

Figure S1. Experimental design and allocation of mice used in the present study. Schematic illustration of the animal experimental workflow. Male mice (6-8 weeks old) were used for *in vivo* CLP-induced sepsis experiments and *in vitro* BMDM experiments. WT and Erbin^{-/-} mice underwent CLP or sham surgery, followed by sample collection at 24 h for biochemical, histological, inflammatory, mitochondrial and molecular analyses, or 7-day survival monitoring. Erbin^{fl/fl} and Erbin^{fl/fl}/Lyz2-Cre mice were used for BMDM isolation and subsequent *in vitro* experiments. BMDM, bone marrow-derived macrophages; CLP, cecal ligation and puncture; WT, wild type; ALT, alanine aminotransferase; AST, aspartate aminotransferase; LDH, lactate dehydrogenase; TEM, transmission electron microscopy; MDA, malondialdehyde; SOD, superoxide dismutase; DHE, dihydroethidium; LPS, lipopolysaccharide; CCK-8, cell counting kit-8.

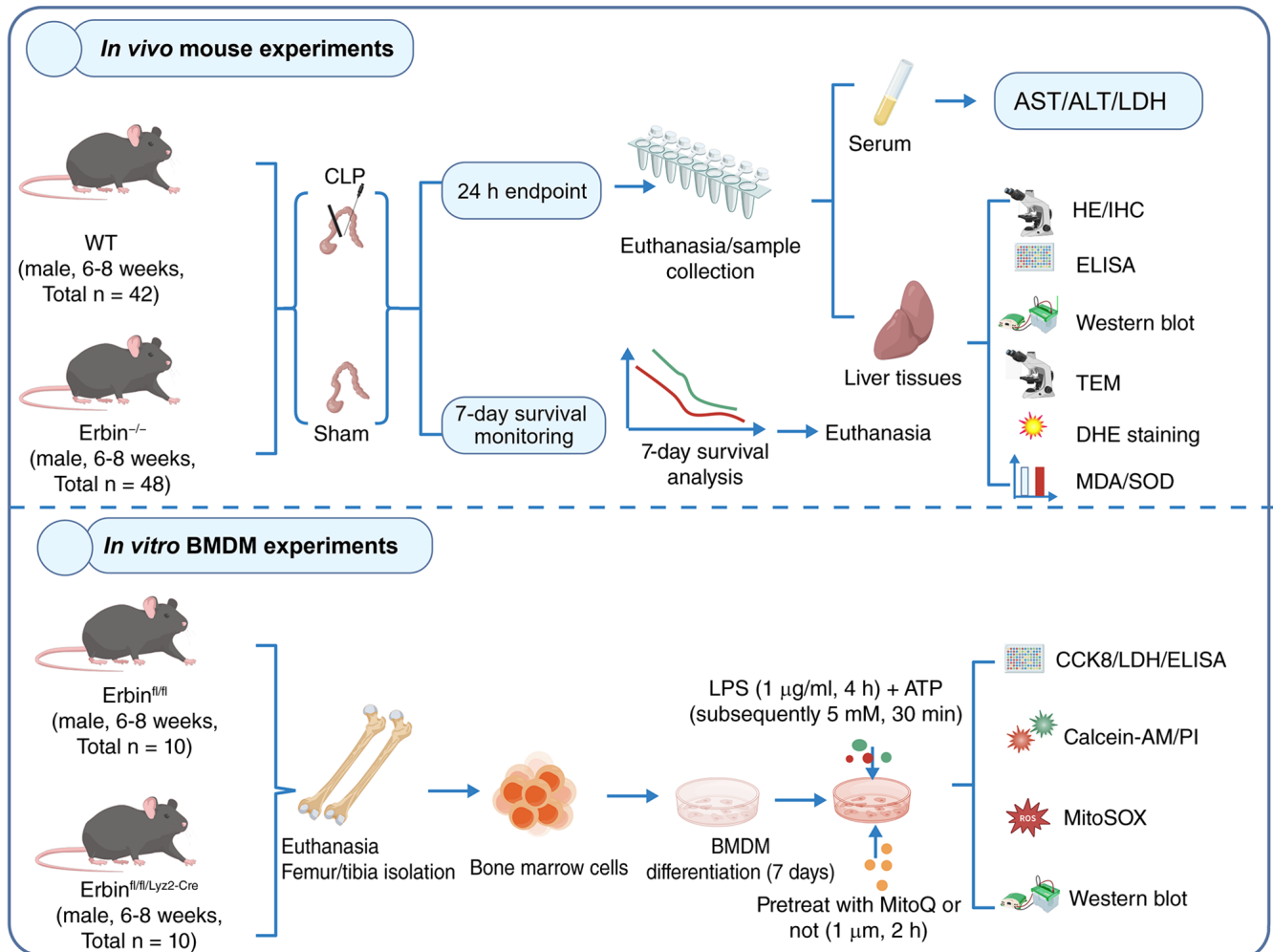


Figure S2. Erbin expression and its correlation with NLRP3 in human sepsis datasets. (A, C, E) Comparison of Erbin expression between control and sepsis samples in (A) GSE294059, (C) GSE228541 and (E) GSE28750. (B, D, F) Correlation analyses between Erbin and NLRP3 expression in sepsis samples from (B) GSE294059, (D) GSE228541 and (F) GSE28750. Blue lines indicate linear regression fits, and gray shaded areas represent 95% confidence intervals. Pearson and/or Spearman correlation coefficients and corresponding P-values are shown in the plots. **P<0.01; NS, not significant.

