

**Results:** 2854 patients treated with heparins were included. The risk of major bleeding or transfusion (3.0% vs. 7.0%) and in-hospital death (3.2% vs 9.2%) was lower with LMWH compared with UFH, a difference that persisted after multivariate adjustment (OR=0.51, 95% CI: 0.34-0.76 and OR=0.53, 95% CI: 0.37-0.76, respectively). Three-year survival and stroke and reinfarction-free survival were also higher with LMWH compared with UFH (adjusted HR =0.73, 95% CI: 0.61-0.86 and HR =0.73, 95% CI: 0.62-0.85, respectively). In two cohorts of patients matched on a propensity score for getting LMWH and with similar baseline characteristics (834 patients per group), major bleeding and transfusion were lower while three-year survival was significantly higher in patients receiving LMWH.

**Conclusion:** The present data suggest that the use of LMWH in AMI patients may have a better benefit/risk profile than UFH with in terms of bleeding, need for transfusion, and long term survival.

## 010

### Prediction of long-term survival in patients receiving optimal secondary prevention therapy after acute myocardial infarction: the FAST-MI registry

Etienne Puymirat (1), Nadia Aissaoui (1), Gilles Lemesle (2), Luc Lorgis (3), Elodie Drouet (4), Genevieve Mulak (5), Jean Ferrieres (6), Simon Tabassome (4), Nicolas Danchin (1)  
(1) *Hôpital Européen Georges Pompidou (HEGP), Cardiologie, Paris, France* – (2) *Regional and University Hospital of Lille, Lille, France* – (3) *CHU Dijon, Cardiologie, Dijon, France* – (4) *Hôpital Saint Antoine, cardiologie, Paris, France* – (5) *Société Française de Cardiologie, Paris, France* – (6) *CHU Rangueil, Toulouse, France*

**Background:** Predictors of long-term outcome in optimally-treated patients after AMI have not been extensively studied.

**Aim:** We assessed 3-year survival in a population of 3,262 patients from the FAST-MI registry who were discharged alive after the acute episode.

**Results:** At hospital discharge, 1586 patients (49%) received optimal medical treatment (OMT: antiplatelet + beta-blocker + statin + ACE-I or ARB agents). Patients receiving OMT were younger (64±13 vs 69±14 years,  $p<0.001$ ), had a lower GRACE risk score (141 ±33 vs 151±36,  $p<0.001$ ) and had more use of PCI during index hospitalization (75% vs 56%,  $p<0.001$ ). Three-year survival was 88% in patients with OMT versus 77.5% in patients without ( $p<0.001$ ). Cox multivariate analysis was used to determine predictors of 3-year mortality and covariates included age, sex, risk factors, comorbidities, type of AMI, CAD extent, use of PCI, use of CABG, in-hospital complications, and other discharge medications. Overall, adjusted HR for 3-year death was 0.82 (0.68-1.00),  $p=0.048$ , for patients receiving OMT, confirming the benefit of comprehensive therapy beyond each of its individual components. In the 1586 patients receiving OMT at discharge, independent predictors of long-term death were age  $\geq 75$  years [HR 1.93 (1.03-3.64)]; AMI type and severity [STEMI vs NSTEMI: HR 0.64 (0.44-0.93)]; GRACE score: HR 1.01 (1.00-1.01); LVEF  $< 40\%$ : HR 2.03 (1.31-3.16); 3-vessel CAD: HR 2.12 (1.28-3.52)]; previous CV history [stroke: HR 1.91 (1.29-2.83), CHF: HR 1.79 (1.11-2.88)]; management with an invasive strategy [HR 0.31 (0.17-0.56)], and associated conditions [history of diabetes HR 1.79 (1.28-2.49); history of cancer HR 2.76 (1.75-4.33); current smoking at the time of AMI HR 1.88 (1.20-2.94)].

**Conclusion:** In patients receiving OMT after AMI, early invasive management remains a significant predictor of improved survival, while associated non cardiac conditions (and in particular cancer, diabetes, previous TIA or stroke, and smoking) are major determinants of higher long-term mortality.

## 011

### The major part of one-year prognosis of acute coronary syndromes is associated with the severity of the initial clinical presentation – Results from the French MONICA registries

Paul-Louis Vervueren (1), Dominique Arveiler (2), Jean Dallongeville (3), Jean-Bernard Ruidavets (4), Aline Wagner (5), Philippe Amouyel (3), Vanina Bongard (1), Annie Bingham (6), Meyer Elbaz (7), Jean Ferrieres (8)  
(1) *CHU, University School of Medicine, Epidemiology, Inserm U1027, Toulouse Cedex, France* – (2) *Strasbourg University School of Medicine, Epidemiology and Public Health, Strasbourg, France* – (3) *Inserm*

*U744, Unité d'Epidémiologie et de Santé Publique, Lille Cedex, France* – (4) *Inserm U1027, Département d'Epidémiologie, Toulouse Cedex, France* – (5) *Faculté de Médecine, Laboratoire d'Epidémiologie et de Santé Publique, Strasbourg Cedex, France* – (6) *Inserm U909, Paul Brousse Hospital, Villejuif, France* – (7) *Toulouse University Hospital, Department of Cardiology B, Toulouse Cedex 9, France* – (8) *CHU Rangueil, Service de Cardiologie B, Toulouse Cedex 9, France*

**Purpose:** Death rate of acute coronary syndromes has decreased for more than 50 years. Out-of-hospital mortality remains high despite improvements in acute coronary syndrome's care.

**Aims:** To evaluate the importance of out-of-hospital mortality and the main determinants of in-hospital and one-year mortality in France.

**Methods:** Analyses were based on data from the French MONICA population-based registry including exhaustively all acute coronary syndromes occurring in people aged 35-74 during the year 2006 in 3 geographic areas. First we evaluated out-of-hospital mortality. Then analyses were performed through Cox models on incident ACS reaching the hospital alive in order to determine main factors explaining the one-year mortality. Number of attributable deaths was assessed for variables of interest.

**Results:** After a one-year follow-up, case-fatality was 29.3% for incident events ( $n=2547$ ) with 70.3% of out-of-hospital deaths and 21.1% occurring in the 28 days following the event. The number of attributable deaths related to 3 situations with a strong impact identified from multivariate analyses (out-of-hospital life-and-death emergency, hospitalization before ACS occurrence, and lack of coronary angiography) was 130 (59% of deaths occurring after reaching the hospital) during the one-year follow-up. These sub-groups were corresponding to patients with an important initial state of severity and not benefiting from traditionally recommended treatments.

**Conclusion:** The major part of deaths after ACS occurs in the out-of-hospital phase. Moreover, the major part of one-year mortality is associated with a very poor prognosis before medicalization. This underlines the importance of cardiovascular prevention, population education and better out-of-hospital emergency management.

## 012

### Use of invasive strategy in non-ST-elevation myocardial infarction is a major determinant of improved long-term survival. The FAST-MI registry

Etienne Puymirat (1), Guillaume Taldir (2), Nadia Aissaoui (1), Gilles Lemesle (3), Luc Lorgis (4), Thomas Cuisset (5), Pierre Bourlard (6), Bruno Mailler (7), Gregory Ducrocq (8), Jean Ferrieres (9), Simon Tabassome (10), Nicolas Danchin (1)  
(1) *Hôpital Européen Georges Pompidou (HEGP), cardiologie, Paris, France* – (2) *Hôpital Européen Georges Pompidou, cardiologie, Paris, France* – (3) *Regional and University Hospital of Lille, Lille, France* – (4) *CHU Dijon, cardiologie, Dijon, France* – (5) *CHU Timones, Marseille, France* – (6) *Groupe Hospitalier Mutualiste de Grenoble, Grenoble, France* – (7) *Hospital Center of Troyes, Troyes, France* – (8) *CHU Bichat, Paris, France* – (9) *CHU Rangueil, Toulouse, France* – (10) *Hôpital Saint Antoine, cardiologie, Paris, France*

**Objectives:** We assessed the impact of invasive strategy (IS) versus a conservative strategy (CS) on in-hospital complications and three-year outcomes in patients with Non-ST-Elevation Myocardial Infarction (NSTEMI) from the FAST-MI registry.

**Background:** Results from randomized trials comparing IS and CS in patients with NSTEMI are conflicting.

**Methods:** Of the 3,670 patients in the FAST-MI registry, which included patients with acute myocardial infarction (within 48 hours) over a one-month period in France at the end of 2005, 1,645 presented with NSTEMI.

**Results:** Of the 1,645 patients analyzed, 80% had an IS. Patients in the IS group were younger (67±12 vs. 80±11 years), less often women (29% vs. 51%) and had a lower GRACE risk score (137±36 vs. 178±34) as compared with patient treated with CS. In-hospital mortality and blood transfusions were significantly more frequent in patients with CS as compared with IS (13.1 vs. 2.0%, 9.1 vs. 4.6%). Use of IS was associated with a significant reduction in 3-year mortality and cardiovascular death (17% vs. 60%, adjusted HR: 0.44; 95%CI: 0.35-0.55 and 8% vs. 36%, adjusted HR: 0.37; 95%CI: 0.27-0.50).