

**Supplementary Materials for
Safety concentrations of genistin *in vitro* and *in vivo*, and
Effect of genistin on H&E staining of bone marrow and
normal mouse platelets**

**Includes: Fig S1; Fig S2; Fig S3;
Supplementary Figure**

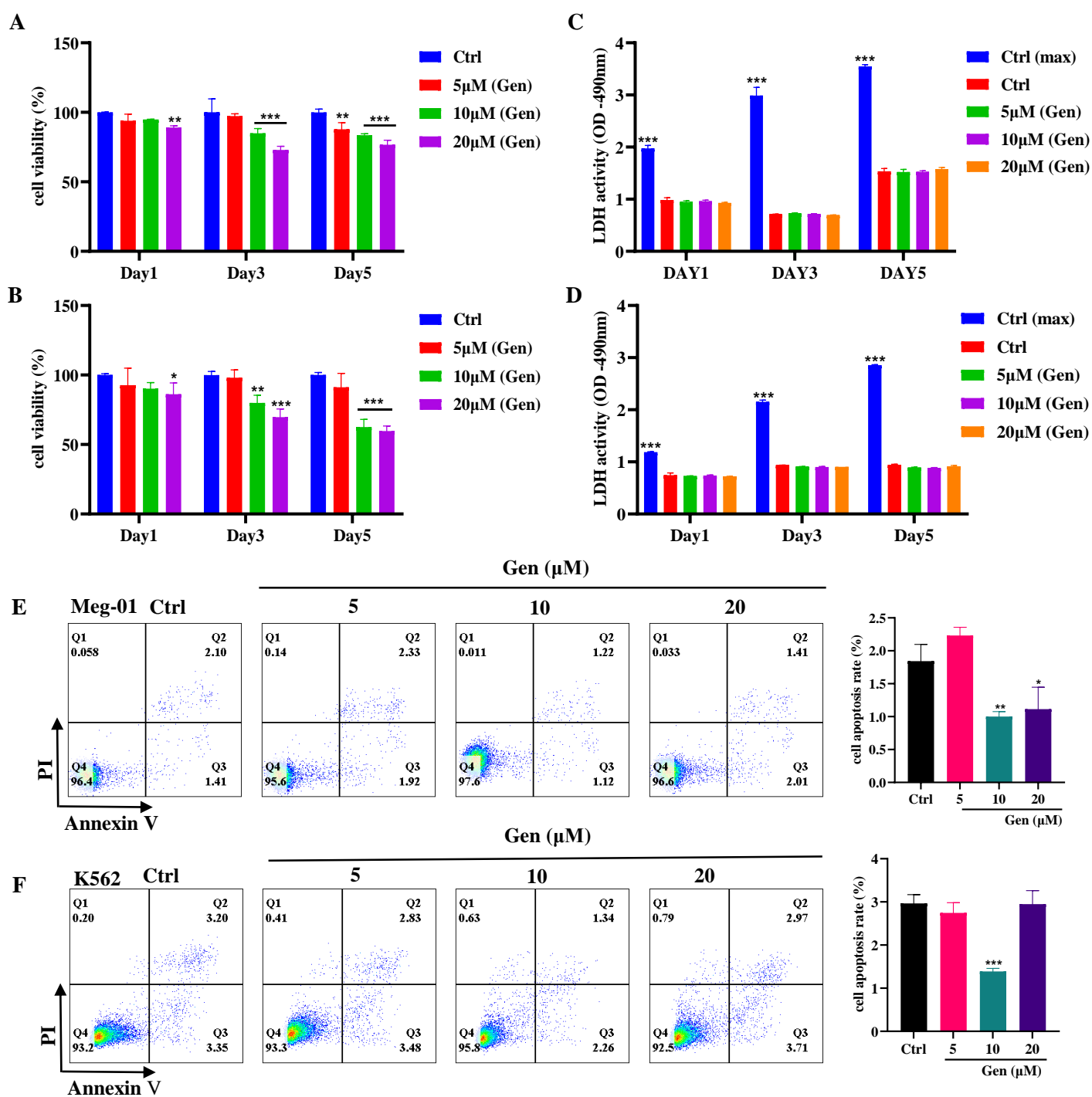


Figure S1. Safety of K562 and Meg01 cell concentrations *in vitro*. (A-B) Measurement of cell proliferation of K562 and Meg-01 cells with the CCK-8 assay after genistin intervention (n=3). (C-D) LDH assay for K562 and Meg-01 cell cytotoxicity after genistin intervention. Ctrl (max) group (sample maximum activity control group) (n=3). (E-F) Apoptosis analysis in K562 and Meg-01 cells after treatment with or without genistin for 5 days. Q2 (Annexin⁺PI⁺) denotes late apoptotic (n=3). Q3 (Annexin⁺PI⁻) denotes early apoptotic cells. Statistical analysis of apoptotic cells (Q2) of K562 and Meg-01 cells in each group. All data are means \pm SD (n=3). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, vs the Ctrl group. Gen: genistin. LDH: lactate dehydrogenase. Ctrl: control.

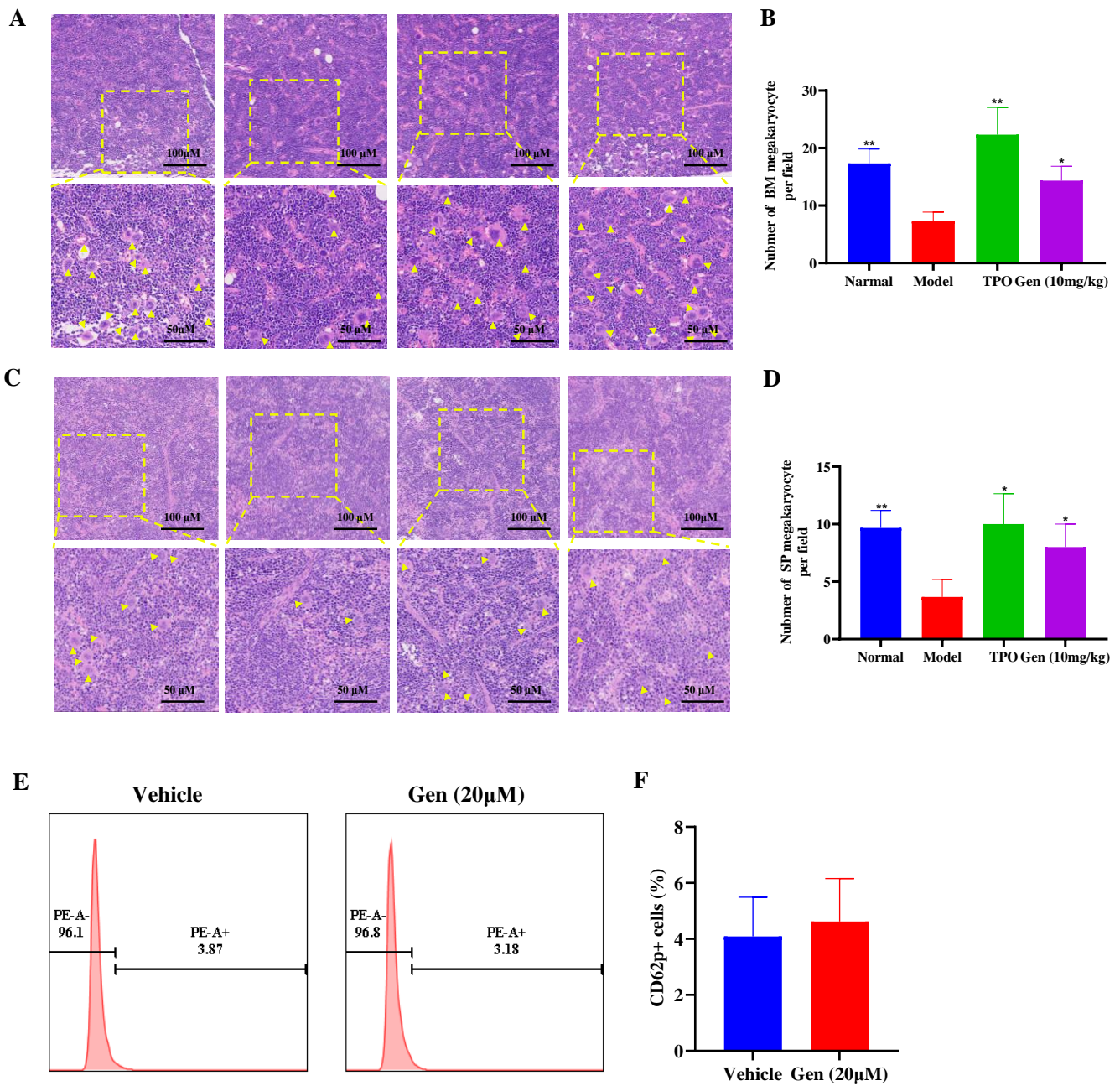


Figure S2. Effect of genistin on H&E staining of bone marrow and normal mouse platelets. (A-B) Representative images of H&E staining of BM after treatment for 10 days. Bars: 100 μ m (top), 50 μ m (bottom); The histogram shows the number of BM MKs in each group; (C-D) Representative images of H&E staining of spleen after treatment for 10 days. Bars: 100 μ m (top), 50 μ m (bottom); The histogram shows the number of SP MKs in each group; (E-F) Representative images of CD62p with or without genistin (10 μ M) washed platelets in each group; Statistical analysis results of CD62p ratio in washed platelets with or without genistin (10 μ M) loading in each groups; All data represent the mean \pm SD of three independent experiments; * p < 0.05, ** p < 0.01, *** p < 0.001, vs the model group.

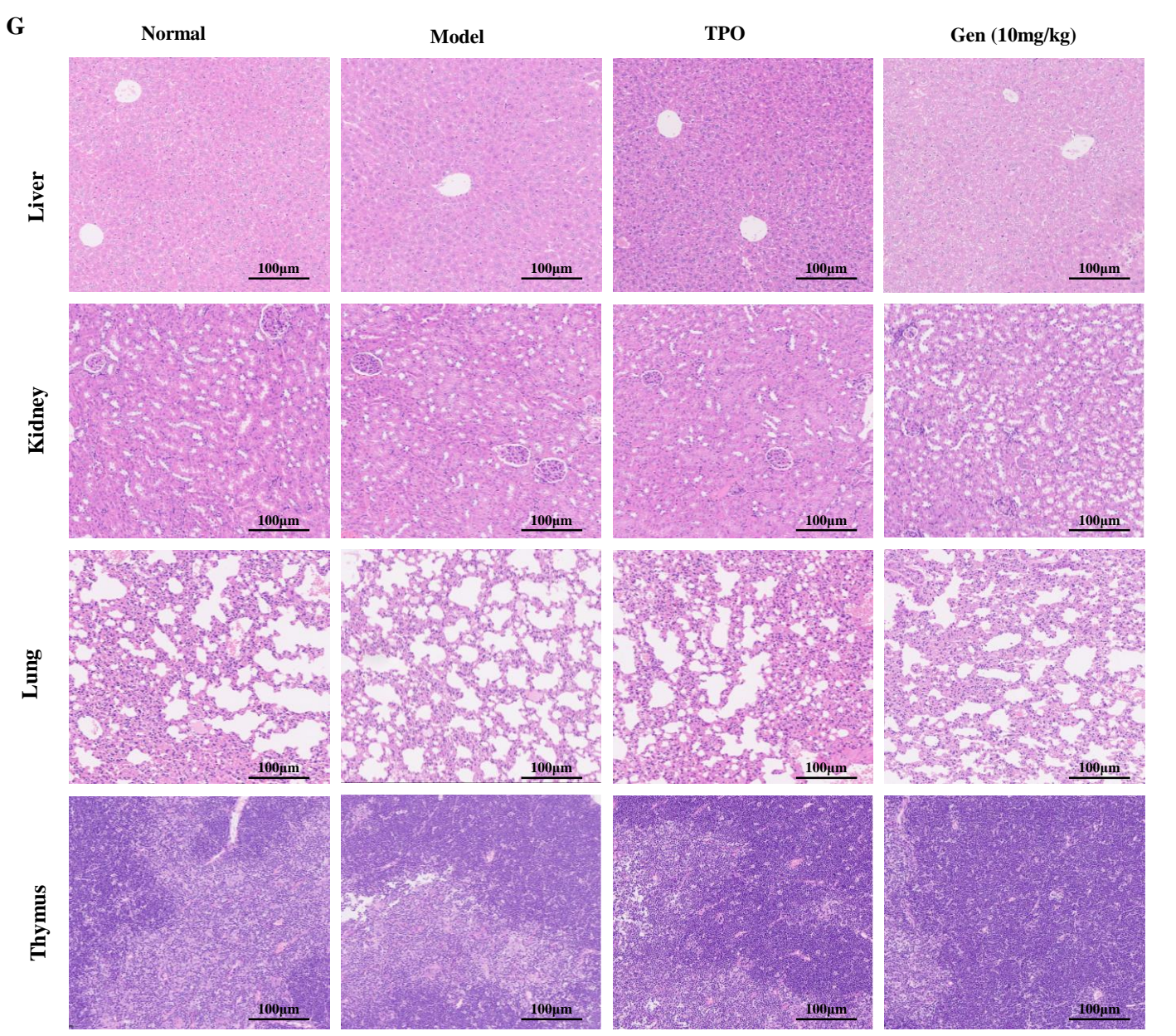
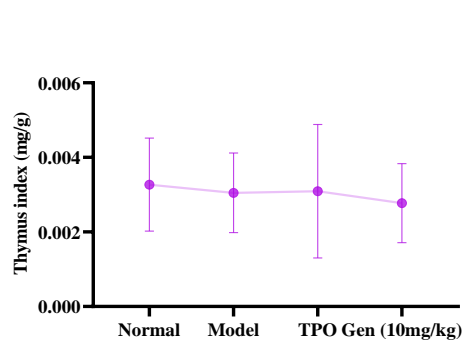
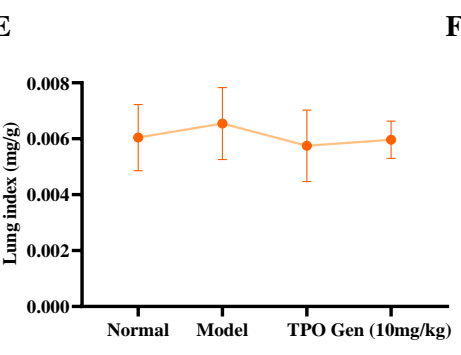
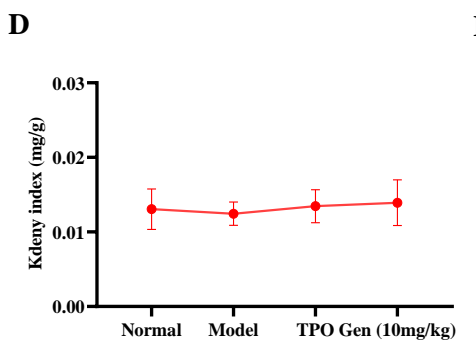
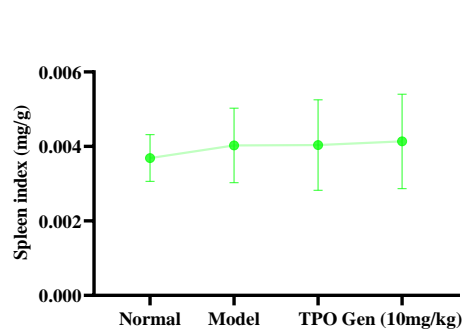
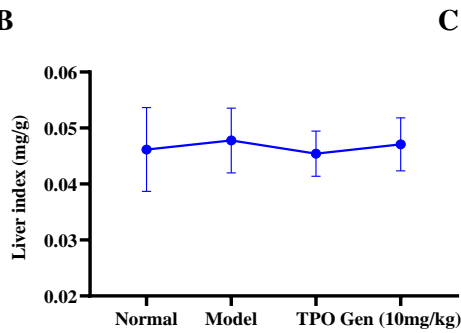
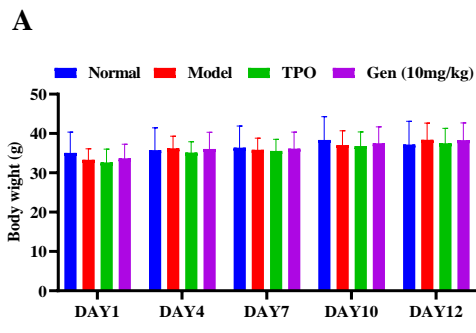


Figure S3. Safety of drug concentrations *in vivo*. (A) Body weight in each group on day 0, 4, 7, 10, 12. (B-F) Liver, kidney, spleen, lung and thymus index in each group on day 12. (G) H&E staining of the liver kidney, lung and thymus in each group on day 10. Bars: 100 μ m. Data are mean \pm SD (n=6, ANOVA). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, vs the model group. Gen: genistin