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Titel des Beitrags: Five-year outcomes from a trial of three limus-eluting stents with different polymer coatings in patients with coronary artery disease: final results from the ISAR-TEST 4 randomised trial.

Abstract: Both biodegradable polymer sirolimus-eluting stents and permanent polymer everolimus-eluting stents offer potential for enhanced late outcomes in comparison with earlier-generation permanent polymer sirolimus-eluting stents. However, long-term comparative efficacy data among these devices remain a scientific gap. We aimed to compare the efficacy and safety of biodegradable polymer sirolimus-eluting stents (Yukon Choice PC) versus permanent polymer everolimus-eluting stents (XIENCE) versus permanent polymer sirolimus-eluting stents (CYPHER) at five-year follow-up. Overall, 2,603 patients were randomised to treatment with the Yukon Choice PC (n=1,299), XIENCE (n=652) or CYPHER (n=652) stents. The primary endpoint was the device-oriented composite of cardiac death, target vessel-related myocardial infarction (MI), or target lesion revascularisation (TLR). The main secondary endpoint was definite/probable stent thrombosis (ST). Follow-up was performed up to five years. Concerning the primary endpoint, there was no significant difference between Yukon Choice PC and XIENCE stents (20.5% vs. 19.5%, HR=1.04, 95% CI: 0.84-1.29; p=0.71)
or between CYPHER and XIENCE stents (23.5% vs. 19.5%, HR=1.21, 95% CI: 0.95-1.53; p=0.12). In terms of safety, rates of ST were similar with both Yukon Choice PC and XIENCE (1.2% vs. 1.4%; HR=0.83, 95% CI: 0.37-1.91; p=0.67) but numerically higher with CYPHER as compared to XIENCE (2.4% vs. 1.4%, HR=1.67, 95% CI: 0.73-3.82; p=0.22). Biodegradable polymer Yukon Choice PC and permanent polymer XIENCE stents showed comparable clinical outcomes at five years. Permanent polymer CYPHER stents showed numerically higher rates of device-related adverse events. Trials registration: ClinicalTrials.gov (identifier: NCT00598676).