infarction (MI), target lesion revascularization (TLR) and stent thrombosis at 9 months follow-up.

RESULTS The majority of patients presented with the acute coronary syndrome (71%) with 76% found to have multi-vessel disease on angiography. Diabetes mellitus was present in 74 patients (43%). Transradial access was used in 90% of cases. The most common target vessel for PCI was left anterior descending artery (48%) followed by the right coronary artery (35%), left circumflex (9%) and left main (5%).

The majority of lesions were type B-C (88%) by ACC/AHA lesion classification with chronic total occlusion accounting for 5.3% of cases. Intravascular imaging was utilized in 8% of PCI. An average of 1.23 ±0.5 AES were used per patient, with mean AES diameter of 3.1 ± 0.4 mm and average total length of 33.8 ± 16.7 mm.

At 9 months follow-up, 3.6% of patients developed MACE. MACE was mainly driven by all-cause mortality (2%), target vessel related myocardial infarction (2%) and TLR (2%). The rate of stent thrombosis (2 cases of subacute) was 1.2%.

CONCLUSION In a real-world all-comers South-East Asian registry, AES was found to be safe and effective with a low incidence of MACE observed at 9 months follow-up.

TCTAP A-105

Safety and Efficacy of a Novel Everolimus-eluting Stent System in 'Real-world' Patients with Coronary Artery Disease: A Report of 1-year Outcomes from Ongoing 'See-real' Registry

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BACKGROUND Tetrilimus (Sahajan and Medical Technologies Pvt. Ltd., Surat, India) is a biodegradable-polymer coated everolimus-eluting cobalt-chromium coronary stent system with an ultra-thin (60μm)strut thickness. We aimed to evaluate the 'real-world' clinical outcomes with Tetrilimus coronary stents in the 'Safety and Efficacy of a novel Everolimus-eluting stents in 'Real-world' patients' (SEE-Real) registry.

METHODS All consecutive patients who had received Tetrilimus stents between July-2015 and April-2016 at two tertiary-care centres in India were examined in this retrospective, singe-arm, open-label, multi-centre registry. Follow-up was conducted at 30 days, 6 months, and 1 year of stent implantation. The primary endpoint was an incidence of major adverse cardiac events (a composite of cardiac death, myocardial infarction, target lesion revascularization, and target vessel revascularization). The Academic Research Consortium (ARC)-defined stent thrombosis was assessed as additional safety endpoint.

RESULTS During the study period, 280 Tetrilimus stents (1.4 ± 0.5 stent/patient) were implanted to treat 252 coronary lesions (1.1 ± 0.3 stent/lesion) in 208 patients (age: 57.5 ± 11.9 years). Among them, 137 (65.9%) were male, 97 (46.6%) were hypertensive, 52 (25%) were diabetic, 76 (36.5%) were alcoholics, 61 (29.3%) were smokers, 29 (13.9%) were tobacco chewers, 11 (5.3%) had previous revascularization, and 94 (45.2%) displayed multi-vessel coronary disease. Of treated lesions, 170 (67.5%) were complex (i.e. Type B 2/C) and 47 (18.7%) had total occlusion. Average length and diameter of implanted stents were 25.5 ± 8.8 mm and 2.9 ± 0.3 mm respectively. The 30-day, 6-month, and 1-year major adverse cardiac events were reported in 2 (0.96%), 6 (2.88%), and 9 (4.32%) patients respectively. Overall, 7 (3.36%) cardiac death, 2 (0.96%) non cardiac death, 2 (0.96%) of myocardial infarction, and 3 (1.44%) cases of possible stent thrombosis were reported at 1-year follow-up.

CONCLUSION Low rates of major adverse cardiac events and stent thrombosis at 1-year follow-up indicates favourable safety and efficacy of Tetrilimus everolimus eluting stents in unselected "real-world" patients with coronary artery disease.

TCTAP A-106

Ultra-long Coronary Artery Drug Eluting Stents: Outcome from Real World Tertiary Centre Experience

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BACKGROUND PCI of long diffuse coronary lesions are often challenging. Data regarding usage and real-world outcomes of very long coronary stents are limited. This retrospective study sought to determine the safety, the efficacy of the procedure and 1-year outcome in terms of MACE in patients treated with Ultra-long Biomime Morph 50-60 mm tapering drug-eluting stents.

METHODS Total number of 275 patients had undergone PCI for severe coronary artery disease with Biomime Morph Ultra long stent from May 2015 to May 2017. Of these, 102 patients have completed one year follow up from the time of stent implantation.

Case notes reviewed and telephonic interview conducted.

Each interventional procedural variables are recorded. Type and site of lesion, stent size, and length.

Procedural time, contrast volume usage and radiation exposure to patients and operator are recorded.

RESULTS Total of 102 patients were studied, of which 85.4 % male, 16.4% female.

Mean age of 60.72 years old.

64 lesions stented were LAD (62.7%), 36 RCA (35.3%), and 2 Lcx (2%)

Procedural success was achieved in 100 % of patients.

There were 28 lesions stented with 2.5-3.0/50 mm, 41 lesions stented with 2.5-3.0/60 mm, 16 lesions stented with 3.0-3.5/50 mm, and 17 lesions stented with 3.0-3.5/60 mm

Mean length of stents: 55.7 mm

Mean diameter of stent: 3.23 mm

Overall survival free from MACE was 94.1% at 12 months. With total of 3 cardiac death (2.94%), 2 non cardiac death (1.96%), 1 myocardial infarction (1.96%), and 0 target vessel revascularisation (0%) and 0 stent thrombosis (0%)

Mean contrast volume: 212 cc

Mean radiation exposure: 1814 mGy

Mean fluoroscopy time: 18.67 minutes.

CONCLUSION Effort is underway to further complete the study of total 275 patients and comparison with another cohort of patients with overlapping stents in this same centre in MACE, TLR.

Long single DES is very practical and convenient from procedural perspective and allow for reduction of costs, contrast volume, procedural time and radiation exposure.

This study has described that ultra-long drug-eluting stents (50-60 mm) is a valid option in treating very long coronary artery stenosis as compared to conventional technique with overlapping multiple drug eluting stents.

1-year outcome in terms of MACE rate was low with favourable clinical outcomes in real world.

TCTAP A-107

Real World Experience of the Biomime Morph Tapered Stent in a Tertiary Care Hospital

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BACKGROUND The Biomime Morph (Meril life Sciences, Gujarat, India) is a Sirolimus eluting tapered stent approved for use in India. It is available in four lengths {30 mm, 40 mm, 50 mm and 60 mm} and four diameters {2.75 mm tapering to 2.25 mm, 3 mm tapering to 2.5 mm, 3.5 mm tapering to 2.75 mm, and 3.5 mm tapering to 3 mm}.

METHODS This is a retrospective observational study which analyzed the demographic, angiographic, procedural characteristics and outcomes of patients undergoing percutaneous coronary intervention {PCI} with the Biomime Morph stent at our institution from January 2013 to January 2016. The current analysis included an average follow up period of 26 months. During the study period, 122 tapered stents were implanted in 122 patients.

RESULTS The mean age of the patients was 56 +-10 years and 81.1% were males. The most common vessel treated was the Left anterior descending {LAD}, 37.7% were true bifurcations and 39.3% chronic total occlusions {CTO}. Among the 16 available stents the most commonly used stent was the 3.5 mm-2.75 mm tapered 60 mm stent. PCI was done through the radial route in 48.3% of the cases and the length of the stent was not a determining factor for choice of a femoral access. Understandably the least commonly used stent in the LAD was the 2.75 mm-2.25 mm tapered stent {p=0.021}. However in the Left Circumflex {LCX} this was the most commonly used stent {p=0.001}. PCI to the Right coronary artery was done most commonly with 60mm stent. Post dilatation with more than one non-compliant balloon was required when the stent length exceeded 40 mm {p=0.001}. With increasing length of the stent the choice of the second antiplatelet

agent shifted from Clopidogrel to Prasugrel and Ticagrelor {p=0.001}. The Major adverse cardiac events {MACE} rate at 26 months was 5.7% with a cardiac mortality of 0.81%. The rates of non-fatal myocardial infarction {MI}, target lesion revascularisation {TLR} and stent thrombosis at 26 months were 1.6%. 3.2% and 1.6%. The instent restenosis {ISR} rates at 12months and 26months were 0.81% and 2.45% respectively. Significantly all the three ISR was seen in the 60mm stent {p=0.001}. There was no difference in procedural outcomes among the stents of different diameters.

CONCLUSION PCI with the Biomime morph is a practical solution when dealing with long coronary lesions or when there is a need for a tapered stent. The rates of TLR, stent thrombosis and MACE conform to the standards of currently available third-generation Drug eluting stents {DES}.

TCTAP A-108

Thrombus Burden Is Significantly Less in Drug-eluting Stent than in Bare Metal Stent at 3-week Follow-Up After ST-segment Elevation Myocardial Infarction: An Optical Coherence Tomography Study

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BACKGROUND Second-generation drug-eluting stent (G2-DES) is associated with lower rate of acute and subacute stent thrombosis as compared with bare metal stent (BMS) even in the setting of ST-segment elevation myocardial infarction (STEMI). The aim of this study was to compare the thrombus burden between DES and BMS at three- and six-weeks follow-up in STEMI patients.

METHODS A total of 41 STEMI patients treated with either G2-DES (n=26; everolimus-eluting stent [EES: Xience®]: n=15, zotarolimus-eluting stent [ZES: Resolute integrity®]: n=11) or BMS (n=15) were prospectively enrolled. All patients received dual-antiplatelet therapy. Optical coherence tomography (OCT) imaging was performed at three- and six-weeks follow-up after stent implantation. Thrombus area (TA) was measured in all the OCT frames. Thrombus burden was calculated as the mean TA divided by the mean lumen area. Thrombus volume was defined as the mean TA multiplied by the thrombus length. Percent of thrombus length was defined as thrombus length divided by analyzed stent length multiplied by 100. The asemi-quantitative assessment was also performed using OCT-thrombus score. A thrombus was classified as absent (0) or subtending 1, 2, 3, or 4 quadrants in each cross section. Thrombus score was calculated as the sum of each score.

RESULTS Thrombus burden, percent of thrombus length and thrombus score were significantly smaller in DES than in BMS at three-weeks (Table). No significant differences in those parameters were observed between EES and ZES at three-weeks. At six weeks, there were no significant differences in thrombus burden between DES and BMS (Table).

Table. OCT findings at three weeks and six weeks

	DES (n=26)	BMS (n=15)	P value
Stent diameter, mm	3.1 ± 0.3	3.2 ± 0.4	0.44
Stent length, mm	27.2 ± 14.8	20.4 ± 7.6	0.11
OCT measurement at three-weeks	DES (n=14)	BMS (n=10)	
Thrombus burden, %	0.8 ± 1.2	3.5 ± 4.3	0.045
Thrombus area, mm^2	0.1 ± 0.1	0.3 ± 0.4	0.073
Thrombus volume, mm^3	0.2 ± 0.2	1.1 ± 2.4	0.11
Thrombus length, mm	0.6 ± 0.4	1.9 ± 2.2	0.016
% thrombus length, %	1.3 ± 1.8	11.1 ± 13.3	< 0.001
Thrombus score	1.6 ± 1.8	12.5 ± 16.7	0.023
OCT measurement at six-weeks	DES (n=12)	BMS (n=5)	
Thrombus burden, %	0.1 ± 0.2	0.0 ± 0.0	0.50
Thrombus area, mm^2	0.05 ± 0.1	0.0 ± 0.0	0.30
Thrombus volume, mm^3	0.0 ± 0.1	0.04 ± 0.06	0.30
Thrombus length, mm	0.1 ± 0.2	0.0 ± 0.0	0.24
% thrombus length, %	0.3 ± 0.6	0.0 ± 0.0	0.56
Thrombus score	0.5 ± 0.9	0 ± 0	0.24

CONCLUSION Thrombus burden was significantly less in DES than in BMS at three-weeks follow-up in STEMI cases, which may partly explain the lower rate of acute and subacute stent thrombosis in G2-DES.

TCTAP A-109

Safety of Longer Size Stent in Treating De Novo Long Coronary Lesion - No ISR at 1.6-year Follow-Up: Experiences at Our Center

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BACKGROUND PCI of long lesions by the long single stent or overlapping multiple stents might have higher incidences of ISR due to increased metal burden as well as the cost of hospital stay. Therefore, our primary aim of our study was to evaluate the long-term safety of treating long lesion by a single longer size stent and its follow-up by coronary angiogram and or clinical evaluation at our OPD.

METHODS A patient who had gone through PCI from the year 2014 to mid-Oct 2017 at our center, had longer lesion and were treated by more than 38 mm stent were selected and analyzed. Total 255 (Male 213: Female 42) patients were enrolled in this very preliminary study, underwent elective PCI and follow-up CAG at on average 1.6 yrs. Total 267 stents were deployed in 255 territories. Mean age for both male: female was (55:56) yrs. Associated CAD risk factors were Dyslipidemia, High Blood pressure, Diabetes Mellitus, Positive FH for CAD and Smoking (all male), CKD, Hypothyroidism.

RESULTS Among the study group; 189 (74.1%) were Dyslipidemia, 192 (75.3%) were hypertensive; 126 (49.4%) patients were Diabetic, positive FH 74 (29.4 %), CKD 8 (3.1%), Hypothyroidism 2 (0.8%) and 104 (40.8%) were all male smoker. Common stented territory was, LAD 126 (49.4%), RCA 115 (45.1%), and LCX 24 (9.4%). Among the total patient population, Single vessel stented were 236 (92.5%) and DVD 19 (7.5%). Total 267 stents were deployed, among them 48 mm were in total 159 (59.6%); among 40 mm were stented in 61 (22.8%) and 38 mm in 47 (17.6%) vessels. At an average follow-up period of 1.6 yrs, all stented territory remain patent without any residual stenosis.

CONCLUSION We conclude that treating a de-novo coronary long lesion by a single longer size stent is safe without any residual stenosis at an average follow-up period of 1.6 yrs. Thus, to reduce chances of recurrent ISR, hospital re-admission and reduce hospital cost as well.

TCTAP A-154

The Clinical Impact of Radial Versus Femoral Access in Patients underwent Percutaneous Coronary Interventions with DES

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BACKGROUND Previous studies for investigating radial versus femoral access for percutaneous coronary interventions (PCI) have provided conflicting evidence. We sought to evaluate the clinical impact of radial versus femoral access for PCI.

METHODS From prospective multicenter IRIS-DES registry, a total of 17,182 patients received PCI were included in this study. The primary outcome was the incidence of major adverse cardiac events (MACE) at 3 years, defined as a composite of death, bleeding, periprocedural myocardial infarction (MI), spontaneous MI or cerebral vascular events (CVA), stent thrombosis.

RESULTS Radial access was used in 5,984 (34.8%) patients and femoral access in 11,198 (65.2%) patients. During a median follow-up of 46.5 months (interquartile range 31.7 to 79.4 months), Patients with femoral access had a significant increase in the risk of MACE(73.4 % vs. 59.5%, Hazard ratio[HR]: 1.940; 95% Confidence Interval[CI]: 1.803 to 2.087; p=0.000), periprocedural MI (3.3 %vs. 2.5%, HR: 0.798; 95% CI: 0.697 to 0.914; p=0.001) and bleeding events (17.0% vs. 11.1%, HR: 0.586; 95% CI: 0.533 to 0.643; p=0.000) in unadjusted model. In multivariable and propensity score-adjusted model, Patients with femoral access showed the higher risk of MACE (HR: 1.792, 95% CI: 1.692 to1.971; p=0.000), CVA (HR: 6.696; 95% CI: 4.190 to 11.591; p=0.000), spontaneous MI (HR: 9.978; 95% CI: 4.934 to 20.180; p=0.000), stent thrombosis (HR: 7.290; 95% CI: 2.105 to 25.250; p=0.002).

CONCLUSION Compared with radial access, femoral access showed unfavorable clinical outcomes. Femoral access should be used in selected patients with caution.