

*Circulation. 2008 Feb 19;117(7):923-30. Epub 2008 Feb 4.*

**Two-year clinical outcomes with drug-eluting stents for diabetic patients with de novo coronary lesions: results from a real-world multicenter registry.**

Ortolani P, Balducelli M, Marzaroli P, Piovaccari G, Menozzi A, Guiducci V, Sangiorgio P, Tarantino F, Geraci G, Castriota F, Tondi S, Saia F, Cooke RM, Guastaroba P, Grilli R, Marzocchi A, Maresta A.

**BACKGROUND:** The long-term effectiveness of drug-eluting stents (DES) in unselected diabetics in routine practice is currently unclear.

**METHODS AND RESULTS:** To evaluate the long-term effectiveness of bare metal stents and DES in a real-world setting of diabetic patients, we analyzed 2-year follow-up data from all diabetic patients with de novo lesions enrolled in a prospective Web-based multicenter registry (Registro Regionale Angioplastiche dell'Emilia-Romagna; study period, 2002 to 2004) comprising all 13 hospitals performing percutaneous coronary interventions in the Emilia-Romagna region of Italy. Among the 1648 eligible patients treated with either bare metal stents alone (n=1089) or DES alone (n=559), 27% were insulin dependent and 83% had multivessel coronary disease. At 2 years, use of DES was associated with lower crude incidence of major adverse cardiac events (all-cause mortality, nonfatal myocardial infarction, and target vessel revascularization) compared with bare metal stents (22.5% versus 28.1%; P=0.01). After propensity score adjustment, only target vessel revascularization appeared significantly lower in the DES group (11.6% versus 15.0%; hazard ratio, 0.66; 95% confidence interval, 0.46 to 0.96; P=0.041). Two-year angiographic stent thrombosis occurred in 1.5% DES patients and 0.7% of the bare-metal-stents patients (P=0.18). At Cox regression analysis, predictors of 2-year major adverse cardiac events were left ventricular ejection fraction <35%, Charlson comorbidity index, insulin-dependent diabetes, and total lesion length.

**CONCLUSIONS:** In this large, real-world, diabetic population, the use of DES was associated with a moderate reduction in the 2-year risk of target vessel revascularization, a benefit that was limited to non-insulin-dependent diabetic patients. Larger long-term studies are needed to clarify the long-term effectiveness and safety of such devices in diabetic patients.