

achieved less than eGFR value. The incidences of CI-AKI was 3%. One year cardiac death and induction of maintenance hemodialysis was 2% and 3%, respectively. In comparison with our prior MINICON1 study which was non-IVUS guided study is shown in Table.

**Conclusions:** IVUS-guided PCI reduced contrast dose, CI-AKI and induction of hemodialysis at 1 year with similar reduction of cardiac death.

#### P6438 | BEDSIDE

##### Long-term prognosis of vasospastic angina and influencing factors of clinical outcomes: a single center experience over 20 years

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**Background:** Recently, the Japanese Coronary Spasm Association (JCSA) developed a novel scoring system providing prognostic stratification of vasospastic angina (VSA) patients.

**Purpose:** The present study aimed to validate the scoring system and demonstrate the independent risk factors for adverse clinical outcome in Korean VSA patients.

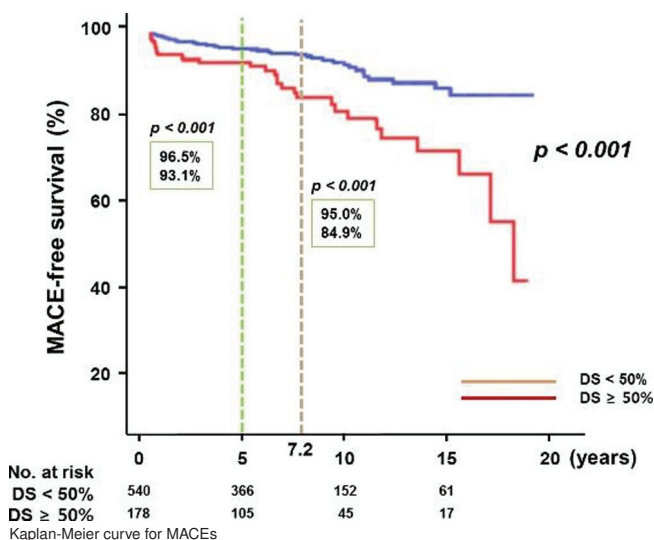
**Methods:** From 2005 - 2014, a total of 718 consecutive patients (594 men, mean 57 year-old) have diagnosed with VSA during ergonovine-provoked coronary angiography (ErgCAG). Major adverse cardiac events (MACEs) were defined as a composite of cardiac death, acute myocardial infarction (AMI), aborted- sudden cardiac death (ASCD), readmission due to acute coronary syndrome (ACS) and revascularization.

**Results:** During the mean follow-up periods (8 years), cardiac death, AMI, ASCD, readmission due to ACS, and revascularization occurred in 16 (2.2%), 21 (2.9%), 6 (0.8%), 44 (6.1%) and 42 (5.8%) patients, respectively. Cumulative MACEs rate was 9% (65/719). Cox regression analysis considering seven JCSA predictors and additional variables showed that VSA with a significant coronary stenosis (diameter stenosis  $\geq 50\%$ ) (odd ratio 2.64; 95% CI 1.56 - 4.49,  $P < 0.001$ ) and AMI (odd ratio 3.28; 95% CI 1.56 - 6.89,  $p = 0.002$ ) at the time of admission were the only unfavorable independent predictors of MACEs-free survival.

Independent risk factors of MACEs

	Odd ratio (95% CI)	P value
History of ASCD*	3.764 (0.349–40.649)	0.275
Smoking*	1.117 (0.660–1.889)	0.680
Angina at rest alone*	1.151 (0.607–2.180)	0.667
Significant organic stenosis*	2.639 (1.550–4.493)	0.000
ST elevation*	0.781 (0.405–1.506)	0.461
beta-blocker use*	1.134 (0.351–3.664)	0.834
Multivessel spasm*	1.140 (0.548–2.370)	0.726
LAD spasm	0.585 (0.274–1.249)	0.166
RCA spasm	0.914 (0.436–1.914)	0.811
AMI presentation	3.281 (1.563–6.886)	0.002
Statin use	1.300 (0.746–2.264)	0.355
Vasodilator ( $\geq 3$ types)	1.084 (0.619–1.898)	0.779

\*Variables in the JCSA scoring system.



**Conclusion:** The only two independent predictors of MACEs are the significant organic stenosis and AMI at initial clinical presentation. Applying the JCSA scoring system to VSA in Korean patients may not be always appropriate for the prognostic stratification.

#### P6439 | BEDSIDE

##### Acute coronary syndromes and high bleeding risk: impact on clinical and invasive management and on long term prognosis

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**Background:** Advances in antithrombotic therapy have led to a reduction in ischemic events in patients with acute coronary syndromes (ACS), however, at the cost of more hemorrhagic complications.

**Purpose:** We intended to assess the impact of high bleeding risk on the clinical and invasive management of patients with ACS diagnosis and its influence on long-term prognosis.

**Methods:** Prospective data of 1449 consecutive patients, admitted between October 2009 and September 2015 in a single coronary unit with ACS diagnosis. They were divided in 2 groups: A) patients with high bleeding risk (n=338, 23.3%; 54.4% male); B) patients without high bleeding risk (n=1111, 76.7%; 73.8% male). High bleeding risk was defined as a CRUSADE Score  $> 40$ . They were compared according to clinical and invasive management, mortality and composite primary endpoint (CPE - re-infarction, stroke and cardiovascular death) during hospitalization and at 1 year of follow up.

**Results:** Group A was older (A= 73.4 $\pm$ 8.6 vs B=62.6 $\pm$ 13.6,  $p < 0.01$ ), had lower estimated glomerular filtration rate (A=50.4 $\pm$ 19.0 vs B=91.9 $\pm$ 33.8,  $p < 0.01$ ), more arterial hypertension (A=80.5% vs B=61.6%,  $p < 0.01$ ), diabetes mellitus (A=58.0% vs B=20.4%,  $p < 0.01$ ) and chronic heart failure (A=16.3% vs B=2.9%,  $p < 0.01$ ). At admission, most of group A had non-ST elevation ACS (A= 62.7% vs B=56.3%,  $p < 0.01$ ), with higher rates of GRACE Score  $> 140$  (A=33.7% vs B=10.2%,  $p < 0.01$ ) and Killip  $> 1$  (A=58.6% vs B=9.4%,  $p < 0.01$ ). Group A had less invasive risk stratification (A=82.2% vs B=91.7%,  $p < 0.01$ ) and, in ST elevation ACS subgroup, primary percutaneous intervention was also inferior (A=62.7% vs B=81.6%,  $p < 0.01$ ). However, in the multivariate analysis, a CRUSADE Score  $> 40$  was not an independent predictor for a conservative strategy.

There were no differences regarding dual antiplatelet therapy (DAPT) or anticoagulation during hospitalization. However, at discharge, group A was less prescribed with DAPT (A=74.3% vs B=85.8%,  $p < 0.01$ ). During hospitalization, group A presented with more bleeding complications (A=11.2% vs B=6.4%,  $p = 0.01$ ), more blood transfusions (A=4.7% vs B=1.0%,  $p < 0.01$ ), cardiovascular death (A=13.0% vs B=3.0%,  $p < 0.01$ ) and CPE (A=16.3% vs B=4.6%,  $p < 0.01$ ). Also, at 1 year follow-up group A had higher rates of CPE (A=32.8% vs B=9.1,  $p < 0.01$ ).

**Conclusion:** A high bleeding risk was associated with a worse cardiovascular profile. They were less submitted to an invasive stratification and angioplasty and had a worse short and long term prognosis.

#### P6440 | BEDSIDE

##### Roles of high density lipoprotein cholesterol in patients with acute myocardial infarction

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**Aims:** Many observational studies showed high density lipoprotein-cholesterol (HDL-C) is strong inverse predictor of cardiovascular outcome. However, interventional studies to raise HDL-C have failed to show the protective role of HDL-C.

**Methods and results:** A total of 28,357 acute myocardial infarction (AMI) patients were enrolled in the Korea Acute Myocardial Infarction Registry (KAMIR) which was a prospective, web-based database of AMI in Korea. From this registry, we evaluated 3,574 patients with AMI who have follow-up HDL-C level to investigate its association with clinical outcomes. The primary endpoint was the relationship between follow-up change in HDL-C and a 12-month composite of major adverse cardiac events (MACEs). Patients with initial HDL-C  $> 40$  mg/dL showed significantly lower rates of 12-month MACEs, especially cardiac and all-cause mortalities ( $p < 0.001$ ). When patients were stratified into 4 group according to the change of HDL-C, patients with decreasing HDL-C showed significantly higher rates of 12-month MACEs as comparable with patients with increasing HDL-C. A multivariate analysis indicated that HDL-C level was a significant predictor of CV events (hazard ratio, 1.38; 95% confidence interval, 1.12 - 1.71) after correcting for confounding variables.

**Conclusions:** The follow-up change in HDL-C level was significantly related with CV outcomes in patients with AMI.

#### P6441 | BEDSIDE

##### Impact of occult renal impairment in long-term survival of patients undergoing isolated coronary artery bypass grafting surgery: a propensity-score matched analysis

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**Introduction:** Preoperative renal dysfunction is a well-known risk factor for morbidity after coronary artery bypass grafting surgery (CABG). However, the impact of occult renal impairment (ORI), defined as normal serum creatinine (Scr) but with impaired glomerular filtration rate (GFR) after CERG is not well defined.