

## Long-term outcomes with cobalt-chromium bare-metal vs. drug-eluting stents: the REgistro regionale AngiopLastiche dell'Emilia-Romagna registry.

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### Abstract

**OBJECTIVE:** To compare the long-term efficacy of cobalt-chromium bare-metal stents (CCSs) with that of first-generation drug-eluting stents (DESs) in patients within a large real-world multicentre registry.

**METHODS:** The incidence of major adverse cardiac events [death, acute myocardial infarction, and target-vessel revascularization (TVR)] and angiographic stent thrombosis were assessed in consecutive patients undergoing percutaneous coronary intervention with CCS (n = 1103) or DES (n = 5195) during 2-year follow-up. Propensity score-adjusted outcomes, overall and in patients with low ( $\leq 10\%$ ), intermediate (10-15%), and high ( $>15\%$ ) 1-year restenosis risk, were estimated.

**RESULTS:** DES-treated patients had significantly higher rates of diabetes, longer lesions, and smaller vessel diameters than CCS-treated patients (all  $P < 0.0001$ ). However, CCS patients were older and presented a higher rate of hypertension, previous myocardial infarction, and heart failure (all  $P < 0.01$ ). At 2 years, adjusted rates of myocardial infarction, death, and cumulative-stent thrombosis were similar for DES and CCS. DES provided statistically significant ( $P < 0.01$ ) reductions in TVR and adjusted major adverse cardiac event rates (9.7 and 17.2%, respectively) compared with CCS (13.2 and 21.2%, respectively). In patients at highest and intermediate risk of restenosis, adjusted TVR rates were significantly ( $P < 0.01$ ) lower with DES (12.2 and 8.9%, respectively) than CCS (19.9 and 17.1%, respectively), but rates were similar in low-risk patients.

**CONCLUSION:** DESs were more effective than CCSs in lowering TVR rates in patients with an intermediate-high baseline restenosis risk.