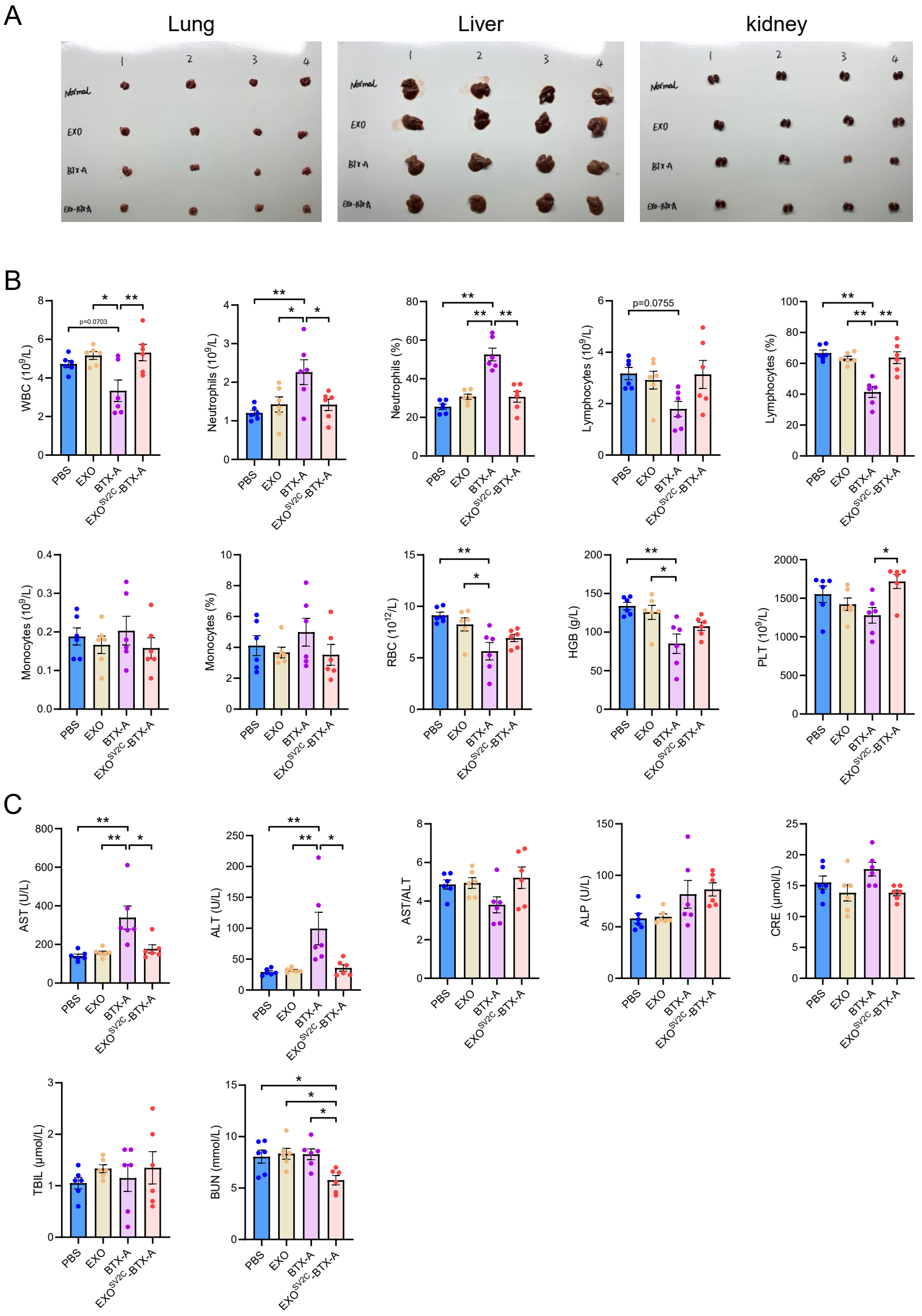
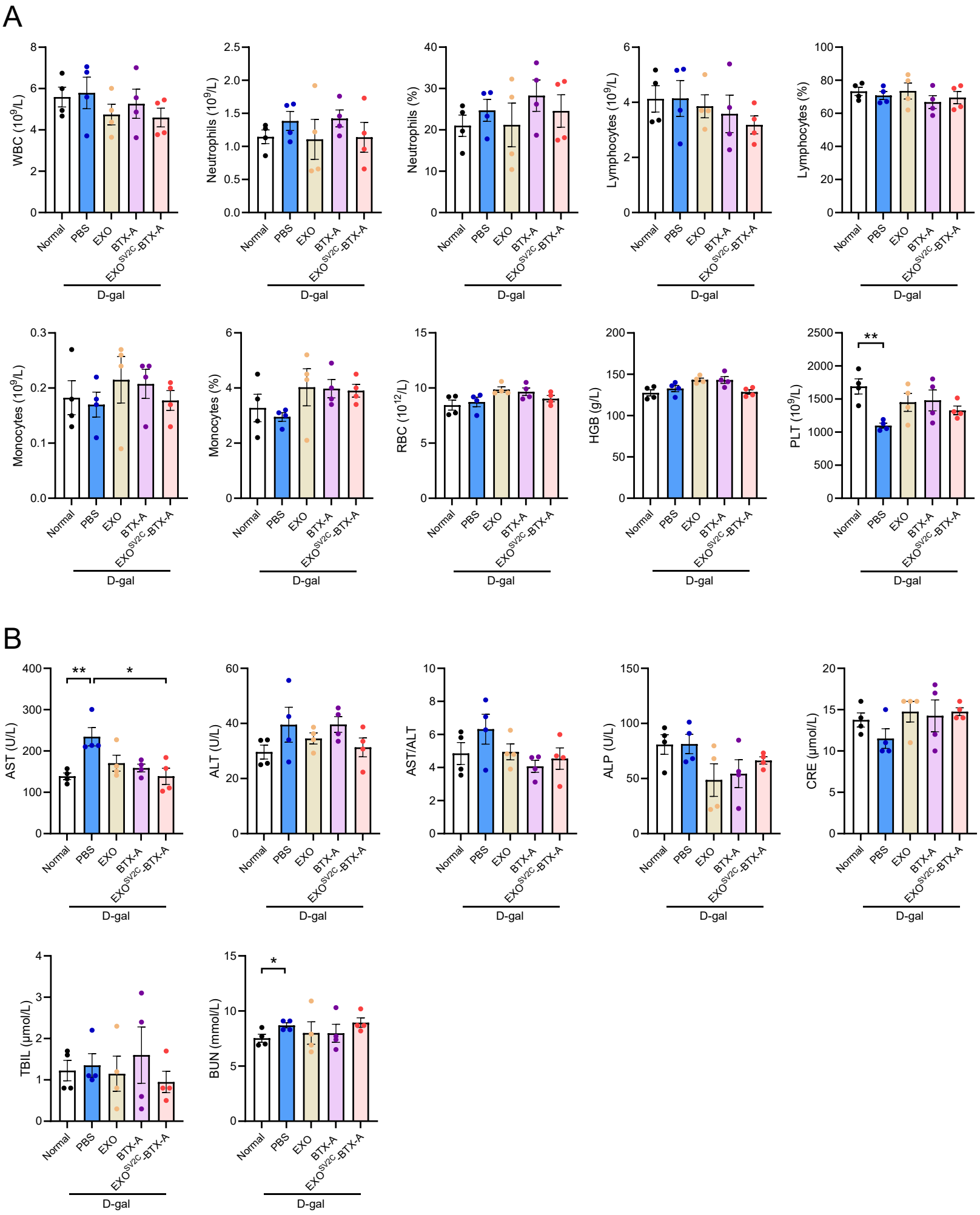



**Supplementary Figure S1.** Organ morphological and hematological/biochemical evaluation following treatment in normal mice. (A) Representative images of the lung, liver, and kidney harvested from normal mice 4 days after intraperitoneal injection of EXO ($2.0 \times 10^7$ particles/mL), BTX-A (50.99 U/kg), or $EXO^{SV2C}$-BTX-A ($2.0 \times 10^7$ particles/mL containing 50.99 U/kg BTX-A). No evident morphological abnormalities were observed in any of the groups. (B) Hematological analysis of peripheral blood. WBC, white blood cells; RBC, red blood cells; HGB, hemoglobin; PLT, platelets. (C) Serum biochemical analysis of liver and kidney function. AST, aspartate aminotransferase; ALT, alanine aminotransferase; ALP, alkaline phosphatase; CRE, creatinine; TRIL, total bilirubin; BUN, blood urea nitrogen. Data are presented as mean ± SEM (n = 6 per group). *p < 0.05, **p < 0.01.




**Supplementary Figure S2.** Hematological and biochemical evaluation in D-galactose-induced aging mice. (A) Hematology analysis of peripheral blood from D-galactose (1000 mg/kg)-induced aging model mice treated with EXO ($2.0 \times 10^7$ particles/mL), BTX-A (3.0 U/ml), or $EXO^{SV2C}$-BTX-A ($2.0 \times 10^7$ particles/mL, 3.0 U/ml BTX-A). WBC, white blood cells; RBC, red blood cells; HGB, hemoglobin; PLT, platelets. (B) Serum biochemical analysis. AST, aspartate aminotransferase; ALT, alanine aminotransferase; ALP, alkaline phosphatase; CRE, creatinine; TRIL, total bilirubin; BUN, blood urea nitrogen. Data are presented as mean ± SEM (n = 4 per group). *p < 0.05, **p < 0.01.