Results There was no difference between the two groups in clinical characteristic, while the interval time of onset to reperfusion in LVA group was longer and the incidence of Killip 3 grade was higher than those in non-LVA group (p<0.05, respectively). The peak value of plasma IL-8 in LVA was significantly higher and the peak time of plasma cTnI was much earlier than those in the non-LVA group (p<0.05, respectively). The peak values of plasma IL-8 in LVA group with LVEDP≥18 mm Hg were significantly higher than those in non-LVA group with LVEDP > (p<0.05). At 6th month post-AMI, the value of LVEF, LVESVI, LVEDVI, WMS and LVEDP in non-LVA group were much better than those in LVA group. The values of LVEF, LVESVI, LVEDVI, WMS and LVEDP in non-LVA group at 6th month post-AMI were significantly improved as compared with those at the first time after PCI but the values of LVEDVI, WMS, LVEDP were improved in the LVA group. Within the 6th month follow-up, the incidences of angina post-AMI, heart failure of NYHA III grade and mortality in LVA group were significantly higher than those in the non-LVA group (p<0.05, respectively).

Conclusions The value of plasma IL-8 is significantly increased and correlated closely with left ventricular remodelling status and haemodynamic change in patients with LVA after AMI. It is indicated that the over activity of immune inflammatory medium IL-8 involves in the process of LVA formation and has an important clinic significance in early diagnosis and appreciation of LVA post-AMI.

Conclusions The value of plasma BNP in the AMI patients with LVA was higher than that with non-LVA, and significantly correlated with left ventricular remodelling status and homodynamic change. It is indicated that the over secretion of BNP is involved in the left ventricular remodelling and the process of LVA formation.

Objective Anisodamine is a M-cholinergic receptor inhibitor that plays improvement effectiveness on the microcirculative perfusion. Our previous study had ever shown reversing effect on no-reflow phenomenon (NRP) in the miniswine models with AMI. The purpose of this study was continually to explore the effect of preventive intracoronary administration of anisodamine on myocardial microcirculation in York swines models with AMI by TIMI frame count, TIMI myocardial perfusion grade, MPP and PCWP, values of ZST and myocardial infarct size in anisodamine group were much lower than that in saline group significantly (p<0.05).

Conclusion Preventive intracoronary administration of anisodamine could improve AMI survival rate with NFR by maintaining effective myocardial microcirculation status and raising coronary perfusion pressure as well decreasing the size of myocardial infarction.

Objective To investigate the change of brain natriuretic peptide (BNP) in plasma and the relationships with the left ventricular myocardial infarction (AMI) patients using left ventriculography (LVG).

Methods A total of 64 patients with primary anterior AMI accompanied LVA diagnosed by LVG were enrolled in this study and divided into LVA group (35 patients) and non-LVA group (31 patients). Plasma BNP was measured. At the immediately after PCI and 6th month after AMI, the parameters of LVEDVI, LVESVI, LVEF, WMS and LVEDP were measured by LVG. The main adverse cardiac events (MACE) were recorded during 24 week after PCI.

Results The peak value of plasma BNP in LVA group was higher and the arrived time of peak values of peak time of plasma BNP was earlier than those in the non-LVA group (p<0.01, respectively). In 5th day and 24th week after AMI, the values of BNP in LVA group were higher as compared to those in non-LVA group (p<0.05, respectively). The peak value of plasma BNP in LVA group, regardless of whether LVEDP≥18 mm Hg or LVEDP<18 mm Hg were higher than that in non-LVA group under the same level of LVEDP (p<0.05). At 6th month after AMI, the parameters of LVEF, LVESVI, LVEDVI, WMS and LVEDP in non-LVA group were much better as compared to those in LVA group. The peak value of plasma BNP was significantly correlated with LVESVI, LVEDVI, WMS, LVEDP in LVA group (p<0.01, respectively), while negatively correlated with LVEF at primary PCI (r=−0.72, p<0.01). During the 6 months follow-up, the incidence of MACE in LVA group were higher than that in the non-LVA group (p<0.05). The peak value of plasma BNP in LVA group was significantly correlated with the incidence of MACE (r=0.56, p<0.05).

Objective To investigate the efficacy and safety of platelet glycoprotein IIb/IIa inhibition (tirofiban) during PCI in AMI patients performed primary PCI.

Methods A total of 96 patients with AMI were randomised to divide into two groups: the tirofiban group (TG, n=44,) and the control group (TG, n=52).