

Supplementary Material

1. Supplementary figures

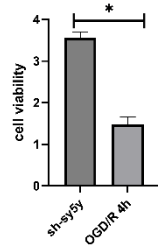


Fig. S1 Cell activity in Con and OGDR groups. ($*p < 0.05$)

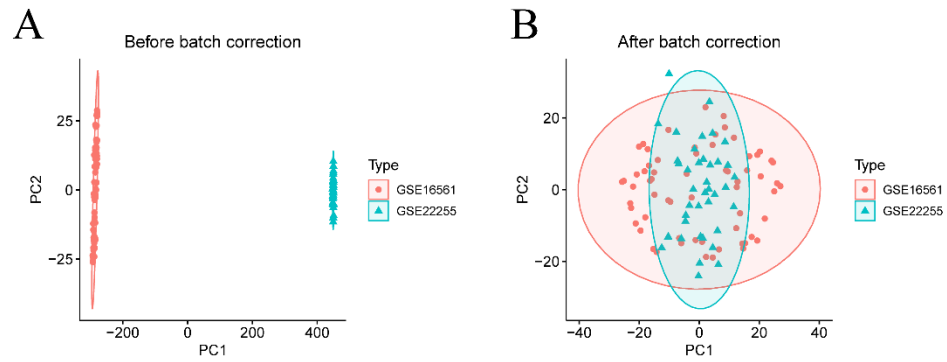


Fig. S2 The principal component analysis (PCA) graph of two obtained datasets before (A) and after (B) batch removing

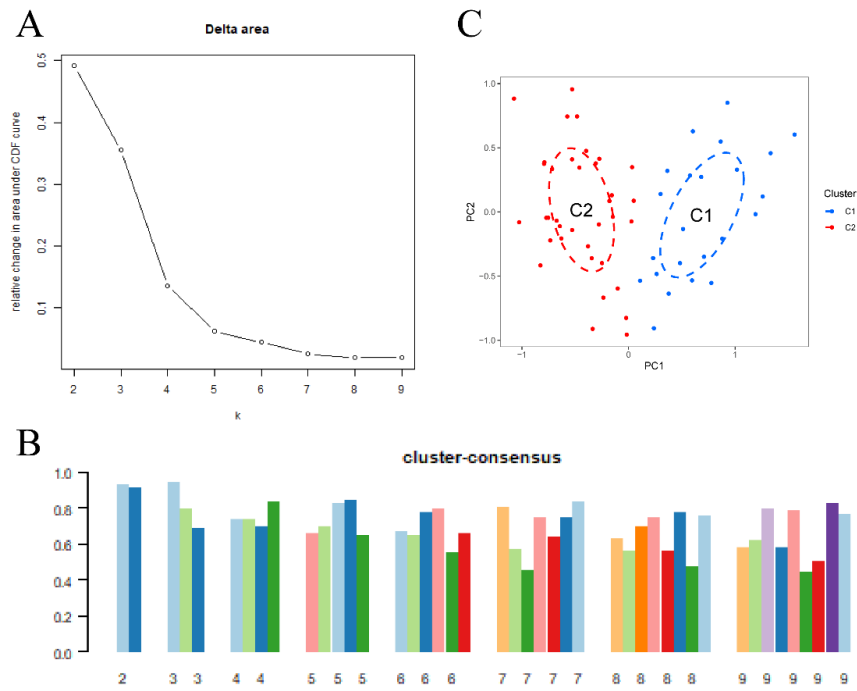


Fig. S3 (A) CDF delta area curves. (B) The score of consensus clustering. (C) T-SNE visualizes the distribution of two subtypes



Fig. S4 The important features in SVM, RF, GLM, GBM, KNN, NNET, LASSO and DT machine models

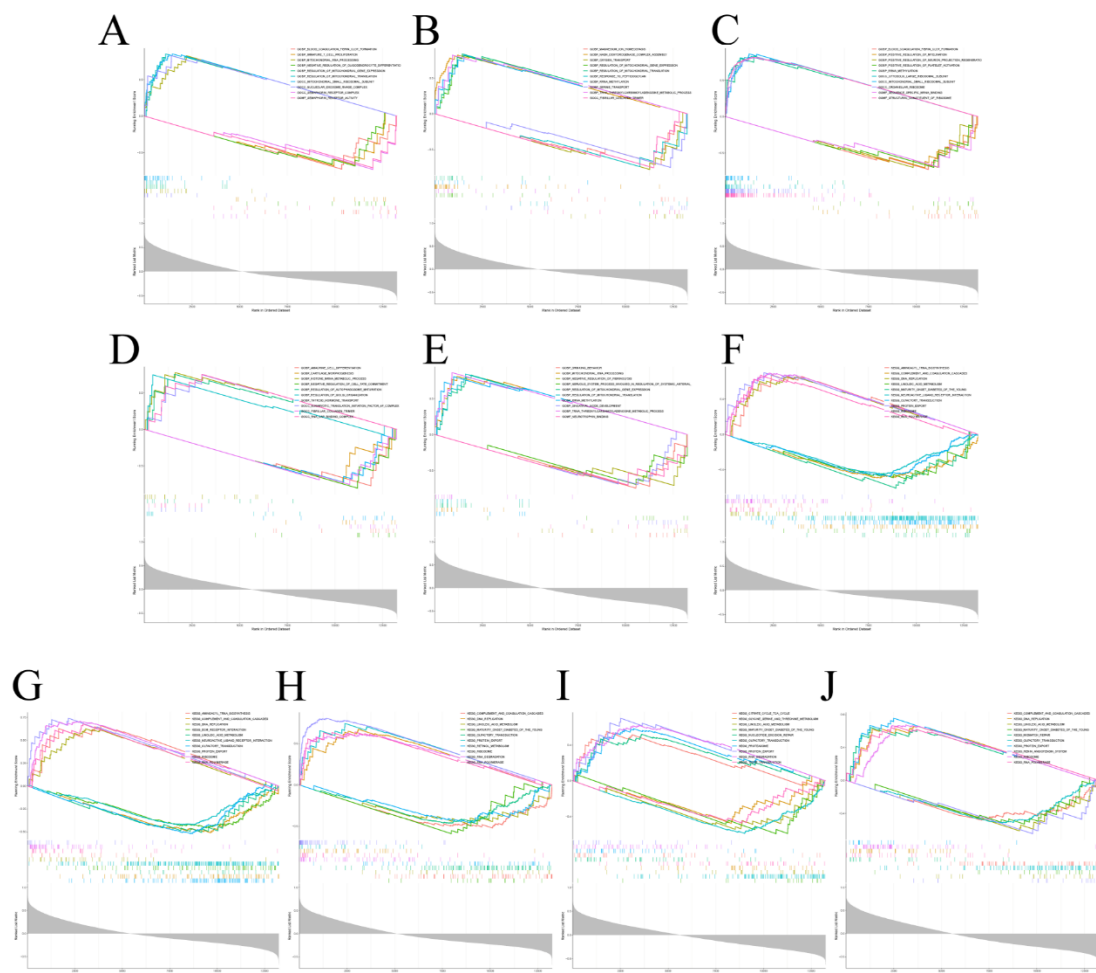


Fig. S5 Results of ssGSEA analysis. KEGG analysis of SRPRB(A), ATP5J(B), LSM7(C), DEGS1(D) and TGDS(E) using ssGSEA. GO analysis of SRPRB(F), ATP5J(G), LSM7(H), DEGS1(I) and TGDS(J) using ssGSEA.

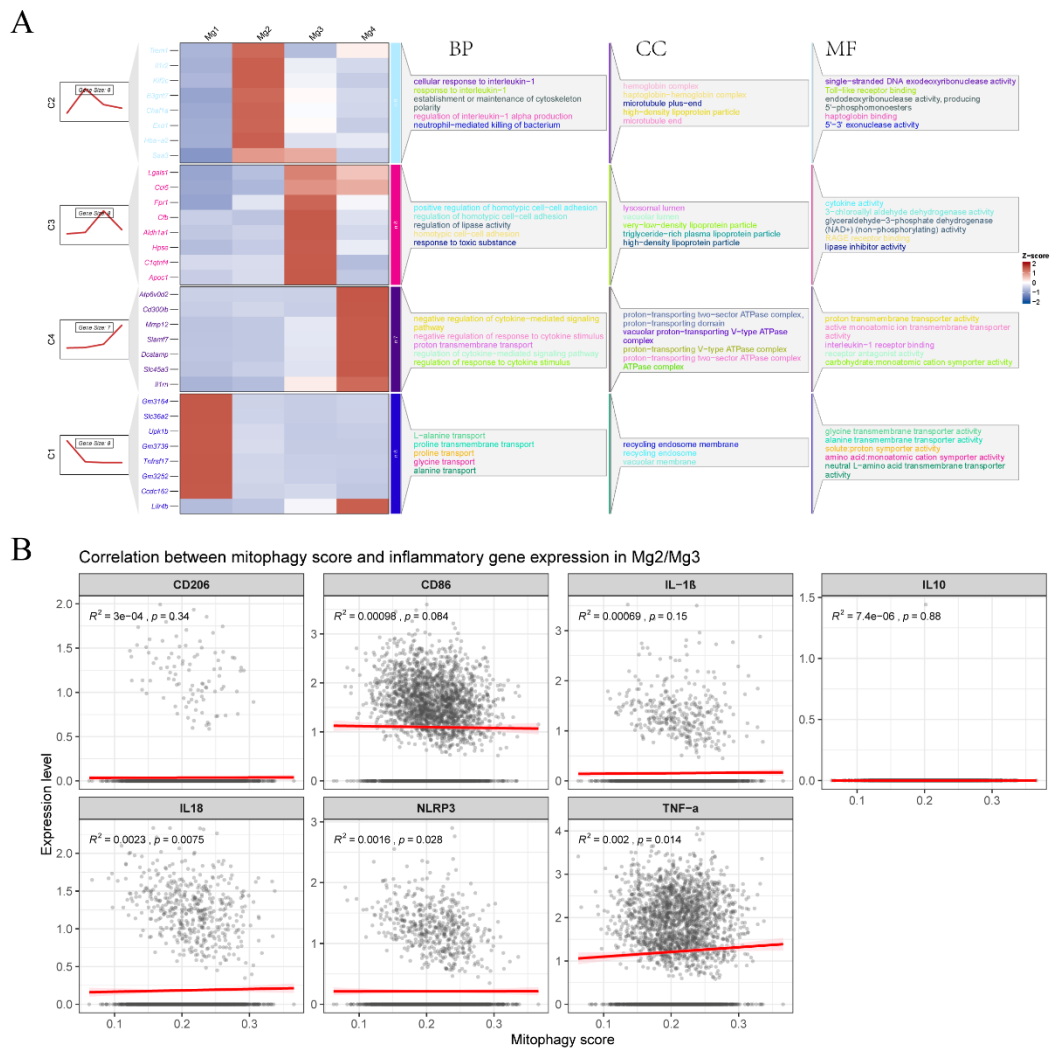


Fig. S6: (A) Heatmap of top genes and GO analysis in microglial subpopulations; (B) Correlation analysis between mitophagy score and inflammatory markers in Mg2/3 subpopulations.

2. Supplementary table

Table S1 The primer sequences of 5 core diagnostic markers.

Primer	Sequence
SRPRB F	GCTCCTACCCCAAAGCACAT
SRPRB R	CAGGGTCAGGGTCTCACAAC
ATP5J F	TGGTGTTACAGCAGTGGCAT
ATP5J R	GTCTCCAGATGTCTGTTCGC
LSM7 F	GGGTAAAGTTCCAGGGAGGC
LSM7 R	GTACTCAATGGTGCCGTCCA
DEGS1 F	AAGGAGAGATGGTGCTGGAGT
DEGS1 R	GGGGAGCTTCTGAGCATCAC
TGDS F	TGGGTCAGGGCTTCAAACAA
TGDS R	TTGGCAAGCTGGACAACCTGA