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Title

Metformin treatment is associated with decreased clinical events in diabetic patients undergoing percutaneous intervention: A presto substudy

Permalink

<https://escholarship.org/uc/item/2372n1md>

Journal

CIRCULATION, 108(17)

ISSN

0009-7322

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Publication Date

2003

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Peer reviewed

PCI Outcomes in High Risk Patient and Lesion Subsets

Subspecialty: PCI

Tuesday

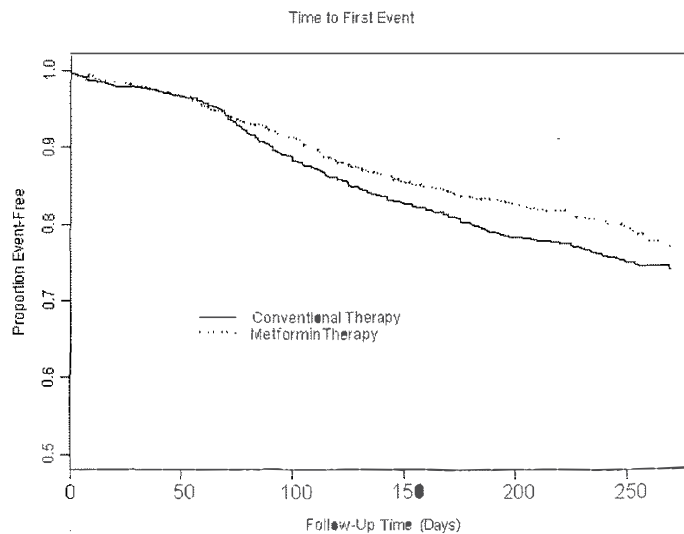
Orange County Convention Center, Hall A

Abstracts 2590-2594

Metformin Treatment is Associated with Decreased Clinical Events in Diabetic Patients Undergoing Percutaneous Intervention: A Presto Substudy

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BACKGROUND: Diabetics undergoing percutaneous coronary interventions (PCI) have worse outcomes than non-diabetic patients. Metformin, an insulin sensitizer, may decrease the occurrence of these outcomes. **METHODS:** Patients in the Prevention of REStenosis with Tranilast and its Outcomes (PRESTO) Trial were screened for diabetes (N = 2772). 111 diabetics received conventional therapy (insulin and/or sulfonylureas), and 887 received metformin (with or without additional therapy). 775 patients were excluded. Logistic regression was used to obtain odds ratios (OR, metformin versus conventional therapy) of any clinical event (death, myocardial infarction [MI], ischemia-driven target vessel revascularization [TVR]) adjusted for multiple risk factors. **RESULTS:** Compared with conventional therapy, metformin therapy was associated with fewer adverse events (p=0.005). The differences between the conventional therapy group and the metformin group were due to decreases in death (p=0.007) and MI (p=0.002). There were no differences in baseline quantitative coronary angiographic measurements (QCA) between the metformin and conventional therapy groups. **CONCLUSIONS:** For diabetics receiving medical therapy, those treated with metformin undergoing PCI have decreased clinical events, especially death and MI, compared with diabetics treated with conventional therapy.



	Clinical Events				
	Conventional Therapy N=1110	Metformin Therapy N=887	P- value	Adjusted OR(95%CI)	P- value
Death(%)	36(3)	12(1)	0.006	0.39(0.19,0.77)	0.007
MI(%)	30(3)	10(1)	0.013	0.31(0.15,0.66)	0.002
TVR(%)	242(22)	180(20)	0.41	0.82(0.65,1.05)	0.110
Any Event	271(24)	186(21)	0.07	0.72(0.57,0.91)	0.005