

## **Abstract**

Ischemia/reperfusion injury is the main cause of death in patients suffering from cardiovascular disease. The efforts of tackling this problem have led to the discovery of cardioprotective adaptations and subsequently – of several cardioprotective models. One of the mechanisms of the adaptations is the stimulation of antioxidant system as a protection against reactive oxygen species formed during reperfusion phase of ischemia/reperfusion. The aim of this thesis is to review the current knowledge regarding the role of antioxidant system in cardioprotective models and comparing them by this property.

**Key-words:** cardioprotective models, antioxidant system, heart