

Clopidogrel: what is the impact of such treatment on MACE rate and mortality in acute coronary syndromes?

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Background: Practice guidelines have currently classified the administration of Clopidogrel in IIa for ST elevation myocardial infarction (STEMI) and I for Non STEMI (NSTEMI). The AMIS-Plus registry (Acute Myocardial Infarction in Switzerland) is a national prospective registry of acute coronary syndromes (ACS) offering the opportunity to study the association of different treatment modalities with hospital outcome.

Method:

From January 1997 to December 2005, The AMIS-Plus data base included 19,461 patients with an ACS admitted to Swiss hospitals. Complete data on Clopidogrel administration are available on 19,209 pts. Baseline characteristics are presented in the table below:

n=19202	With Clopidogrel (n=7,819) STEMI/ NSTEMI 4742/3077	No Clopidogrel (11,390) STEMI/ NSTEMI 6760/4630	P value (Chi-Square)
Female gender	23.3%	30.7%	<0.001
Age mean ±sd median	62.7 ± 12.6 63y	67.3 ± 13.1 69y	<0.001
Killip class			
Killip class I	82.5%	70.2%	<0.001
Killip class II	13.2%	20.5%	
Killip class III	2.3%	6.7%	
Killip class IV	1.9%	2.6%	
Diabetes	18.2%	21.5%	<0.001
Concomitant GP IIb/IIIa antagonists	47.9%	21.1%	<0.001
PCI any	85.5%	37.5%	<0.001

Results:

As shown in Fig. 1 the administration of Clopidogrel had a significant impact on in-hospital mortality and in-hospital MACE rate. The magnitude of this benefit is particularly important in diabetic patients. When correcting the baseline characteristic imbalances by multivariate analysis: impact on mortality and major adverse clinical events (stroke, reinfarction and death: MACE), the differences are still significant (OR for mortality 0.81, CI 95% 0.74-0.98; OR MACE 0.83, CI 95% 0.70-0.98).

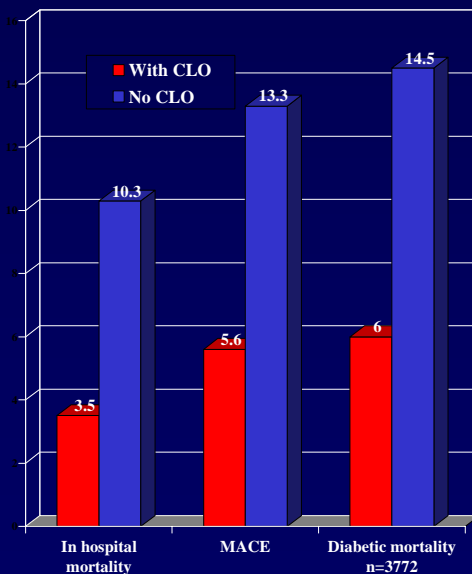


Figure 1: In-hospital mortality and MACE rate



A Acute
 M Myocardial
 I Infarction in
 S Switzerland

✓ **Conclusion:** In Swiss hospitals, Clopidogrel use for pts with ACS is associated with both lower MACE rate and lower in-hospital mortality.