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Effect of Perfluorooctanoic Acid Treatment on Caspase-3 Expression in Female Mice Liver

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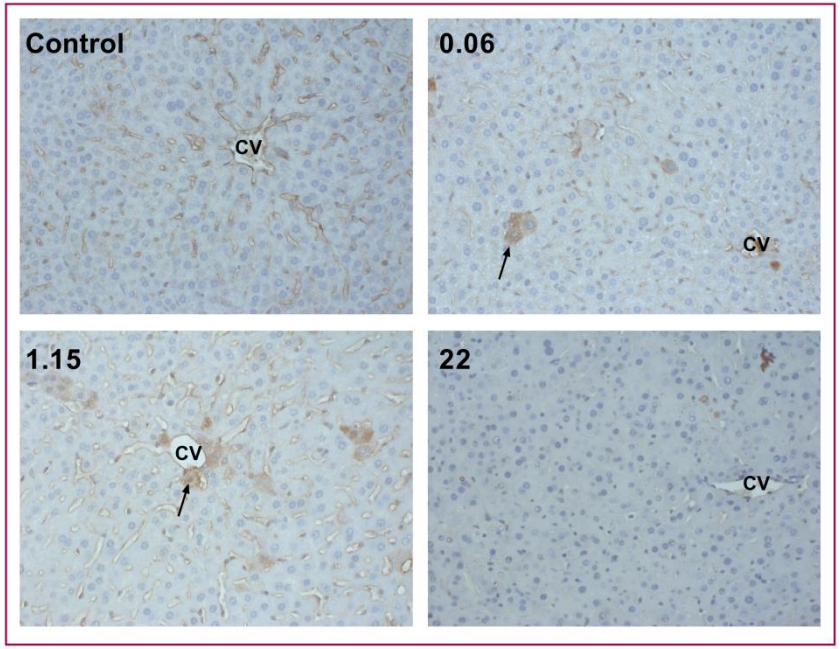
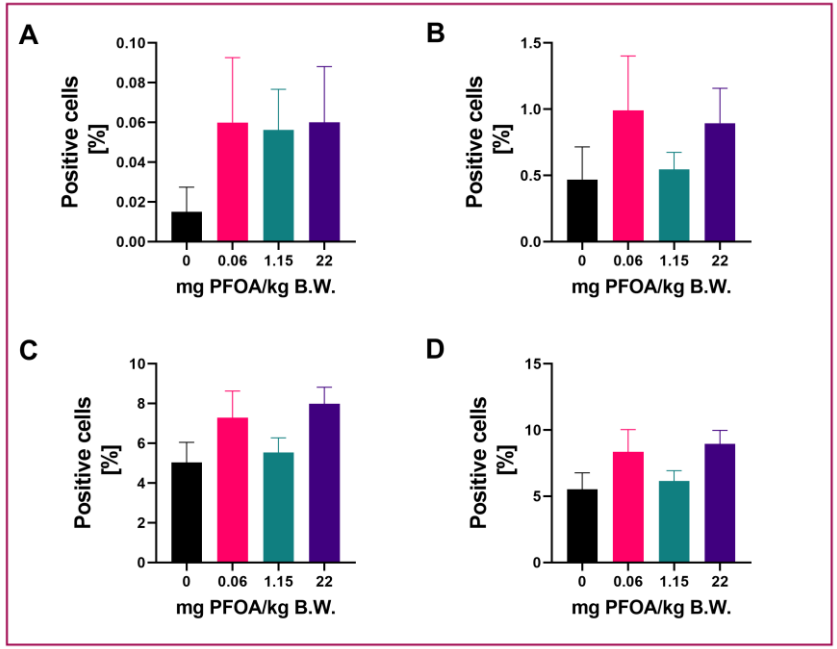
Materials and methods

- Twenty-four female Swiss mice were divided into four groups (6 per group) and treated via drinking water with **0, 0.06, 1.15, and 22 mg PFOA/kg body weight (b.w.) for 14 days.**
- After the treatment, liver tissues were collected, formalin-fixed, and embedded in paraffin. Sections of 5 µm thickness were prepared and **immunostained with an anti-caspase-3 antibody.**
- Quantification of caspase-3 expression was performed using the **ImageJ program** to analyze the number of positive cells, including the **percentage of high positive, positive, low positive and total positive cells.**

Results of the research





Discussion

- Our analysis revealed **an increase of the number of high positive, positive, low positive and total positive cells across treated groups.**
- These changes **were not statistically significant** when compared to the control group.
- These findings suggest that **PFOA exposure at the tested doses does not significantly alter caspase-3 expression in the liver** of female Swiss mice.

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