LITHUANIAN UNIVERSITY OF HEALTH SCIENCES

International Summer School Practice

The effects of blood pressure-modulating substances on the function of human connexin proteins

Elevated arterial blood pressure is one of the major risk factors for cardiovascular diseases, including heart failure. In scientific literature, connexins have been identified as potential therapeutic targets for various pathological conditions, including arterial hypertension. However, the effects of antihypertensive drugs on the functions and biophysical properties of human connexin proteins remain insufficiently understood.

The aim of this study is to evaluate the effects of selected blood pressure-modulating substances on the biophysical properties of one or more human connexins. The study will seek to determine whether these substances alter the functional properties of connexins, including the activity and permeability of the channels they form.

The results are expected to contribute to a better understanding of the molecular mechanisms underlying the effects of blood pressure-modulating drugs on connexin proteins and provide a basis for further research into connexins as potential therapeutic targets for the treatment of arterial hypertension.