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**INFLUENCE OF NEW ANTIHYPERTENSIVE AND CARDIOPROTECTIVE COMPOUNDS ON FATTY ACID PROFILE OF LIPIDS**

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**My preferred method of presentation is:** Poster Presentation

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**Background:** The actual direction of modern pharmacology is study of the influence of new biologically active compounds on the change of fatty acid (FA) composition of lipids in tissues, which helps determine the mechanisms of their effect in arterial hypertension (AH) and heart failure (HF).

**Purpose:** To evaluate the effect of the studied biologically active compounds of phosphorylated derivatives of oxazole and coordination compounds of germanium on the FA profile of lipids in myocardium and aorta.

**Methods:** Experiments were performed on Wistar rats, which were modeled saline AH and anthracycline HF.

**Results:** It was shown that phosphorylated derivatives of oxazole restored the ratio of saturated and unsaturated FA aortic lipids to the level of intact control under the conditions of AH by increasing the content of arachidonic acid and reducing the content of palmitic acid. The administration of coordination compounds of germanium corrected the FA profile of lipids of the myocardium by content of both saturated and unsaturated FAs, mainly due to the reduction of palmitic acid.

**Conclusion:** It has been established that phosphorylated derivatives of oxazole can correct pathological changes in the vessel wall, which arise from hypertension, by restoring the aortic FA profile of lipids. The coordination compounds of germanium exhibit cardioprotective activity by preventing the lipotoxicity of doxorubicin.

None conflict of interest.