



Acute and Stable Ischemic Heart Disease

ONE-YEAR MORTALITY INCREASED IN PATIENTS WITH PERI-PROCEDURAL MYOCARDIAL INFARCTION: INSIGHTS FROM THE CHAMPION TRIALS

Moderated Poster Contributions

Acute and Stable Ischemic Heart Disease Moderated Poster Theater, Poster Hall, Hall C
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Session Title: Post-CAD/MI: Making Tough Predictions About the Future

Abstract Category: 2. Acute and Stable Ischemic Heart Disease: Clinical

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Authors: *Christoph Olivier, Vandana Sundaram, Victoria Ding, Lingyao Yang, Sergio Leonardi, Renato Lopes, Deepak Bhatt, Gregg Stone, Philippe Steg, C. Michael Gibson, Christian Hamm, Matthew Price, Harvey White, Manisha Desai, Robert Harrington, Donald R. Lynch, Kenneth Mahaffey, on behalf of the CHAMPION Investigators, Stanford University, Stanford, CA, USA*

Background: The importance of peri-procedural myocardial infarction (PPMI) remains controversial. We evaluated one-year mortality after PCI and its association with PPMI.

Methods: We used data from the CHAMPION PLATFORM and CHAMPION PCI trials, in which patients undergoing PCI were randomized to cangrelor vs. clopidogrel. Adjudicated PPMI was defined by 2012 3rd Universal Definition of MI (UDMI; CK-MB $\geq 3x$ + other supportive findings), or based solely on CK-MB elevations to 3-5x, 5-10x, and $>10x$ ULN.

Results: Of 13,968 participants, 11% initially presented with stable angina (SA), and 89% with ACS. One-year mortality was 3.4% (3.2% cangrelor vs. 3.6% clopidogrel; HR 0.88 [95% CI 0.73-1.06]; $p=0.17$). Mortality at one year was lowest for SA (1.5%), intermediate for NSTEMI-ACS (3.5%), and highest for STEMI (4.8%) patients. PPMI defined by UDMI or CK-MB elevation 3-5x, 5-10x and $>10x$ occurred in 2.6%, 2.5%, 2.1% and 1.6% of participants, respectively (Figure). After multivariable adjustment, patients with PPMI had a significantly higher risk of one-year mortality when defined by UDMI (HR 1.8 [1.1-3.0]; $p=0.01$) or CK-MB elevation $>10x$ (HR 3.3 [2.2-4.9]; $p<0.01$), but not for MI defined only by elevations of 3-5x or 5-10x compared with participants without PPMI.

Conclusions: Patients with PPMI defined by the UDMI and those with CK-MB elevations $>10x$ ULN have an increased risk of death within one year after PCI. Survival is not significantly impacted by peri-procedural CK-MB elevation $<10x$ without other findings of MI.

Kaplan-Meier Survival Estimates for One-Year Mortality by PPMI status for each PPMI definition

