

DES Benefit in High Risk Subpopulations - A Comprehensive Analysis of a Large All-Comer PCI Database

Bental, Tamir; Lev, Eli; Assali, Abid; Vaknin-Assa, Hana; Teplitsky, Igal; Rechavia, Eldad; Battler, Alexander; Kornowski, Ran

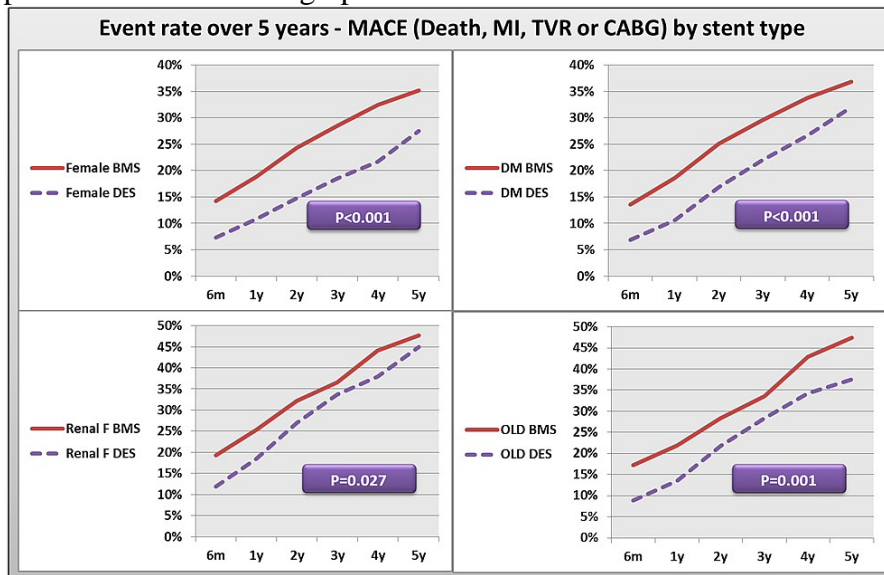
Cardiology Dept, Rabin Medical Center, Petach Tikva, Israel

DES use has been shown to be safe and effective in reducing MACE in patients undergoing PCI. Higher risk patients such as females, diabetic, renal failure patients and octogenarians, may or may not benefit from the use of DES. We therefore examined the effect of DES use in these various subpopulations.

We analyzed 8592 consecutive PCI cases from 4/2004 to 12/2010 and determined rates of death, death or MI and MACE (Death, MI, or revascularization-TVR/CABG) with a median follow up of 4 years (6m to 7y). Analysis of DES vs. BMS in the subgroups was done on a propensity score-matched cohort of 6869 patients. Subgroups were female (24%), diabetics (41%), renal failure patients (16%), and octogenarians (17%).

At 1 year, females had a higher risk of death (7.69% vs. 4.77%) and MACE (15.97% vs. 12.59%). Similar were diabetics (death 6.75% vs. 4.57%; MACE 16.37% vs. 11.31%), renal failure patients (death 15.81% vs. 3.44%; MACE 24.93% vs. 11.14%) and octogenarians (death 9.85% vs. 4.54%; MACE 18.37% vs. 12.35%).

Use of DES provided a significant and sustained benefit in all subgroups over a 5-year follow up period as shown in the graph:



In conclusion, high risk patients derive a sustained and significant benefit from the use of Drug Eluting Stents.