

DIABETES

WHICH DES IS THE SAFEST?

The Naples-Diabetes trial has shown that a zotarolimus-eluting stent (ZES) is less safe than a sirolimus-eluting stent (SES) or a paclitaxel-eluting stent (PES) in patients with type 2 diabetes mellitus.

Patients with diabetes are at increased risk of restenosis after drug-eluting stent (DES) implantation, but the long-term relative risks of the various available DESs are not well known in this population. The investigators of the Naples-Diabetes trial randomly assigned patients with type 2 diabetes who were scheduled to undergo revascularization at their institution to receive the Cypher Select® SES (Cordis, Johnson & Johnson, Miami Lakes, FL, USA; $n = 76$), the TAXUS® Liberté® PES (Boston Scientific Corporation, Natick, MA, USA; $n = 75$), or the Endeavor® Sprint ZES (Medtronic CardioVascular, Santa Rosa, CA, USA; $n = 75$). The follow-up period was 3 years.

Patients in the ZES group had a higher rate of major adverse cardiovascular events (MACE; a composite of death from any cause, nonfatal myocardial infarction, and clinically driven revascularization) than patients who received an SES or a PES (64.4%, 86.8%, and 82.5% MACE-free survival, respectively, $P = 0.006$). A *post hoc* analysis showed that the difference in the MACE rate between the SES and the PES groups was not significant, in contrast to the differences between the ZES and the SES groups (adjusted $P = 0.012$) and between the ZES and the PES groups (adjusted $P = 0.075$). These results raise questions about the use of the Endeavor® Sprint stent in patients with diabetes.

“We need to select a DES ‘strong’ enough to prevent restenosis, which is very high in diabetic patients,” says Carlo Briguori, one of the study researchers. He also recommends the use of pharmacological approaches to prevent further MACE after stent implantation.

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Original article Briguori, C. *et al.* Novel approaches for preventing or limiting events in diabetic patients (Naples-Diabetes) trial: a randomized comparison of 3 drug-eluting stents in diabetic patients. *Circ. Cardiovasc. Interv.* doi:10/1161/CIRCINTERVENTIONS.110.959924