

## Drug Eluting Stenting of Bifurcation Lesions: Second Versus First Generation DES

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Background: Recent studies show improved clinical and angiographic results obtained with PCI of de novo coronary artery bifurcation lesions using drug-eluting stenting [DES]. First-generation [DES Gen 1] stents eluting sirolimus or paclitaxel were joined by second-generation [DES Gen 2] stents, such as the everolimus- and the zotarolimus-eluting stents, promising increased safety and efficacy.

Objective: To compare the clinical outcomes between first and second generation DES when treating bifurcation lesions.

Methods & Results: The study included 408 patients. DES Gen 1 included 251 pts [Cypher 78%, Taxus 22%], and DES Gen 2 included 157 pts [Xience, Promus 50%, Endeavor Resolute 39%, Biometrix 11%].

Results: Baseline clinical characteristics were comparable between the two groups.

	DES Gen 1 [n=251]	DES Gen 2 [n=157]	P-value
Two stents technique	43%	47%	0.4
12 month Death	1.6%	1.3%	0.9
12 month MI	0.4%	2.6%	0.6
12 month Definite Stent thrombosis	0.8%	1.3%	0.5
12 month TVR	4.8%	7%	0.1
12 month CABG	2.4%	0%	0.08
12 month MACE	8.8%	8.9%	0.7

Conclusions: During the first year after stent implantation, we didn't find significant differences in clinical outcomes between DES Gen -1 and DES Gen-2 when treating bifurcation lesions and using a systematic approach.