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PROTECTIVE EFFECT OF INOSITOL PYROPHOSPHATES INHIBITION AGAINST MYOCARDIAL ISCHAEMIA REPERFUSION INJURY

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Objectives This study was designed to investigate the role of IP7 in I/R injury and to test the hypothesis that down-regulating IP7 generation protects against I/R injury.

Methods Male Sprague-Dawley rats were subjected to 30 min of ischaemia followed by 3 h of reperfusion. Animals were administrated with TNP (IP6Ks inhibitor) or PBS intravenously before coronary artery ligation. The infarct size, cardiac function and cardiomyocytes apoptosis were compared.

Results TNP administration significantly attenuated myocardial infarct size, enhanced left ventricular ejection fraction and decreased myocardial apoptotic

Conclusions This study suggested that increased IP6Ks activity and IP7 production contribute to myocardial ischaemia-reperfusion injury.

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