Conclusions: The SRI is a newly described method for quantifying the proportion of CAD burden treated by PCI. Given its correlation with mortality, and pending external validation, the SRI may be useful in assessing the degree of revascularization after PCI, with SRI $\geq$80% a “reasonable” goal.

### One-year Outcomes According to SYNTAX Revascularization Index

<table>
<thead>
<tr>
<th></th>
<th>SRI 100%</th>
<th>SRI 50-99%</th>
<th>SRI $\leq$ 50%</th>
<th>P-value all groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>15 (1.4)</td>
<td>24 (2.7)</td>
<td>25 (3.7)</td>
<td>0.009</td>
</tr>
<tr>
<td>Cardiac death</td>
<td>4 (0.4)</td>
<td>18 (2.0)</td>
<td>13 (1.9)</td>
<td>0.002</td>
</tr>
<tr>
<td>Myocardial infarction</td>
<td>75 (7.3)</td>
<td>97 (10.8)</td>
<td>71 (10.4)</td>
<td>0.006</td>
</tr>
<tr>
<td>Unplanned revascularization</td>
<td>109 (11.0)</td>
<td>99 (11.4)</td>
<td>89 (13.4)</td>
<td>0.14</td>
</tr>
<tr>
<td>Definite/probable ST</td>
<td>12 (1.1)</td>
<td>17 (1.9)</td>
<td>13 (2.0)</td>
<td>0.29</td>
</tr>
<tr>
<td>Death/ myocardial infarction</td>
<td>86 (8.2)</td>
<td>110 (12.3)</td>
<td>88 (12.9)</td>
<td>0.001</td>
</tr>
<tr>
<td>Major adverse cardiac events</td>
<td>167 (16.4)</td>
<td>171 (19.2)</td>
<td>144 (21.3)</td>
<td>0.009</td>
</tr>
</tbody>
</table>

Data presented as n (%); Major adverse cardiac events (MACE) is the composite rate of death, myocardial infarction, or unplanned revascularization; MI—myocardial infarction; SRI—SYNTAX Revascularization Index; ST—stent thrombosis.

### TCT-87

**Frequency And Impact Of Intraprocedural Thrombotic Events During Percutaneous Coronary Intervention In Women Compared To Men: Pooled Analysis From The ACUITY And HORIZONS-AMI Trials**

Mikkel Schoos1, Roxana Mehran2, Usman Baber1, Ke Xu4, Frederick Fier1, Bernard J Gersh6, E. Magnus Ohman7, Bernhard Witzenbichler8, Gregg W. Stone9

1Mount Sinai Medical Center, New York, NY, USA; Copenhagen, Denmark, 2Mount Sinai Hospital, New York, United States, 3Mount Sinai Hospital, New York, New York, 4Cardiovascular Research Foundation, New York, NY, 5NYU, New York, United States, 6Mayo Clinic College of Medicine, Rochester, United States, 7Duke University Medical Center, Durham, North Carolina, 8Charité Campus Benjamin Franklin, Berlin, Germany, 9Cardiovascular Research Foundation, New York, NY

Background: Women have greater morbidity and mortality after myocardial infarction (MI) than men. Whether this is due to more severe comorbidities or inherent biologic differences is unsettled. Specifically, women have been shown to have higher platelet reactivity, but whether a greater thrombotic tendency contributes to gender differences in outcome is unknown.

Methods: Intraprocedural Thrombotic Events (IPTE), defined as new/increasing thrombus, abrupt vessel closure, no/slow flow, or distal embolization, were evaluated in 6,591 patients undergoing stenting in a pooled analysis from the ACUITY and HORIZONS-AMI trials of patients with non-ST-segment elevation acute coronary syndromes and ST-segment elevation MI. Quantitative coronary angiographic analysis was blinded to treatment and outcomes.

Results: IPTE was identified in 507 patients (7.7%), with 119/1744 (6.8%) occurring in women and 388/4847 (8.0%) in men (p=0.12). Rates of MACE (Death, MI, unplanned target lesion revascularization for ischemia) and major bleeding were higher in women (p<0.001) and in patients with IPTE (p<0.001). However, the risk of MACE associated with IPTE was nearly identical among women [HR (95%CI) = 1.6 (1.0-2.4), p=0.03] and men [HR = 1.6 (1.2-2.0), p<0.001] (Figure). Similar results were found for major bleeding. There was no interaction between IPTE and gender for 1-year MACE (p=0.099) and 30-day bleeding (p=0.50).

Conclusions: In acute coronary syndromes, IPTE is not uncommon and occurs at similar frequency in both men and women. The adverse impact of IPTE on ischemic and bleeding risk is also independent of sex.

### TCT-88

**The Clinical Outcomes of Peri-contrast Staining (PSS) after Second Generation DES Implantation**

Takahiro Tokuda1, Toshiya Muramatsu2, Reiko Takahara1, Yoshikazu Ito1, Hiroshi Ishimoto1, Keisuke Hirano1, Masatsugu Nakano1, Motohara Araki2, Norihito Kobayashi1, Hideyuki Takimura1, Yasunari Sakamoto1, Shinsuke Mori1, Masakazu Tsutsumi1,4, Hiroya Takahji1,5,6

1Saiseikai Yokohama City Eastern Hospital, yokohama, GA, 2Saiseikai Yokohama City Eastern Hospital, Yokohama, Japan, 3Saiseikai Yokohama-city Eastern Hospital, Yokohama, Japan, 4Saiseikai Yokohama-city Eastern Hospital, Yokohama-city, Kanagawa, 5Saiseikai Yokohama City Eastern Hospital, Yokohama, Japan, 6Saiseikai Yokohama City Eastern Hospital, Yokohama, Japan, 7Saiseikai Yokohama City Eastern Hospital, Yokohama, Kanagawa, 8Saiseikai Yokohama City Eastern Hospital, Yokohama, Japan, 9Saiseikai Yokohama City Eastern Hospital, Yokohama, Kanagawa

Background: Several studies showed peri-contrast staining (PSS) after sirolimus-eluting stent was be associated with target-lesion revascularization (TLR) and very late stent thrombosis. However, the incidence and clinical sequela of PSS after second generation DES implantation are unclear, so we retrospectively evaluate the clinical outcomes.

Methods: This study consisted of de novo 2301 lesions in 1743 patients that were treated with second generation DES (zotarolimus-eluting stent: ZES, everolimus-eluting stent: EES, and biolimus-eluting stent: BES). They were evaluated by follow-up angiography within 12 months after stent implantation, from April 2009 to February 2013. We divided into PSS group and non-PSS group and compared the two groups in clinical and angiographical outcomes.

Results: We had obtained 1872 lesions follow-up angiography. (81.3%) The mean clinical follow up period was 610±13 days. Baseline clinical and angiographic characteristics were similar between the two groups. (N.S.) Late acquired PSS was observed in 16 lesions (0.85%). In these lesions, 2 lesions (0.75%) were observed in BES, 7 lesions (0.67%) were EES and 7 lesions (1.62%) were ZES. (N.S.) Stent fracture (SF), tortuosity, and lesions with severe angulation (>45°) were more frequently observed in lesions with PSS than in lesions without PSS (31.3% versus 11.1%, p<0.001, 12.5% versus 1.3%, p=0.002, 18.8% versus 1.7%, p=0.02). Cumulative incidence of TLR and MACE in the PSS group was higher than that in the non-PSS group. (33.3% versus 5.4%, p=0.003, and 41.7% versus 9.3%, p=0.003). There was no significant difference in late and very late stent thrombosis between the two groups. (N.S.) After multivariable analysis, CTO (OR: 4.07, 95% CI: 1.1 to 12.1, p=0.04), and reference diameter (<2.83mm) (OR: 4.17, 95% CI:1.5 to 12.4, p = 0.005) were independent predictors for PSS.

Conclusions: PSS after second generation DES was a rare phenomenon but appeared to be associated with subsequent TLR.

### TCT-89

**Left Ventricular Global Function Index: Relation with Infarct Characteristics and Left Ventricular Ejection Fraction after STEMI**

Sebastian Reinstadler1, Gert Klug1, Hans-Josef Feistritzer1, Wolfgang-Michael Franzi2, Bernhard Metzler1

1Innsbruck Medical University, Innsbruck, Austria

Background: The left ventricular global function index (LVGFI) is a novel indicator of left ventricular performance. Its role in patients after acute myocardial infarction is unknown. We sought to investigate the relationship between the LVGFI and infarct characteristics as well as left ventricular ejection fraction in patients after acute ST-segment elevation myocardial infarction (STEMI).

Methods: 226 patients with first STEMI (mean age 57±11 years) were enrolled in this observational study. All patients underwent cardiac magnetic resonance (CMR) imaging within the first week after STEMI. Infarct characteristics were determined in the use of late gadolinium enhanced images. Left ventricular dimensions and function were measured by cine true-FISP sequences.

Results: The mean LVGFI was 32 ± 8 %. LVGFI was inversely related with peak creatine kinase (r = -0.46), peak cardiac troponin T (r = -0.45) and CMR-determined infarct size (r = -0.42, all p < 0.001). Significantly decreased LVGFI values were also observed in patients with microvascular obstruction and anterior STEMI (all p < 0.001). In addition, there was a strong correlation between LVGFI and left ventricular ejection fraction (r = 0.91, p < 0.001).

Conclusions: This study demonstrates that the LVGFI is significantly associated with infarct characteristics and left ventricular ejection fraction in patients after acute STEMI. LVGFI is a useful functional parameter of the left ventricle. Future studies are needed to evaluate its role as a prognostic marker in this population.