

## EP8

### **DPP4-Inhibitors are Associated with Lower Risk of in-Hospital Complications in Diabetic ACS Patients**

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**Background:** We studied the association between treatment with oral hypoglycemic medications and the clinical presentation of diabetic patients with acute coronary syndromes (ACS).

**Methods:** Multivariate logistic regression analysis was used to evaluate the risk of in-hospital complications among 445 diabetic patients with ACS enrolled in the Acute Coronary Syndrome Israeli Survey (ACSIS) 2010. Patients were categorized into 3 groups according to hypoglycemic medications at time of admission: 1) DPP 4 inhibitors (DPP4i; as monotherapy or in combination, 2) Metformin (monotherapy or in combination, excluding DPP-4i) and 3) other oral hypoglycemics.

**Results:** Patients in the DPP4i group displayed similar baseline clinical characteristics to the other 2 groups, with the exception of a younger age and a lower frequency of prior CHD and CRF. Medical therapy with DPP4i was associated with a significantly lower rate of in-hospital complications and a shorter duration of in-hospital stay as compared with treatment with metformin or other oral antiglycemic drugs. Consistently, multivariate logistic regression modeling showed that treatment with DPP-4i was associated with a lower risk (OR=0.20; p=0.03) of in-hospital complications compared with Metformin (OR 0.60, p=0.13) and other oral hypoglycemic therapy.

**Conclusions:** Our data suggests that treatment with DPP4i may have cardioprotective effects in diabetic patients suffering from AMI.

	DPP4i (N=31)	Metformin (N=348)	Other oral (N=66)	p Value
Killip >1 (%)	9.7	16.4	34.8	<0.001
post MI angina (%)	0	2.6	7.6	0.06
Pulmonary edema (%)	0	6.3	15.2	0.01
Infections (%)	0	6.6	21.2	<0.001
Acute renal failure (%)	3.3	7.5	19.7	0.003
Length of stay (days)	5.4±3.8	5.6±5	7.5±6.5	0.03