CONCLUSION Although the guidelines recommended a DTBT of within 90 min in PCI for STEMI patients, patients treated with DTBT within 30 min showed significantly better clinical outcomes than did patients treated with DTBT from 30 to 90 min. The effort to achieve a shorter DTBT contributed to lower in-hospital mortality in patients with STEMI, especially when the DTBT was ≤30 min.

CATEGORIES CORONARY: Acute Myocardial Infarction

TCT-170 Clinical Outcome After Myocardial Infarction Treatied With Resolute Integrity and Promus Element Stents: Insights From DUTCH PEERS (TWENTE II) Randomized Trial

K. Gert van Houwelingen,1 Liefke van der Heijden,2 Ming Kai Lam,3 (TWENTE II) Randomized Trial Integrity and Promus Element Stents: Insights From DUTCH PEERS (TWENTE II) Randomized Trial

BACKGROUND In acute myocardial infarction (MI), novel highly deliverable drug-eluting stents may be particularly valuable as their flexible stent designs might reduce device-induced traumas to culprit lesion. The aim of the study was to assess the safety and efficacy of percutaneous coronary interventions with two novel durable polymer-coated drug-eluting stents in patients with acute MI.

METHODS The randomized DUTCH PEERS (TWENTE II) multicenter trial compares zotarolimus-eluting Resolute Integrity and everolimus-eluting Promus Element stents in patients with acute MI.

RESULTS Of all 817 patients treated for acute MI, 421 (51.5%) were treated for ST-elevation myocardial infarction (STEMI) or non-STEMI. 2-year clinical outcome is available in 99.9%.

CONCLUSION Ticagrelor was superior to clopidogrel in reducing myocardial infarction size in patients undergoing primary PCI. Our results suggest that benefit of ticagrelor may result from reducing infarct size as well as prevention of recurrent vascular events.

CATEGORIES CORONARY: Acute Myocardial Infarction

TCT-172 The Effect of Obstructive Sleep Apnea on Outcomes in Patients with STEMI: An Age Stratified Analysis of Nationally Representative Data

Divyanshu Mohanane,1 Nirmannobh Bhatia,2 sahil agrawal,3 Jaskaran Sethi,4 Aswathi Chandran,1 Ashish Aangl,5 Thelma Dangana,6 Zeeshan Hussain,7 Muhammad Ali,8 Pedro Villablanca9 1Cleveland Clinic, Cleveland, Ohio, United States; 2Vanderbilt University Medical Center, Nashville, Tennessee, United States; 3St. Luke’s University Hospital, Bethlehem, PA, USA; 4Center of Cardiovascular Research and Development; 5Center of Cardiovascular Research and Development; 6John H Stroger, Jr. Hospital of Cook County; 7Rush University, Chicago, Illinois, United States; 8Center for Cardiovascular Research and Development, American Heart of Poland; 9Center of Cardiovascular Research and Development, CHICAGO, Illinois, United States; 10Montefiore Medical Center, New York, New York, United States

BACKGROUND Obstructive sleep apnea (OSA) is a precursor for many cardiovascular conditions such as congestive heart failure, atrial fibrillation, hypertension, myocardial infarctions (MI) and stroke. However data is limited in patients who are admitted with ST elevation myocardial infarction (STEMI) and have a co-existing diagnosis of OSA.

METHODS We used the National Inpatient Sample (NIS) database to find patients with a primary discharge diagnosis of STEMI between 2003 and 2011. Multivariate logistic regression analysis was used to compare in-hospital mortality between patients with and without OSA.

RESULTS We identified 1,850,625 patients with a primary discharge diagnosis of STEMI between 2003-2011 and 1% of these patients also had OSA. Patients with OSA were younger, and were more likely to have a history of previous MI, previous coronary artery bypass surgery (CABG), dyslipidemia, previous percutaneous intervention (PCI) (p<0.001 for all). They had a significantly decreased in-hospital mortality (aOR 0.65, p<0.001) as compared to patients without OSA. They had higher rates of revascularization (CABG and PCI) and a shorter duration of hospitalization (p<0.001 for all). When stratified for age,