

## **Clinical Characteristics Associated with Poor Long-term Survival Among STEMI Patients Treated with Primary PCI: Mortality insights from a large single-center registry**

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**Background and Aims:** Cumulative evidence has demonstrated that rapid primary percutaneous coronary intervention (PCI) is the most effective reperfusion strategy for acute STEMI. The baseline clinical factors associated with one year mortality in these patients are less known. In this study we analyzed pre-angiography clinical, laboratory and echocardiographic factors associated with one year mortality.

**Methods:** We used our clinical database consisting of all pts treated using primary PCI for STEMI within 12 hours of chest pain between 1/2001 and 1/2008. Patients presented with cardiogenic shock were excluded. **Results:** 1249 pts with STEMI mean age 61±13 years [range 24-101] were included. PCI was successful in 94% of pts. After multivariate analysis including all pre-angiography factor associated with one year mortality in uni-variate analysis [p<0.05] the following factors were statistically significant factors predicting one year mortality:

	<b>OR</b>	<b>95 % CI</b>	<b>P-value</b>
Age > 65 y	1.4	1.02-1.9	0.03
GFR (<60 mL/min/1.73 m <sup>2</sup> )	1.3	1.1-1.6	0.007
Killip class >1	1.4	1.1-1.7	0.002
History of CVA	3.2	1.4-7	0.004
WBC >15000	2.8	1.5-5.1	0.007
LVEF <40%	1.3	1.1-1.6	0.008

CVA= cerebrovascular attack, WBC= white blood count, LVEF= left ventricular ejection fraction.

**Conclusions:** Our results show that older age, history of CVA, high killip class, impaired renal function, high WBC and depressed left ventricular function, factors available before angiography, are a significant factors associated with poor one year outcomes in pts with STEMI undergoing primary PCI.