



### IS CABG THE BEST REVASCULARIZATION STRATEGY AMONG ALL DIABETICS SUBGROUPS WITH MULTI-VESSEL DISEASE IN THE MODERN ERA? A MULTI-CENTER ANALYSIS

Poster Contributions  
Poster Hall, Hall C  
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Session Title: Complex Coronary Intervention: Left Main/Bifurcations and Multivessel Disease  
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**Background:** To assess the comparative effectiveness of coronary artery bypass grafting (CABG) versus percutaneous coronary intervention (PCI) among major diabetic subgroups.

**Methods:** Study design: multi-center, retrospective analysis of all CABGs (n=18,292) and PCIs (n=55,438) from 2004-2014. Inclusion criteria: diabetes, 2 or 3 vessel disease (VD). Exclusion criteria: prior PCI or CABG, left main ≥ 50%, STEMI, or within 24 hours of a MI. Baseline co-morbidities were balanced using inverse probability weighting for a matched cohort of 3,286 CABGs and 3,446 PCIs. Primary end point: all-cause mortality.

**Results:** The mean duration of follow-up was 4.5 ± 3.2 years. The rate of drug-eluting stent (DES) was 78.8 % (n=2715). Groups were well matched on age, gender, BSA, baseline co-morbidities, number of diseased vessels, and ejection fraction. Compared to PCI, CABG was associated with: improved long-term survival (HR 0.73 [0.66-0.81], p<0.01), decreased risk of repeat revascularization (CABG 3.7% (n=122), PCI 12.5% (n=430), p<0.001), but increased risk of stroke (CABG 0.9% (n=29), PCI 0.09% (n=3), p<0.001). CABG was associated with improved survival across major subgroups of diabetic patients, and the survival advantage was not influenced by era or stent type (Table).

**Conclusions:** Among patients with diabetes and multi-vessel disease, CABG was associated with greater long-term survival when compared to PCI, and this survival advantage was observed across major patient subgroups.

Hazard Ratios for CABG : PCI among Diabetic Subgroups

	Hazard Ratio	p-value		Hazard Ratio	p-value		Hazard Ratio	p-value
<b>Age</b>			<b>Ejection fraction</b>			<b>Stent type</b>		
<65	0.82 (0.68-0.99)	0.036	≤35%	0.53 (0.41-0.67)	<0.001	DES	0.80 (0.72-0.89)	<0.001
≥65	0.43 (0.60-0.77)	<0.001	>35%	0.79 (0.70-0.88)	<0.001	BMS	0.53 (0.46-0.63)	<0.001
<b>Gender</b>			<b>Proximal LAD</b>					
Male	0.73 (0.65-0.84)	<0.001	Yes	0.67 (0.57-0.79)	<0.001			
Female	0.72 (0.61-0.86)	<0.001	No	0.71 (0.62-0.83)	<0.001			
<b>Diseased vessels</b>			<b>Era</b>					
2VD	0.83 (0.72-0.95)	<0.001	2004-2009	0.79 (0.70-0.88)	<0.001			
3VD	0.63 (0.55-0.74)	<0.001	2009-2014	0.57 (0.45-0.71)	<0.001			