



OUTCOME OF SECOND-GENERATION EVEROLIMUS- AND ZOTAROLIMUS-ELUTING STENTS IN STELEVATION MYOCARDIAL INFARCTION

i2 Poster Contributions McCormick Place South, Hall A Saturday, March 24, 2012, 9:30 a.m.-Noon

Session Title: Acute Myocardial Infarction

Abstract Category: 6. PCI - Acute MI Presentation Number: 2520-117

Authors: <u>Matthijs A. Velders</u>, Helen Boden, Bas L. van der Hoeven, Su-San Liem, Ernst E. van der Wall, Johan W. Jukema, Martin J. Schalij, Leiden University Medical Center, Leiden, The Netherlands

Background: Use of drug-eluting stents (DES) in STEMI (ST-elevation myocardial infarction) is still considered off-label, due to an increased risk of stent thrombosis (ST) in first-generation DES. Limited data exist concerning appliance of second-generation DES in STEMI patients.

Methods: A retrospective analysis of an unselected patient population included in a prospective STEMI registry, comparing treatment with Promus everolimus-eluting (EES) and Endeavor zotarolimus-eluting stents (ZES) up to two-years of follow-up.

Results: EES were implanted in 256 patients, 301 patients received ZES. Baseline and procedural characteristics were balanced between groups. Average age was 60.0±0.5. Pre-hospital times were low (median first diagnosis-to-balloon time was 79 minutes) and glycoprotein Ilb/Illa inhibitor use high (96%). Follow-up was available in 96% of patients. No differences in mortality and re-infarction were observed. After one year, ST was more common in ZES (2.4% vs. 0.4%, p=0.05). This difference was not sustained over two-years (2.8% vs. 0.8%, p=0.091). Target lesion revascularization was lower in EES after two-years (3.2% vs. 7.3%, figure 1), due to lower rates of restenosis- and ST-related procedures.

Conclusion: During two-years of follow-up, EES was more efficacious compared to ZES. Furthermore, EES showed low ST rates suggesting that EES use is safe in STEMI patients.

