## **Optimal Timing of Invasive Strategy in NSTEMI Patient: Immediate or Delayed?**

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Early invasive approach in patients with non-ST-segment elevation acute coronary syndrome (NSTE-ACS) has been approved to improve outcomes [1]. The issue of optimal timing of routine invasive strategy has not been clarified due to confusing results of recently released randomized controlled trials (RCTs) that have compared early versus delayed invasive intervention. Several meta-analyses have indicated the potential of earlier intervention to reduce recurrent ischemia, while mortality and new MI rates were not different as compared to delayed invasive strategy [2].

The largest systemic review and meta-analysis of this issue announced early invasive strategy in NSTE-ACS patients seems to be associated with lower rates of recurrent ischemia, but higher levels of cardiac injury biomarkers, as compared with delayed invasive strategy. Mortality rates appear to be similar in the short- and midterm follow up (Figure 1) [3].

The aim of this lecture is to systematically summarize the RCTs on early versus delayed invasive strategy and to elucidate improvement of outcomes between two strategy.



Figure 1. Forest plots show comparisons of rate in mortality (panel A), new MI (panel B) and recurrent ischemia (panel C).

## Reference

1. C.P. Cannon, W.S. Weintraub, L.A. Demopoulos, et al., Comparison of early invasive and conservative strategies in patients with unstable coronary syndromes treated with the glycoprotein IIb/IIIa inhibitor tirofiban, N. Engl. J. Med. 344 (2001) 1879-1887.

2. M. O'Donoghue, W.E. Boden, E. Braunwald, et al., Early invasive vs conservative treatment

strategies in women and men with unstable angina and non-ST-segment elevation myocardial infarction: a meta-analysis, JAMA 300 (2008) 71-80.

3. D. Milasinovic, A. Milosevic, J. Marinkovic. Timing of invasive strategy in NSTE-ACS patients and effect on clinicaloutcomes: A systematic review and meta-analysis of randomized controlled trials. Atherosclerosis 241 (2015) 48-54.