



INCIDENCE AND PREDICTORS OF TARGET LESION FAILURE IN A MULTI-ETHNIC ASIAN POPULATION RECEIVING THE SYNERGY CORONARY STENT: A PROSPECTIVE ALL-COMERS REGISTRY

Poster Contributions
Poster Hall, Hall C
Sunday, March 19, 2017, 9:45 a.m.-10:30 a.m.

Session Title: Coronary Intervention in Interventional Cardiology: Core Concepts
Abstract Category: 21. Interventional Cardiology: Coronary Intervention: Devices
Presentation Number: 1286-179

Authors: *Joshua Ping Yun Loh, Rajiv Ananthakrishna, William Kristanto, Liu Li, Siew Pang Chan, Poay Huan Loh, Edgar Tay, Mark Chan, Koo Chan, Ronald C. H. Lee, Adrian Low, Huay-Cheem Tan, National University Heart Centre, Singapore, Singapore*

Background: Currently, majority of the drug eluting stents deliver anti-proliferative drugs from a durable polymer which is associated with chronic inflammation, delayed healing, and an increased risk of late stent thrombosis. The novel everolimus-eluting, platinum chromium SYNERGY stent is coated with a bioabsorbable abluminal polymer that resolves after 4 months.

Methods: This is a prospective, single center post-marketing registry of consecutive patients who underwent percutaneous coronary intervention with implantation of the SYNERGY stent (Boston Scientific Corporation, Marlborough, MA) from December 2012 to April 2015. The primary outcome was the incidence of TLF, defined as the combination of cardiac death, target vessel myocardial infarction, or clinically driven target lesion revascularisation (TLR) at one- year.

Results: A total of 765 patients with 1279 stents implanted were analyzed. The mean age was 60.7 years, with 83.4% males. Patients with diabetes mellitus consisted of 38.7% of the study population, and 50.3% presented with acute myocardial infarction. The treated lesions were complex (ACC/AHA type B2/C: 72.7%). The primary end point of TLF at one-year was 5.8%. Rates of cardiac mortality, target vessel myocardial infarction and TLR were 4.2%, 1.0% and 1.3%, respectively at one-year. Predictors of the incidence and early time to TLF were female gender, Malay ethnicity, diabetes mellitus, acute myocardial infarction at presentation and prior history of coronary artery bypass surgery. Of the lesion variables, moderate/severe calcification and ostial location predicted early time to TLF. The incidence of definite / probable stent thrombosis was 0.5% at 1 year.

Conclusions: In this real world all-comers multi-ethnic population, the use of SYNERGY stent was associated with low rates of TLF and stent thrombosis at one-year.