Background: This present study investigated the effect of each Taurine (TAU) and Sulfamethoxazole

(SMX), either separately or together (TAU+SMX) against liver damage induced by carbon tetrachloride

(CCl4). The research design was experimentally where one hundred and thirty-five *N=135* Swiss male

adult albino mice were divided into 9 groups: negative control (olive oil-treated), toxin control (CCl4

treated), Dimethyl sulfoxide (DMSO) control, TAU control, SMX control, TAU+SMX control, (CCl4+TAU),

(CCl4+SMX) and (CCl4+TAU+SMX). Results: The carbon tetrachloride (CCl4 ) amplified the oxidative

stress (by increasing Malondialdehyde (MDA) and Nitric oxide (NO) levels and reducing Superoxide

dismutase (SOD), reduced glutathione (GSH), Glutathione reductase (GR) and Total antioxidant

capacity (TAC)), moreover, the liver damage indicators were increased (alanine transaminase ALT and

aspartate transaminase AST) and liver proteins were reduced (serum albumin and total protein).

Additionally, white blood cell levels (WBCs) were increased, while platelets (PLT), red blood cells

(RBCs), hemoglobin (HGB) and hematocrit (HCT) levels were reduced. Also, SDS-PAGE

electrophoresis showed a decrease in protein synthesis. The liver tissue histopathological analyses

confirmed the former biochemical results. Both TAU and SMX post-treatments were efficiently able to

discharge the detected differences in the indicators to nearly normal levels. Conclusion: In conclusion,

the order of efficiency towards ameliorating the hepatotoxicity effect of CCl4wasTAU > (TAU+SMX) >

SMX.