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CORRECTION

Correction to: Abstracts

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The author names of abstract **E-PS-23-005** were presented incorrectly in the original publication (Last Name initial and First Name presented). The author names have been corrected. In addition, the authors wish to clarify the Funding details related to their abstract. The abstract is included in full below – no changes have been made to the abstract beyond listing the Funding information.

E-PS-23-005
Impact of iron-molybdenum polyoxometalates on the thymus and blood leukocytes in rats
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Background & Objective: A change in blood leukocytes could follow the penetration of nanoparticles into the immunopoietic organs. Iron-molybdenum polyoxometalates (POM) are promising nanoparticles for targeted drug delivery because of their low toxicity, association with biologically active substances and percutaneous transport by electrophoresis. It is unclear whether POM can penetrate a special haemato-thymic barrier. The aim of the study is to investigate changes in the thymus and blood leukocytes in rats treated with POM.

Method: Male Wistar rats (5 intact, 15 experimental) were used in accordance with the ethical principles of Directive 2010/63 / EU. Experimental rats received 1, 7 and 30 intramuscular injections of an aqueous POM solution (1.5 mg / kg of mass in one injection). Histological, chemical, immunohistochemical and flow cytometry methods were performed.
Results: We revealed an iron and molybdenum accumulation and cortex thickness depletion in the thymus after 7 injections. The heat shock protein (HSP) expression increased in the thymus after a single and multiple POM injections. We observed a decrease in the total number of leukocytes and their fractions with a single and seven-fold administration of POM and an increase in leukocyte apoptosis and histone proteins in leukocytes after 30 injections.
Conclusion: Therefore, the accumulation of iron, molybdenum and HSP in the thymus suggests the penetration of POM through the haemato-thymic barrier. Despite minor and transient changes in the thymus, the accumulation of apoptotic leukocytes and histone proteins after 30 injections raises the question of reducing the number of POM injections for possible therapeutic use.

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