## **Supplementary Figure legend**

Supplementary Fig. 1: Evaluation of the ASE therapeutic influence in the studied organs using heatmap plots. The heatmaps clustered the studied oxidative stress and necroinflammation parameters in the liver, brain, lung, and spleen tissues of the rats in the CCl<sub>4</sub>-ASE group. Results are revealed as percentage change values in comparison to the CCl<sub>4</sub> group. (A) Heatmap distribution of the up-regulated parameters in the CCl<sub>4</sub>-ASE group relative to the CCl<sub>4</sub> group. (B) Heatmap distribution of the down-regulated parameters in the CCl<sub>4</sub>-ASE group relative to the CCl<sub>4</sub> group. The dark orange color refers to the higher percentage increase values and the light color indicates the lower ones. COX-2, cyclooxygenase-2; GPX, glutathione peroxidase; GSH, reduced glutathione; iNOS, inducible nitric oxide synthase; MPO, myeloperoxidase; NF- $\kappa B$ , nuclear factor-kappa B; NO, nitric oxide; ROS, reactive oxygen species; SOD, superoxide dismutase; TAC, total antioxidant capacity; TBARS, thiobarbituric acid reactive substances; TNF- $\alpha$ , tumor necrosis factor- $\alpha$ .