Gender differences with short-term vs 12 months dual antiplatelet therapy in patients with acute coronary syndrome treated with the COMBO dual therapy stent: a 1-year analysis of the REDUCE trial

Authors:
M Verdoia1, H Suryapranata2, S Damen2, C Camaro2, E Benit3, L Barbieri4, S Rasoul5, AW Van T Hof6, V Roolvink6, E Lignetgen7, S Postma8, JJE Kolkman8, MA Brouwer2, E Kedhi2, G De Luca4, 1ASL Biella Ospedale degli Infermi University of Piemonte Orientale - Biella - Italy, 2Radboud University Medical Centre - Nijmegen - Netherlands (The), 3Virga Jesse Hospital - Hasselt - Belgium, 4Maggiore Della Carita Hospital, Department of Invasive Cardiology - Novara - Italy, 5Atrium Medical Centre Parkstad - Heerlen - Netherlands (The), 6Isala Clinics - Zwolle - Netherlands (The), 7Orbus Neich Medical - Hoevelaken - Netherlands (The), 8Diagram BV - zwolle - Netherlands (The),

Topic(s):
Coronary Artery Disease: Treatment, Revascularization

Funding Acknowledgements:
None

Abstract: P5535

Gender differences with short-term vs 12 months dual antiplatelet therapy in patients with acute coronary syndrome treated with the COMBO dual therapy stent: a 1-year analysis of the REDUCE trial

Methods. REDUCE is a prospective, multicenter, randomized, investigator-initiated study, designed to enroll 1500 ACS patients after treatment with the COMBO Dual Stent Therapy, based on a non-inferiority design. Patients were randomized in a 1:1 fashion to either 3 or 12 months of DAPT. Primary study endpoint was a composite of all-cause mortality, myocardial infarction, definite/probable stent thrombosis (ST), stroke, target-vessel revascularization (TVR) and bleeding (BARC II, III, V) at 12 months. Secondary endpoints were cardiovascular mortality and the individual components of the primary endpoint.

Results. From June 2014 to May 2016 300 women and 1196 men were randomized in the trial. Among them 43.7% of females and 51.9% of males were assigned to the 3 months DAPT treatment. Baseline characteristics were well matched between the two arms, but of a lower rate of TIMI flow <3 (p<0.001) and lower systolic blood pressure (p<0.05) among women and a more advanced age (p=0.05) among men receiving a shorter DAPT. At 1 year follow-up, no difference in the primary endpoint was observed according to DAPT duration (females: 6.9% vs 5.9%, HR[95%CI]=1.19[0.48-2.9], p=0.71; males: 8.2% vs 9%, HR[95%CI]=0.92[0.63-1.35], p=0.67). Results were confirmed after correction for baseline differences (females: adjusted HR[95%CI]=1.12[0.45-2.78], p=0.81; males: adjusted HR[95%CI]=0.90[0.61-1.32], p=0.60). Comparable rates of survival, thrombotic (MI, stent thrombosis, TVR, stroke) and bleeding events were observed with the two DAPT strategies, with no impact of gender.

Conclusions. The present study shows that among ACS patients randomized in the REDUCE trial, a 3 months DAPT strategy offers comparable results as compared to a standard 12 months DAPT at 1-year follow-up in both male and female gender.