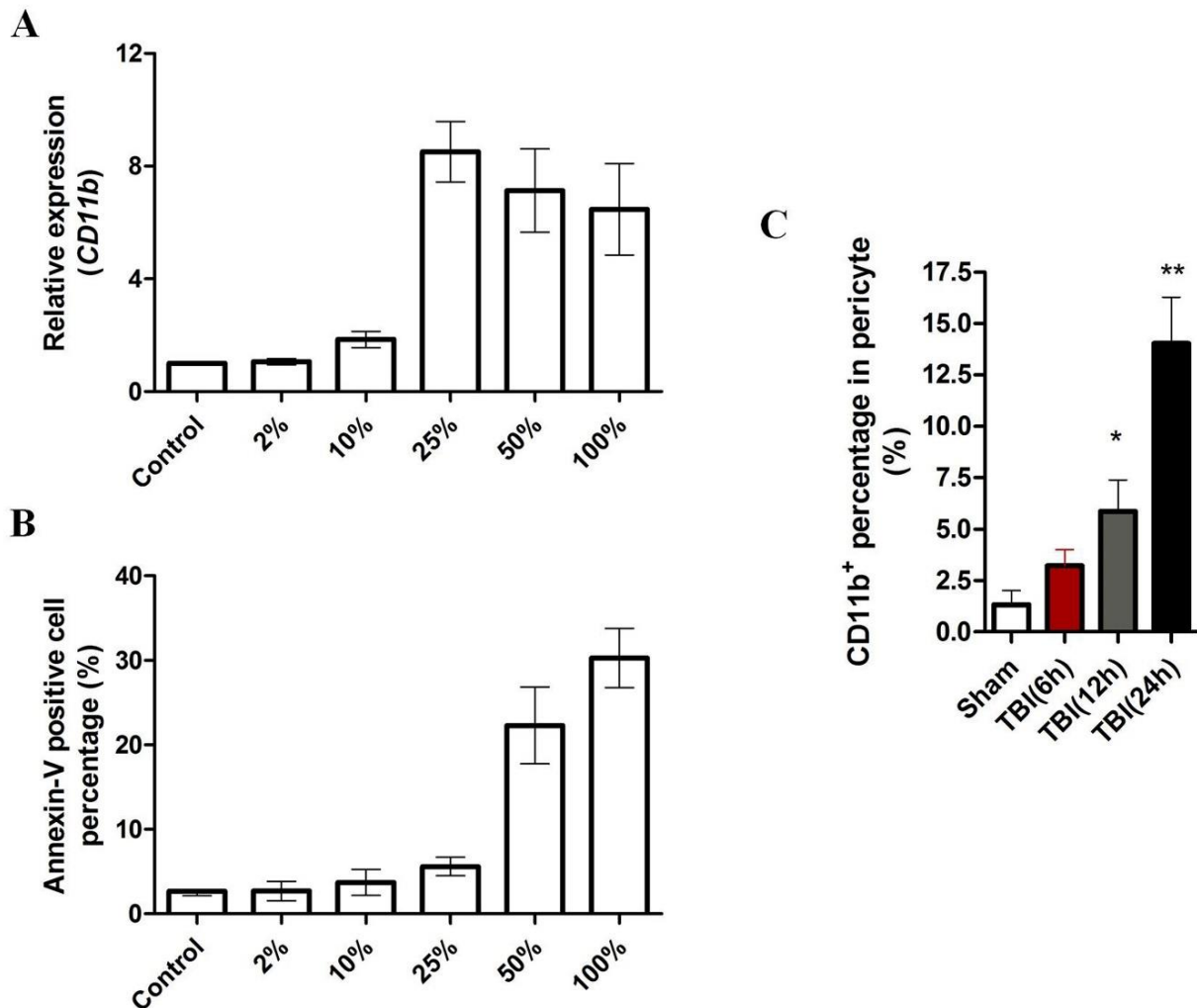
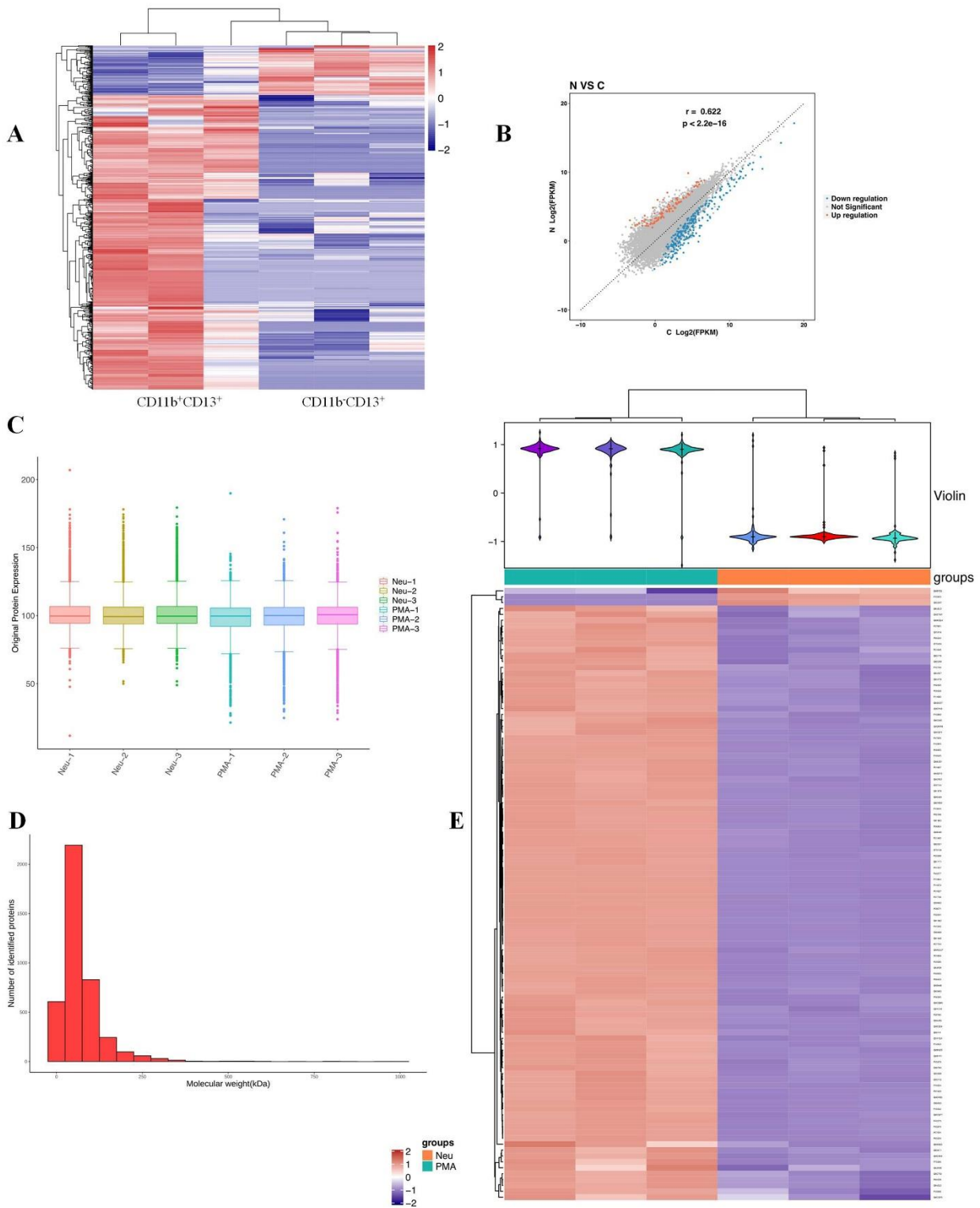


# Supplementary Information



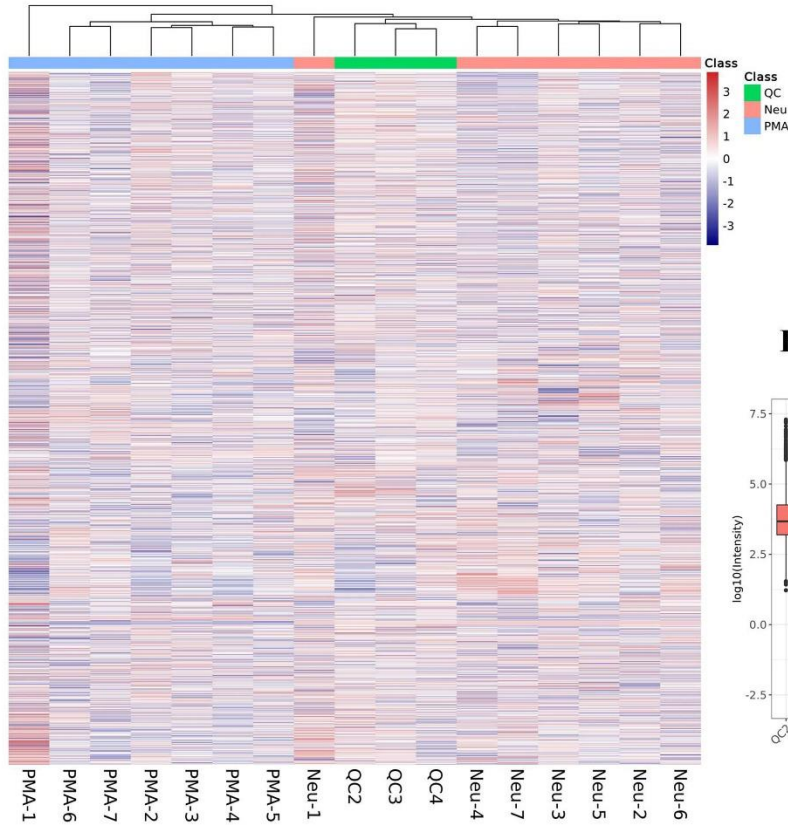
**Fig. S1** Cell death and CD11b mRNA expression in MBVPs incubated with indicated mixed NET-formed medium for 24 h. Control (normal culture medium), 2% (NET-formed medium:normal medium, 1:49), 10% (NET-formed medium:normal medium, 1:9), 25% (NET-formed medium:normal medium, 1:3), 50% (NET-formed medium:normal medium, 1:1), 100% (NET-formed medium replaces normal medium). NET formation and pericyte dysfunction post-TBI. **A** RT-PCR analysis of relative expression of CD11b in indicated groups. **B** FACS analysis of apoptotic MBVPs (Annexin-V-positive). Data are shown as the mean  $\pm$  SEM of 3 individual experiments. **C** Percentage of CD11b<sup>+</sup> pericytes in brain tissue from TBI mice at different time points. Mean  $\pm$  SEM of 5 individual samples; \*\* $P$  < 0.01, \* $P$  < 0.05, Sham vs target groups, ANOVA..



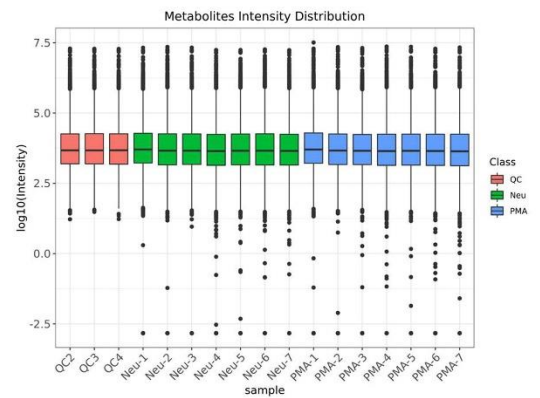
**Fig. S2:** Heatmap and plot of pericyte RNA-seq and neutrophil medium proteomics. **A** Full view of differential mRNAs in specific brain pericyte subpopulations ( $n = 3$  per group; red, up-regulation; blue, down-regulated). **B** Scatter plots of detected mRNAs in **A**. **C** Quantified protein expression of control

(Neu) and NET-formed (PMA) medium. **D** Molecular weight distribution of identified proteins in neutrophil medium proteomics. **E** Full view of heatmap from neutrophil medium proteomics [blue, NET-formed (PMA) medium; orange, control (Neu) medium].

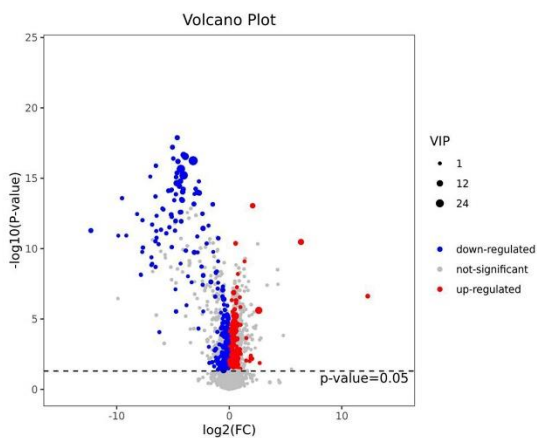
**A**



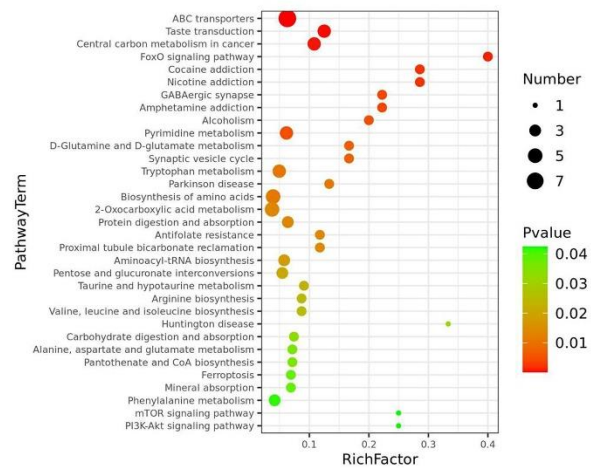
**B**



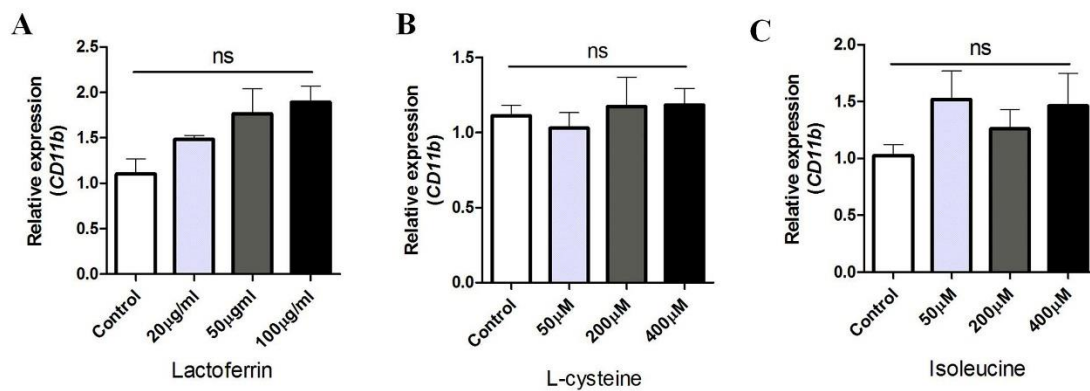
**C**



**D**



**Fig. S3** Heatmap, plots, and bioinformatics analysis of neutrophil medium metabolomics. **A** Full view of differential metabolites in indicated groups ( $n = 7$  per group; 3 samples of control groups were also tested as quality control; red, up-regulated; blue, down-regulated). **B** Distribution of detected metabolite intensity in neutrophil medium metabolomics. **C** Volcano plot of differential metabolites in PMA groups compared with control. **D** KEGG pathway enrichment bubble plot of the differential expression in neutrophil medium (X-axis, enrichment factor; Y-axis, pathways).



**Fig. S4** Relative expression of CD11b in MBVPs stimulated under indicated conditions for 24 h. **A–C** RT-PCR analysis of relative expression of CD11b in MBVPs treated with gradient concentrations of Lactoferrin (**A**), L-cysteine (**B**), and Isoleucine (**C**). Data are presented as the mean  $\pm$  SEM; NS, no statistically significant difference by ANOVA.





