

 MYOCARDIAL ISCHEMIA AND INFARCTION

TICAGRELOR VERSUS CLOPIDOGREL IN ELDERLY PATIENTS WITH ACUTE CORONARY SYNDROMES: A SUBANALYSIS FROM THE PROSPECTIVE RANDOMIZED PLATELET INHIBITION AND PATIENT OUTCOMES (PLATO) TRIAL

ACC Poster Contributions
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Background: Elderly patients with acute coronary syndrome (ACS) are at high risk for recurrent ischemic events and death as well as for treatment-related complications.

Purpose: To investigate the effect and treatment-related complications of ticagrelor vs. clopidogrel in elderly patients (>75 years) with ACS.

Methods: The association between age and the primary composite outcomes as well as major bleeding were considered in the PLATO trial using Cox proportional hazards. Similar models were used to evaluate the interaction of age with treatment effects.

Results: Patients aged >75 years (n=2,878) as compared to <75 years (n=15,744) had higher rates of adjusted (for differences in baseline characteristics) hazard ratio (HR) for cardiovascular (CV) death, myocardial infarction (MI) and stroke (1.48; 95% CI 1.32-1.66), total mortality (1.95; 95% CI 1.66-2.27) and major bleeding (1.11; 95% CI 0.97-1.26).

Importantly, the reduction by ticagrelor compared to clopidogrel of ischemic endpoints and mortality in ACS patients without an increase in major bleeding was independent of patient age (Table). Adverse effects of dyspnoea and ventricular pauses observed more often during ticagrelor treatment also did not differ among age groups (data not shown).

Conclusions: The significant clinical benefit and overall safety of ticagrelor as compared to clopidogrel in ACS patients are independent of age.

	Ticagrelor	Clopidogrel	HR (95% CI)	Interaction p-value
CV death, MI or stroke				
> 75 years	17.2	18.3	0.94 (0.78 - 1.13)	0.22
< 75 years	8.6	10.4	0.82 (0.74 - 0.91)	
Total death				
> 75 years	9.8	12.4	0.81 (0.65 - 1.03)	0.78
< 75 years	3.6	4.8	0.78 (0.67 - 0.92)	
Definite stent thrombosis				
> 75 years	1.8	2.1	0.66 (0.30 - 1.45)	0.94
< 75 years	1.3	1.9	0.67 (0.49 - 0.93)	
Major bleeding				
> 75 years	14.2	13.5	1.04 (0.84 - 1.28)	1.00
< 75 years	11.2	10.8	1.04 (0.94 - 1.15)	
Non-CABG major bleed.				
> 75 years	8.3	7.1	1.16 (0.87 - 1.55)	0.78
< 75 years	3.9	3.2	1.22 (1.02 - 1.46)	