of prior stroke or TIA in in-hospital mortality (IHM) and complications, and to compare baseline and clinical characteristics of patients with and without previous cerebrovascular disease.

**Methods:** We evaluated 16567 patients with AMI included in a national multicentric registry. Two groups were considered: Group 1 - patients with previous stroke or TIA, and Group 2 - patients without previous stroke or TIA. In both groups, we registered age, gender, cardiovascular and non-cardiovascular co-morbidities, in-hospital (IH) therapy and angiography performed. We defined IHM as a primary outcome, and heart failure (HF), re-Infarction, cardiacogenic shock (CS) and blood transfusion (BT) as secondary outcomes. We performed multivariate analysis to evaluate the independent impact of prior stroke or TIA in the studied outcomes.

**Results:** Prior stroke or TIA was present in 7.8% (N=1293). These patients were older (72±11 vs 65±13, p<0.001), had a higher prevalence of previous history of bleeding (6% vs 2%, p<0.001), renal failure (14% vs 5%, p<0.001) or HF (11% vs 5%, p<0.001). A higher incidence of non-ST elevation AMI was found in Group 1 (61% vs 52%, p<0.001), as well as a lower incidence of ST-elevation AMI (34% vs 45%, p<0.001). Additionally, a lower proportion of patients in Group 1 was treated with coronary angiography (52% vs 66%, p<0.001) and antiplatelet therapy with aspirin (97% vs 90%, p<0.001) and ticagrelor (11% vs 19%, p<0.001), while a higher proportion of patients were treated with clopidogrel (81% vs 76%, p<0.002) and enoxaparin (60% vs 69%, p<0.001), comparing to Group 2. Group 1 had more re-Infarction (2% vs 1%, p<0.005), CS (6% vs 4%, p<0.001) and BT (3% vs 2%, p<0.001). The multivariate analysis also showed that prior stroke or TIA were independent predictors of IHM (OR 1.87; IC95% 1.14–3.05, p=0.013) and HF (OR 1.36; IC95% 1.09–1.69, p<0.005).

**Conclusions:** Patients with an AMI with prior stroke/TIA were older, had more co-morbidities, received less often coronary angiography and different anti-thrombotic treatment. They were at an increased risk for IHM, HF, re-Infarction, CS and BT. We conclude that the risk of stroke/TIA is a predictor for short-term complications in patients with AMI and cerebrovascular disease should be considered in the decision to initiate dual antiplatelet therapy, especially in patients with an indication for OAC in whom bleeding complications are specially feared.

**4177 Differences in the ischemic-hemorrhagic balance between diabetic and non-diabetic patients treated with dual antiplatelet therapy with ticagrelor and prasugrel**


**Introduction:** Bleeding and ischemic risk after hospital discharge for acute coronary syndrome (ACS) is not uniform over time. This affect the benefit-to-risk ratio of guideline recommended antiplatelet therapy in different time intervals. With this study, we aim to characterize the differences in the average daily rates for post-discharge ischemic and bleeding events between diabetic (DM) and non-diabetic ACS patients treated with dual antiplatelet therapy (DAPT) with the new P2Y12 inhibitors (prasugrel or ticagrelor).

**Methods:** From 4,402 patients discharged for ACS who were enrolled in the RE-NAM registry, 1,323 (29.9%) had DM. Ischemic and bleeding events were classified according to the timing of their occurrence, excluding recurrent events. We only consider those events during DAPT. Bleeding events were defined as any primary BARC type 3, 4 or 5 bleeding (=major bleeding). Ischemic events were defined as spontaneous reinfarction according to the third Universal Definition of Myocardial Infarction. The average daily rate (ADR) was calculated as the total number of events divided by the number of patient-days of follow-up. The ischemic-hemorrhagic balance was calculated with the difference between ADR for ischemic and bleeding events.

**Results:** Average daily rate for both ischemic and bleeding events in patients treated with DAPT with ticagrelor and prasugrel was high in first 30 days (ADR for reinfarction 0.014% in DM and 0.012% in non-DM; ADR for major bleeding 0.012% in DM and 0.008% in non-DM), and decreased later. In DM, the risk of reinfarction is higher than the bleeding risk, especially in the first month (difference in ADR 0.002% and 0.005% in non-DM after 6 months). However, in non-diabetic patients, the risk of bleeding is higher than the risk of reinfarction, mainly between months 3 and 9 (difference in ADR -0.001%)

**Conclusions:** Diabetic patients had an ischemic-hemorrhagic balance different to non-diabetic patients when they are treated with DAPT with ticagrelor or prasugrel. During the first year, in DM patients there is a predominance of reinfarction against bleeding. In contrast, in non-DM patients, the risk of bleeding is higher than the risk of reinfarction, with the exception of the first 2 and last 2 months.

**4178 Cerebral microbleeds and acute coronary syndrome: screening and progression under dual anti-platelet therapy: proof of concept study**

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**Introduction:** Cerebral microbleeds (CMB) are associated with intracerebral hemorrhage. Therefore they may represent a concern if anticoagulant and/or anti-platelet therapy is needed. In addition, some risk factors for developing CMB are similar to those of coronary artery disease including age and hypertension. The aim of this study was to determine the prevalence of CMB in patients with acute coronary syndrome and troponin elevation, and to follow their progression at 3 months under dual antiplatelet therapy.

**Methods:** This prospective study included patients aged over 65 hospitalized in intensive cardiac care unit in our city for acute coronary syndrome with troponin elevation. These patients underwent a first brain MRI (T2* gradient echo and SWI magnetic susceptibility image) within 72 hours of admission, that was repeated 3 months after stenting.

**Results:** Sixty eight patients (29 women and 39 men, mean age 77 years) were included between November 2016 and June 2017. The prevalence of CMB was 22%, with a female predominance of 80% vs 33% (p=0.002). Patients with at least one CMB had significantly lower LDL-Cs and HDL-Cs levels than patients without CMB (1.1±0.43 vs 1.5±0.36 g / L, p=0.013 and 0.48±0.29 vs 0.68±0.36 g / L / p=0.045, respectively) but also renal function impairment (Cockroft-Gault creatinine clearance: 52.7±27.7 vs 73.4±31.5 ml / min / p<0.025). Patients with at least one CMB had a higher risk CRUSADE score (45.4±12.8 vs 32.7±14.5, p=0.003). Multivariate analysis showed that only female sex was associated with the presence of a CMB on the initial MRI. On repeated MRI, an increase in CMB was observed in 7% of patients, but it was not statistically significant.

**Conclusion:** The prevalence of CMB in patients with acute coronary syndrome is high (22% of patients over 65). MRI monitoring showed an increase in CMB numbers, which should be evaluated over longer series, but also over longer periods, taking into account risk factors for CMB development, and duration of anti-platelet treatment. For that purpose, additional patients are recruited in this study.

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**4179 Cardiovascular outcomes following percutaneous coronary intervention among patients with cancer: observations from a large unselected cohort**

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**Introduction:** Despite an increase in the prevalence of patients with established diagnosis of both coronary artery disease (CAD) and cancer, data on cardiovascular and non-cardiovascular event rates following percutaneous coronary intervention (PCI) are scarce.

**Purpose:** We aimed to evaluate the outcomes of patients with established diagnosis of cancer undergoing PCI in routine clinical practice.

**Methods:** Between February 2009 and December 2015, 12,208 consecutive pa-