

Ten-year Clinical Outcomes of Sirolimus-Eluting Stent Versus Bare-Metal Stent

[Purpose] The aim of this study is to compare clinical outcomes for ten years, between sirolimus-eluting stent (SES) and bare metal stent (BMS).

[Methods] During the BMS and drug-eluting stent (DES) transition period (from April 2002 to April 2004), 434 consecutive patients with 482 lesions underwent percutaneous coronary intervention, using BMS or SES. Using propensity score matching, 187 patients with BMS and 166 patients with SES were selected. 10 year clinical outcomes of major adverse cardiac events (MACE), such as myocardial infarction (MI), ischemia-driven target vessel revascularization (TVR), cardiac death and angiographic definite stent thrombosis (ST) were compared.

[Results] At one-year follow up, patients with SES showed significantly lower MACE (11.2% in BMS vs 4.8% in SES, $p=0.029$). However, cumulative MACE for 10 year was not significantly different between two groups (33.1% in BMS vs 37.3% in SES, $p=0.428$). There were no significant differences in MI, ischemia-driven TVR, cardiac death and ST for 10 year. The TVR was gradually increased from 1 to 10 year in SES, on the contrary to that of BMS.

[Conclusions] In conclusion, although SES showed better clinical outcomes in the early period after implantation, it did not show significant benefits in the long-term follow up, compared with that of BMS.