

## **Supplementary Information**

### **Insights into the Protective Effect of Pycnogenol Against Methotrexate-Induced Toxicity: *in silico* and *in vivo* study**

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## Supplement for regression analysis

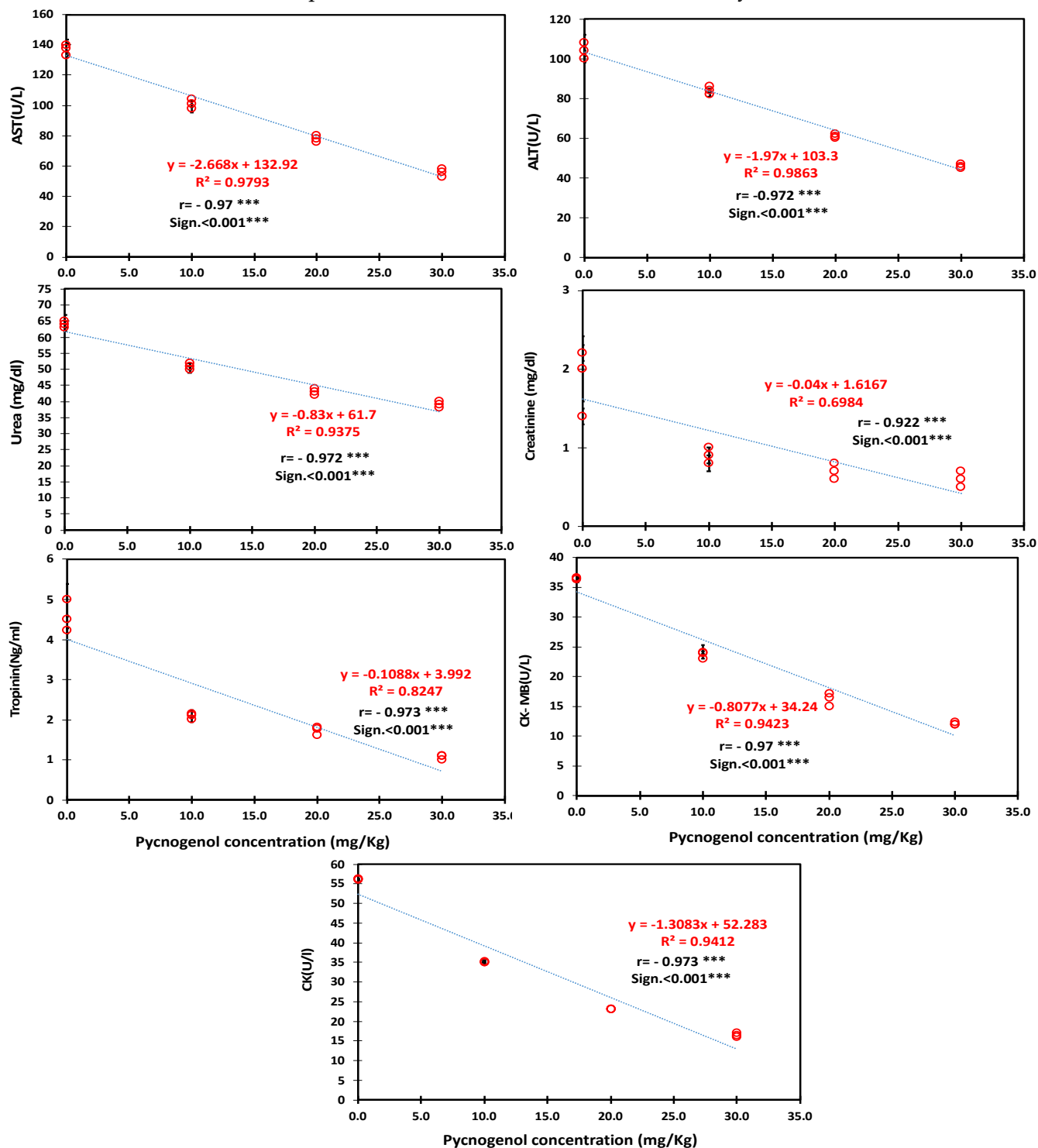
### 1- Biochemical analysis:

#### a) Serum biomarkers:

i. Liver function: activities of ALT, AST enzymes

ii. Kidney function: level of urea and creatinine

iii. Heart function: level of troponin and activities of CK and CK-MB enzymes

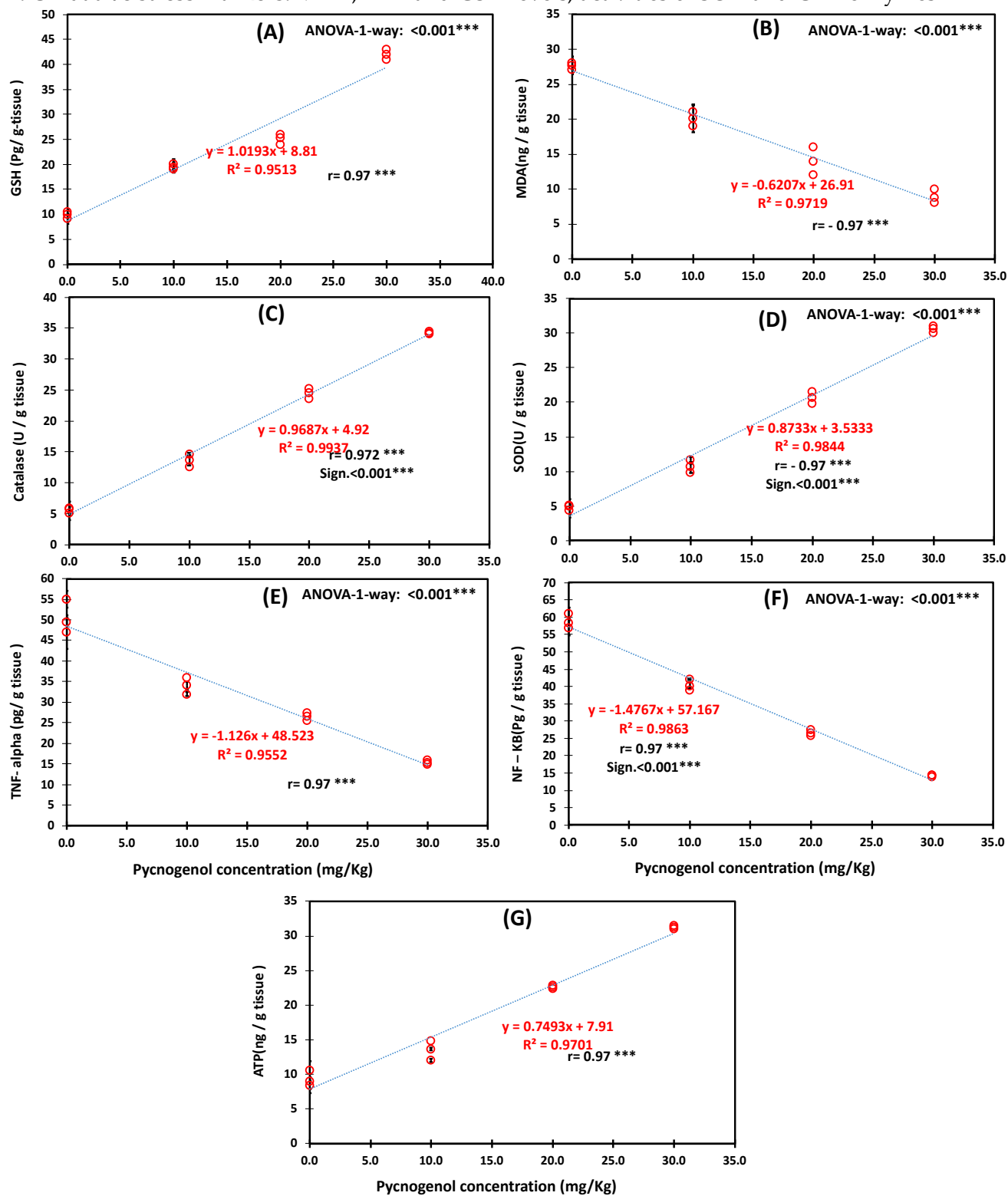


**Figure S1.** Regression trendline showing the relationship between increasing Pycnogenol levels (10, 20, and 30 mg Kg<sup>-1</sup>) with various serum biomarkers.

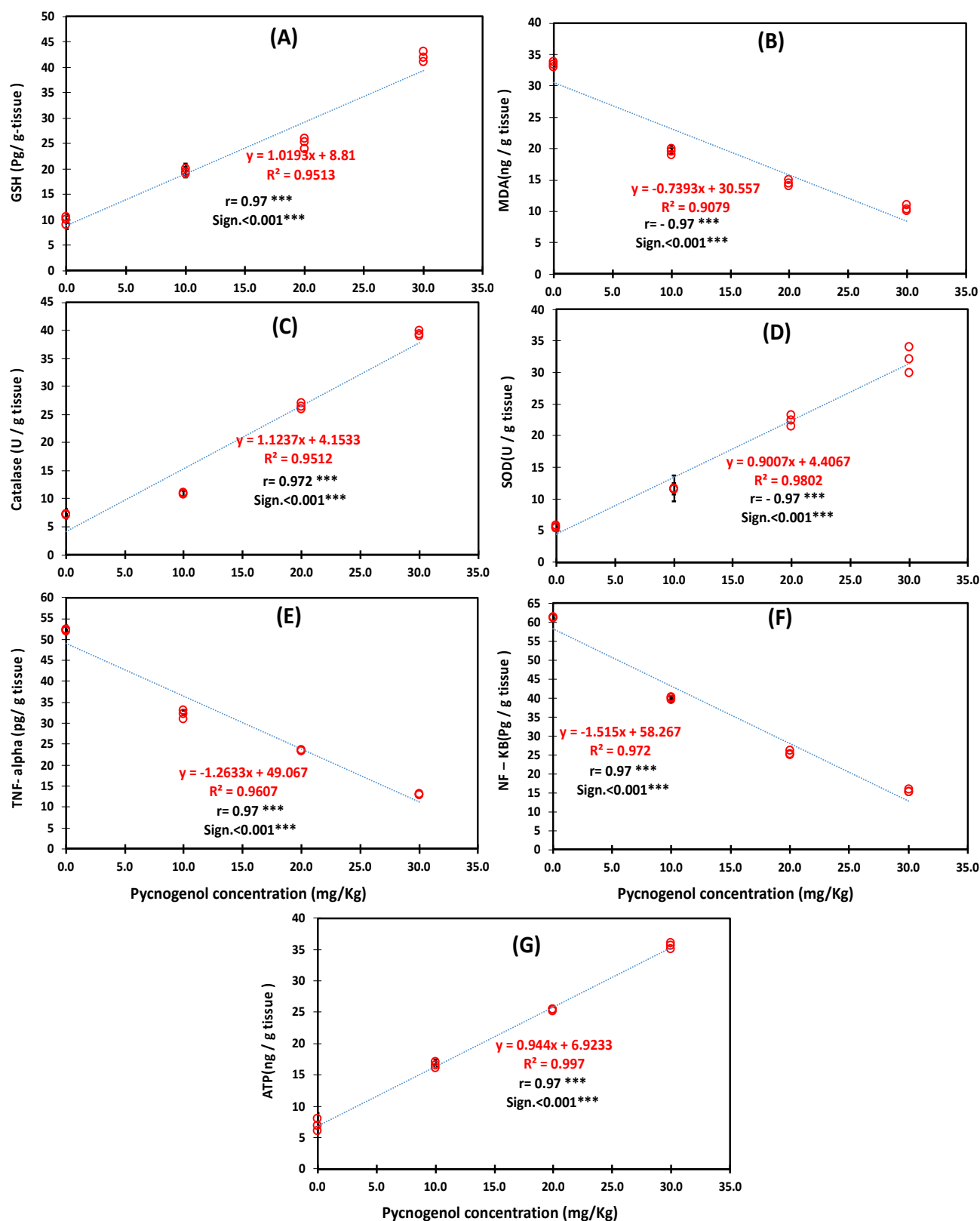
## B) Tissue markers: (heart, liver and kidney)

### i. Inflammatory biomarkers: NF- $\kappa$ B and TNF- $\alpha$ level

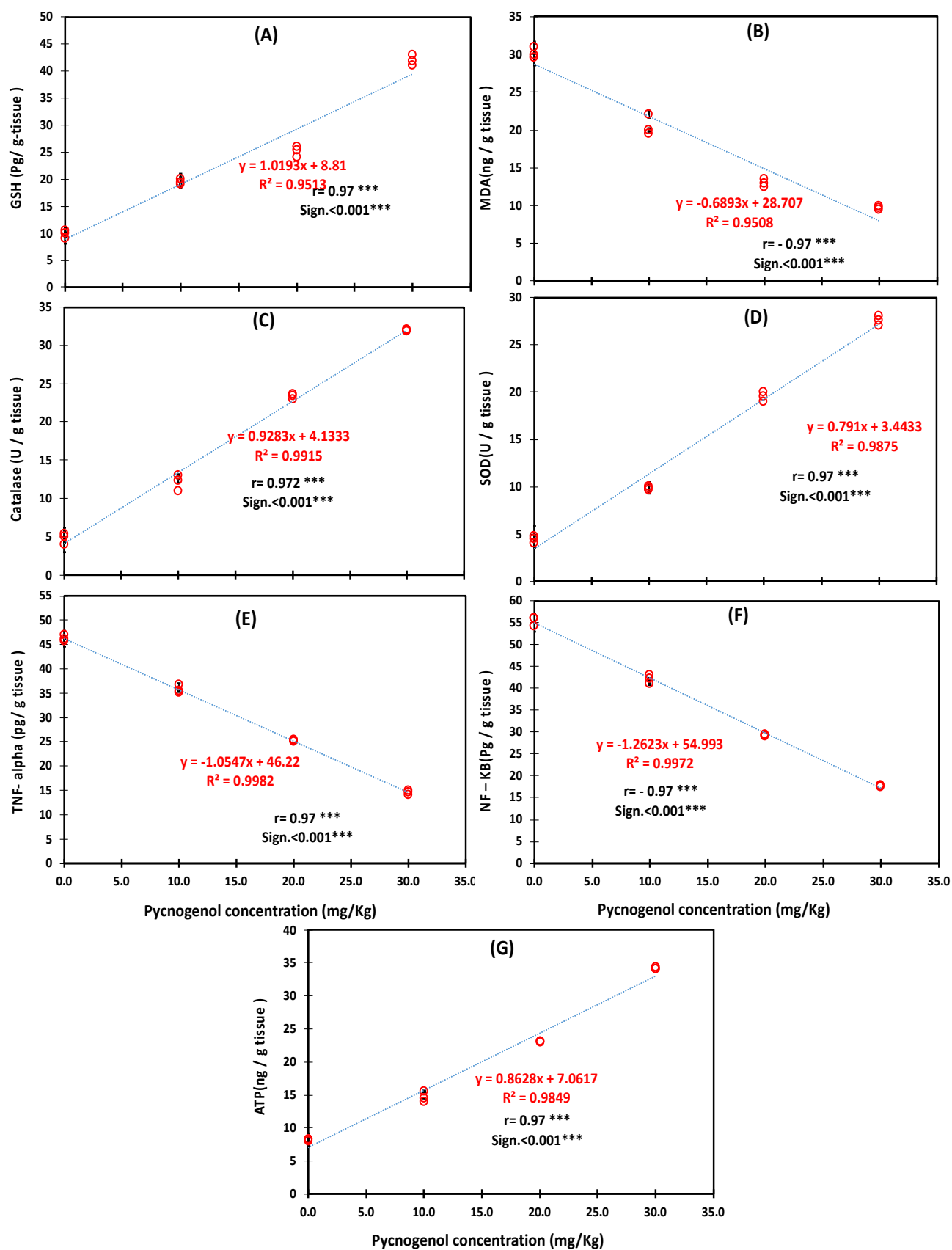
### ii. Oxidative stress markers: MDA, ATP and GSH levels, activities of SOD and CAT enzymes



**Figure S2.** Regression trendline showing the relationship between increasing Pycnogenol levels (10, 20, and 30 mg Kg<sup>-1</sup>) and various heart biomarkers.



**Figure S3.** Regression trendline showing the relationship between increasing Pycnogenol levels (10, 20, and 30 mg Kg<sup>-1</sup>) and various liver biomarkers.



**Figure S4.** Regression trendline showing the relationship between increasing Pycnogenol levels (10, 20, and 30 mg Kg<sup>-1</sup>) and various kidney biomarkers.