clustering and heatmap of
 4 DEGs. **(A)** Samples clustering of GSE31699 to detect outliers. **(B)** Heatmap of the top
 5 200 DEGs according to the value of $|\log FC|$ in GSE31699.

6

7

8

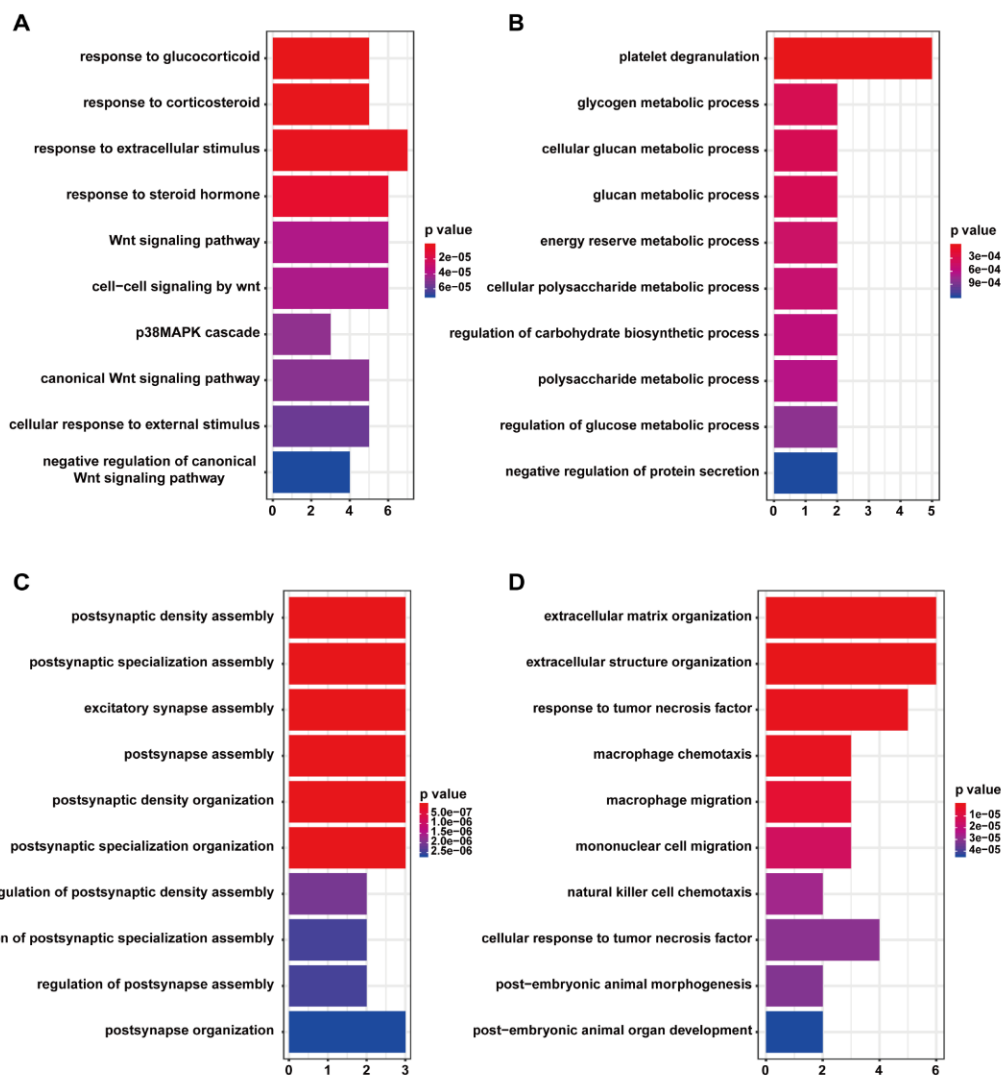
9



1

2 **Figure S2** The volcano plot of all DEGs in GSE31699

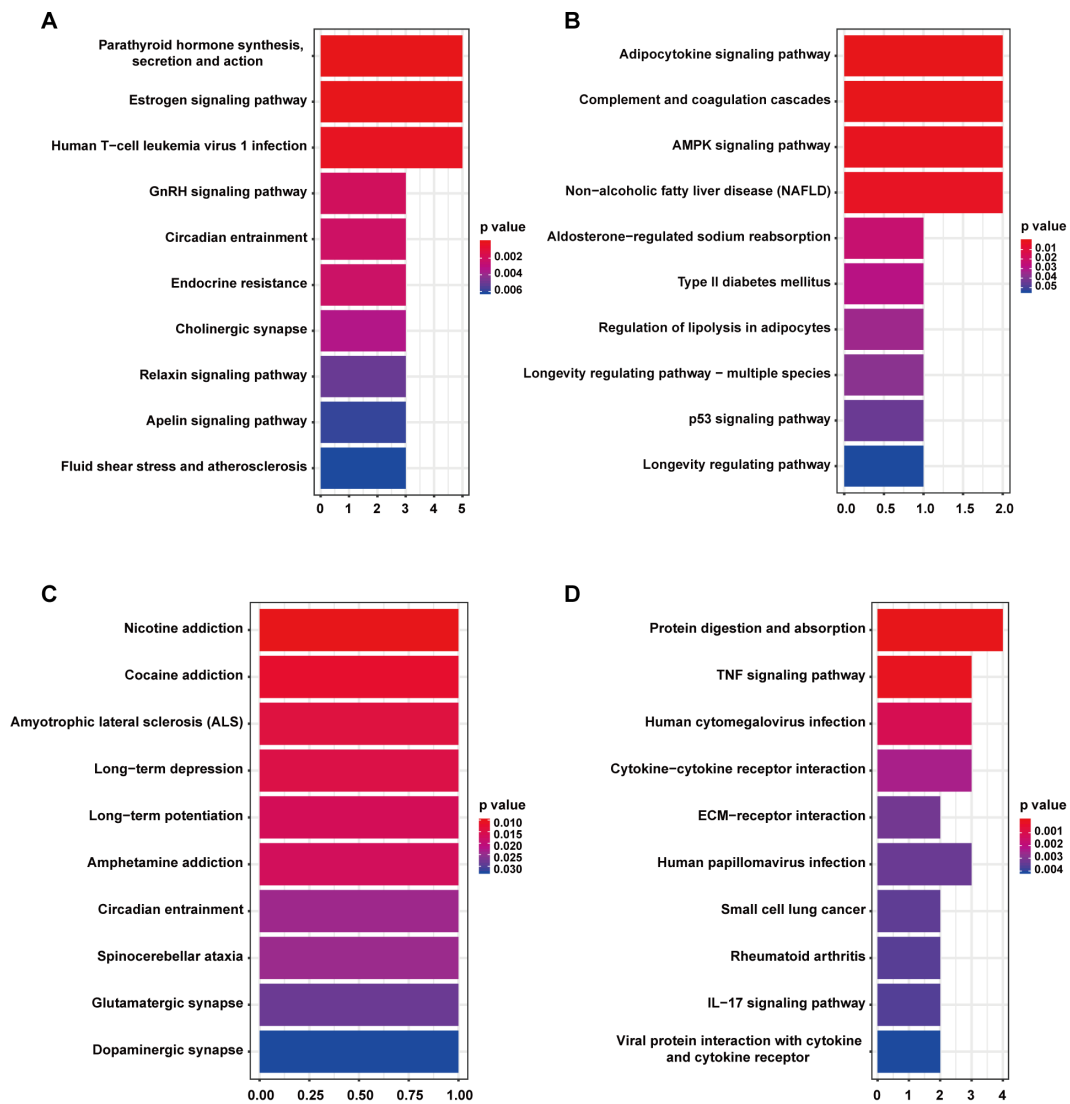
3



1

2 **Figure S3** GO enrichment of hub clusters in PPI networks. (A) Cluster rank 1. (B)

3 Cluster rank 2. (C) Cluster rank 3. (D) Cluster rank 4.

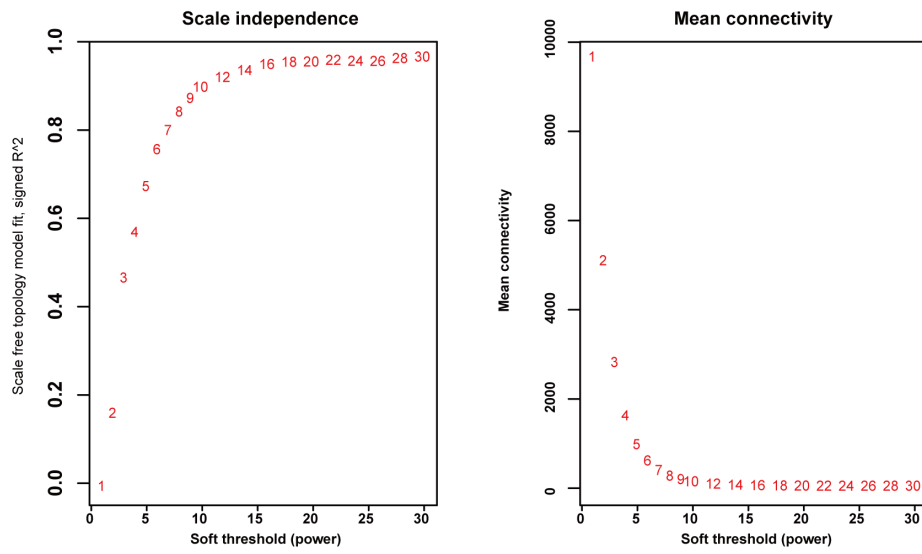


1

2 **Figure S4** KEGG analysis of hub clusters in PPI networks. (A) Cluster rank 1. (B)

3 Cluster rank 2. (C) Cluster rank 3. (D) Cluster rank 4.

4



1

2 **Figure S5** Determination of soft-thresholding power in WGCNA. (A) Analysis of the
 3 scale-free fit index for various soft-thresholding powers (β). (B) Analysis of the mean
 4 connectivity for various soft-thresholding powers.

5

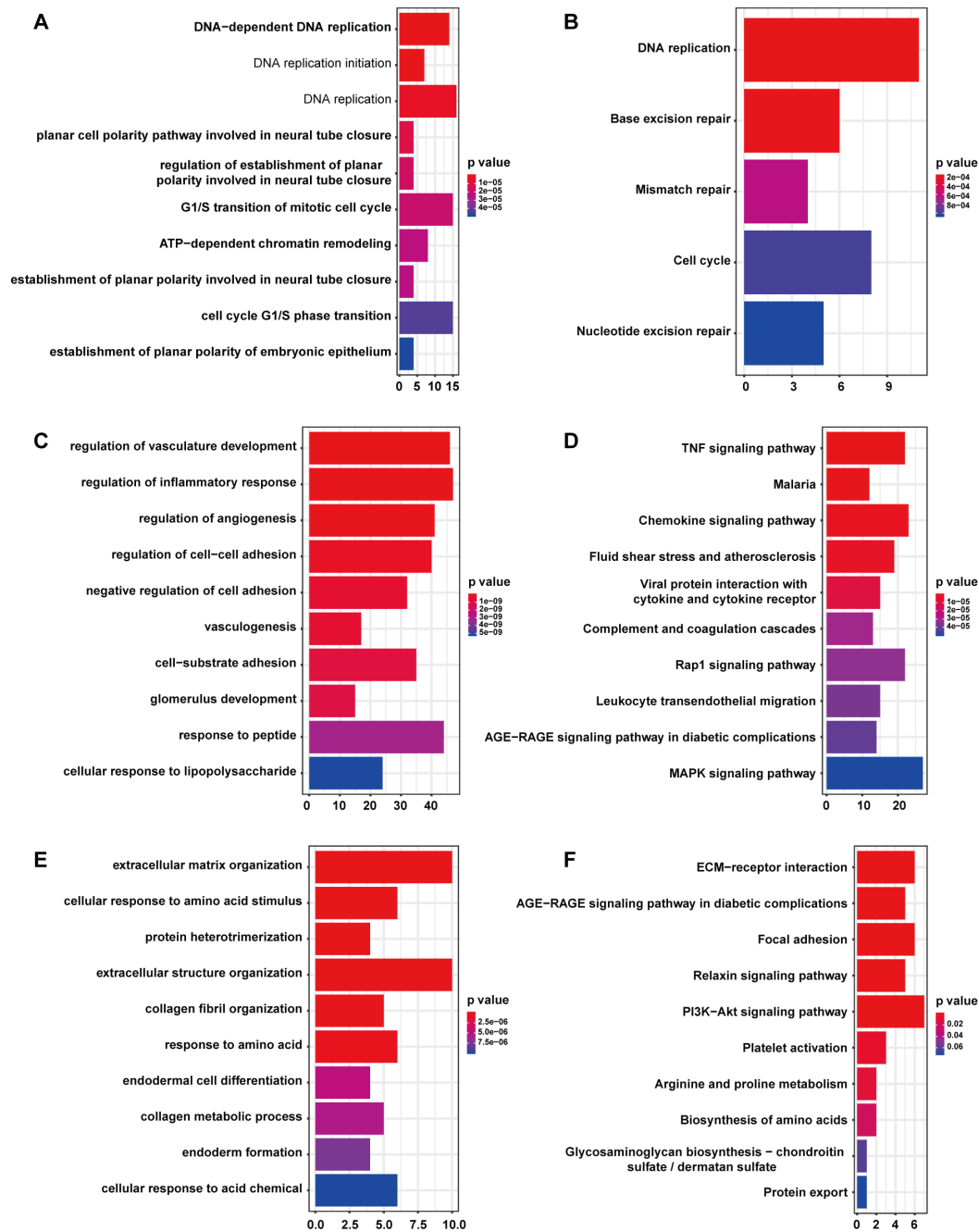


Figure S6 Hub modules functional analyses. (A) GO enrichment of genes in blue module. (B) KEGG analysis of genes in blue module. (C) GO enrichment of genes in turquoise module (D) KEGG analysis of genes in turquoise module (E) GO enrichment of genes in tan module. (F) KEGG analysis of genes in tan module.