

(MACE) defined as the composite of cardiovascular death, myocardial infarction and stroke was analyzed.

Results: Clinically relevant bleedings (Bleeding Academic Research Consortium types 2, 3 or 5) were frequently observed (20.6%, n=181 patients) with one third of bleeding events occurring in the first month. Cutaneous and gastro-intestinal bleedings were the two predominant complications. There was no difference according to the P2Y12 inhibitor used between patients with a bleeding complication (prasugrel 5mg: 77.3%, prasugrel 10mg: 2.8% and clopidogrel 75mg: 19.9%) and those without (prasugrel 5mg: 77.9%, prasugrel 10mg: 2.5%, clopidogrel 75mg: 19.6%) (p=0.91).

MACE occurred more frequently at one year in patients with a bleeding complication (16.6% vs 7.6%, adj.HR 2.04 (1.24; 3.38); p=0.005). Rates of myocardial infarction (Fig. 1A) and particularly stroke (Fig. 1B) were higher at one year after bleeding complications (9.9% vs 4.5%, adj.HR (95% CI): 2.40 (1.24; 4.66); p=0.0093 and 6.6% vs 1%, adj.HR (95% CI): 5.55 (2.04; 15.06); p=0.0008 respectively) without significant difference in death (6.6% vs 4.0%; HR (95% CI): 1.20 (0.57; 2.51); p=0.63). Predictive factors of major bleedings in the multivariate model were age >85 years [adj.HR (95% CI): 2.48 (1.25; 4.91); p=0.0093] and hemoglobin level (per gram of decrease) [adj.HR (95% CI): 1.45 (1.18; 1.79); p=0.0004].

Conclusions: Clinically relevant bleedings were frequently observed in elderly patients and strongly associated with myocardial infarction and stroke. Age itself remained a predictive factor of bleeding in this population over the age of 75 years.

P2246

Effectiveness and safety of oral anticoagulants in patients aged 90 years or older with atrial fibrillation

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Background: Patients aged 90 years or older are often excluded from or under-represented in randomized and cohort studies. Thus, the clinical benefit of oral anticoagulants in nonagenarians with atrial fibrillation (AF) remains to be defined.

Objectives: To assess the effectiveness and safety of oral anticoagulants in patients aged 90 years or older with AF.

Patients/Methods: Patients with non-valvular AF aged 90 years or older receiving direct oral anticoagulants (DOACs) or vitamin K antagonists (VKAs) were included in the study. Ischaemic stroke/systemic embolism (SSE) and major bleeding (MB) were the primary efficacy and safety outcomes. Anticoagulant discontinuations and all-cause death were also collected. Incidence of study outcomes is presented as proportion per patient year.

Results: 546 patients were included in the study, 301 (55%) on VKAs and 245 (45%) on DOACs (dabigatran 16.3%, rivaroxaban 49.4%, apixaban 34.3%). Reduced dose of DOACs was prescribed in 81.6% of patients. During a median follow-up of 404 days, ischaemic stroke/SSE occurred in 2.4% patient-year and MB in 5.5% patient-year. Similar rates of ischaemic stroke/SSE (adjusted-HR 0.71, 95% CI 0.21–2.34) and MB (adjusted-HR 1.52, 95% CI 0.71–3.29) were observed in DOACs and VKAs patients. Compared to patients on VKAs, those on DOACs had a lower rate of permanent discontinuation (adjusted-HR 0.45, 95% CI 0.26–0.78) and a similar risk of death (adjusted-HR 1.07, 95% CI 0.70–1.62).

Conclusions: Bleeding and thromboembolic rates seemed comparable in patients aged 90 years or older receiving DOACs or VKAs. Specific risk factors for ischemic and bleeding events in these patients need further evaluation.

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Elderly females with acute coronary syndrome present frailty and readmissions more frequently than males

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Background: A worse prognosis has been reported among women with acute coronary syndrome (ACS) compared to men.

Purpose: Our aim was to address the role of frailty and sex in the management and prognosis of elderly patients with non-ST-segment elevation ACS.

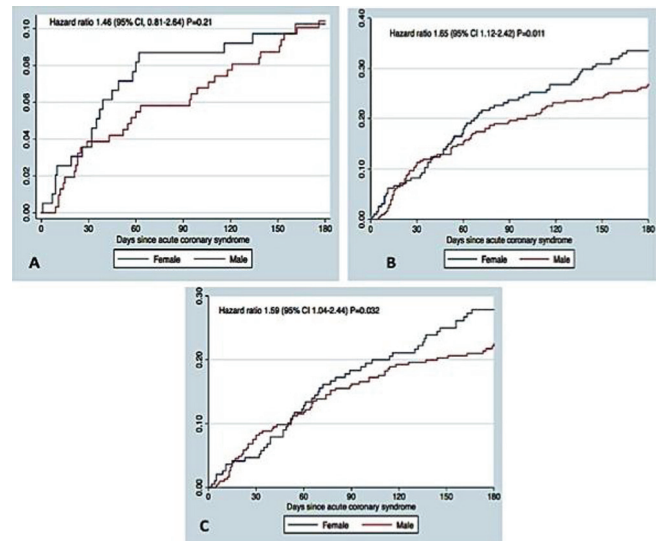
Methods: Prospective registry in 44 Spanish hospitals including patients ≥80 years with non-ST-segment elevation ACS. Frailty assessment was performed by the FRAIL scale.

Results: From 535 patients, 207 (38.7%) were women. Mean age was 84.8±4.0 years, similar in men and women. Prior history of coronary artery disease was more common in men (146 [44.9%]) than in women (46 [22.2%]), p<0.001. Frailty was less frequent in men (65 [20.2%]) than in women (77 [37.8%]), p<0.001. Fe-

male sex was an independent predictor of death/hospitalization (hazard ratio [HR] 1.7, 95% confidence interval [CI] 1.1–2.4) and of hospitalization at 6 months (HR 1.6, 95% CI 1.04–2.4). Figure depicts Kaplan–Meier Curves addressing study outcomes, according to sex. [A. All-cause death. B. Composite endpoint (all-cause or first hospital admission). C. First hospital admission.] In men, compared to non-frail patients, both a prefrail status (HR 3.47, 95% CI 1.22–9.89) and frailty (HR 3.19, 95% CI 1.08–9.43) were independently associated with higher mortality. In women only frailty was independently associated with higher mortality (HR 5.68, 95% CI 1.91–16.18, compared to prefrail or robust). Frailty was associated with readmissions in men (HR 3.34, 95% confidence interval 1.79–6.22) but not in women.

Independent predictors of outcomes

	Hazard ratio (95% Confidence interval)	p
Death from any cause during follow-up		
Female sex	1.46 (0.81–2.64)	0.21
Older age	1.10 (1.02–1.19)	0.011
FRAILTY status		
– Frail	4.47 (1.79–11.19)	0.010
– Prefrail	3.36 (1.34–8.45)	0.010
GRACE score	1.02 (1.01–1.04)	0.007
Beta-blockers	0.37 (0.21–0.65)	0.001
Angiotensin convertor enzyme inhibitors	0.32 (0.17–0.62)	0.001
Hospital admission during follow-up		
Female sex	1.59 (1.04–2.44)	0.032
FRAILTY phenotype		
– Frail	2.35 (1.42–3.89)	0.001
– Prefrail	1.25 (0.77–2.02)	0.297



Kaplan–Meier Curves

Conclusions: In octogenarians with ACS female sex was independently associated with death/hospitalization at 6 months. Frailty was more common in females and was a predictor of poor prognosis. In men prefrailty also predicted a poor prognosis.

P2248

Longitudinal changes in cardiac function at the extremes of aging

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Background: People over the age of 85 (the “oldest old”) are the world’s most rapidly growing age group. The aging of the population poses an increasing challenge for cardiovascular care given the high frequency of cardiac death in this population. Limited longitudinal data on cardiac function is available and has generally been performed in the clinic setting.

Purpose: We have previously assessed cardiac function in an age-homogenous, community-dwelling population at 85–6 years of age. The aim of the current study was to reassess cardiac structure and function and determine longitudinal changes in this unique population at age 94 years using home echocardiography.

Methods: Subjects were recruited from the Jerusalem Longitudinal Cohort Study that was initiated in 1990 and has followed an age homogenous cohort of West Jerusalem residents born between June 1920 and May 1921. Echocardiography was initially performed in 450 randomly selected subjects at ages 85–6 and repeated in surviving subjects at age 94. Exams at both time points were performed by the same technician and interpreted by the same physician. All subjects had standard 2-D and Doppler echocardiography at their place of residence with a portable echocardiograph and standard assessment of cardiac structure and function.

Results: 63 patients (32F, 31M) underwent home echocardiography at ages 85