



## Acute Coronary Syndromes

### COMPARISON OF 600MG VERSUS 300MG LOADING DOSE OF CLOPIDOGREL FOR PATIENTS WITH STEMI: A META-ANALYSIS

Poster Contributions

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**Background:** The optimal loading dose (LD) of clopidogrel in ST-elevation myocardial infarction (STEMI) patients treated with primary percutaneous coronary intervention (PCI) is not well established. The current AHA/ACC STEMI guidelines recommend 300-600mg as LD.

**Methods:** We undertook a meta-analysis of controlled trials and observational studies comparing 600mg and 300mg clopidogrel LDs. The efficacy end point was major adverse cardiac events (MACE), and the safety end point was major bleeding. Data were extracted on an intention to treat basis. The chi-squared ( $\chi^2$ ) test was used to evaluate heterogeneity and a p-value <0.05 was deemed significant. A random effects model was used and odds ratios (OR) were calculated using the Mantel-Haenszel method.

**Results:** 9 studies involving 18,623 patients were included in the efficacy analysis. Mean duration of follow-up was 8 months. Only 4 studies were eligible for the safety analysis. The MACE risk was lower with 600mg LD (7.0%; 650/9,231) compared to 300mg LD (9.2%; 867/9,392) [OR 0.75; 95% CI (0.63-0.91)] (Fig. 1). On the other hand, there was no significant difference in the major bleeding events between the two groups (2.5%; 89/3,551 with 600 mg vs. 2.3%; 63/2,796 with 300 mg) [OR 0.84; 95% CI (0.60-1.16)].

**Conclusion:** In STEMI patients treated with primary PCI, the administration of 600mg of clopidogrel LD was associated with lower risk of MACE compared to 300mg without causing an increase in the risk of major bleeding.

Figure 1. MACE

