nation-wide accreditation of ACS is needed in Taiwan, the regional differences (RD) on ACS subjects’ outcomes are unclear in the real world practice.

**METHODS** Data were analyzed from the 2005-2008 National Health Insurance Research Database (NHIRD) in Taiwan. ACS subjects undergoing CAG or PCI with intent to revascularization during the same admission were enrolled. The major adverse cardiac events (MACE) were cardiovascular death, myocardial infarction (MI) and stroke. Other exploratory endpoint is heart failure (HF). RD was defined as cardiovascular outcomes between two geographic locations.

**RESULTS** 2481 patients with ACS were enrolled and the mean age was 65.0±12.9 years old. We found RD including admission charge, length of hospital stay, and the percentage of hyperlipidemia, beta-blockers use, angiotensin-converting-enzyme inhibitors (ACEI) use, and CAG. Cox regression analysis showed that RD was associated with MACE and MI (both log-rank test p < 0.012) and MI (P=0.005), but not HF (P=0.094), cardiovascular death (P =0.551) or stroke (P =0.733). Kaplan-Meier curves showed two locations had significant difference among MACE and MI (both log-rank test p < 0.012). In the multivariate analysis, RD was associated with MACE (P =0.006) and MI (P =0.002).

**CONCLUSION** In the real-world practice, RD might be an outcome predictor of MACE and MI in ACS subjects.

Key words: acute coronary syndrome, regional difference, coronary angiography, MACE, PCI

**TCTAP A-129**

**Time of Onset of Acute Myocardial Infarction to First Balloon Dilatation and T Wave Alternans**

Tetsuya Ishikawa, Dian Larasati Munawar, Binawaluya Cardiac Center, Indonesia

**BACKGROUND** T-wave alternans (TWA) is a heart rate dependent repolarization measurement and correlates with arrhythmia vulnerability in animal and human studies. TWA is one of established marker and can predict individuals at high risk of developing a potentially lethal cardiac arrhythmia. We evaluate the association of onset of myocardial infarction and increased of TWA in patients with acute ST-segment elevation myocardial infarction (STEMI).

**METHODS** All patients with acute STEMI who underwent primary percutaneous coronary intervention (PPCI) at Bina Waluya Cardiac Center in periods of January 2011 to October 2011 were enrolled. Those who were having previous myocardial infarction was excluded. TWA was measured using Treadmill test after 1 to 2 weeks after discharge.

**RESULTS** A total of consecutive 27 patients were included in the study. There were 25 man and 2 women, with the mean age 58.8±9.9 years. The median onset of STEMI and first medical contact was 5.2 hours (0.5 to 11 hours) and the mean door to balloon was 149.5±97.8 minutes (62 to 432 minutes). The time between onsets of myocardial infarction to the first balloon dilatation was so-called pre-revascularization time. No complication occurred. The mean LV EF was 59±13.2% and End Diastolic Diameter (EDD) was 49±9.5 mm, and the End Systolic Diameter (EDS) was 32±9.7 mm. There was significant correlation between pre-revascularization time and the TWA (r=0.51, p<0.01). The longer the pre-revascularization time, the longer the TWA.

**CONCLUSION** The longer the pre-revascularization times the more probability of having higher results of TWA and may influence occurring of ventricular arrhythmia.

**TCTAP A-130**

**Very Long-Term Outcomes After Stenting Using Sirolimus- and Paclitaxel-eluting Stents for Patients with First STEMI: A Propensity-Score Matched Analysis**

Tetsuya Ishikawa, Makoto Muto, Saitama Prefectural Cardiovascular and respiratory Disease Center, Japan

**BACKGROUND** We conducted a retrospective examination of very long-term clinical outcomes after stenting using sirolimus (SES) and paclitaxel (PES)-eluting stents for patients with STEMI presented within 48hrs from the onset.

**METHODS** The present study was a non-randomized, retrospective, and single center study, recruiting 872 first STEMI patients after successful either SES (n=547) or PES placement during from November 2004 to April 2012.

**RESULTS** The incidence of severe cardiac events comprising of cardiac death, nonfatal recurrent MI, and definite stent thrombosis in the SES group (8.6%) during the follow-up duration of 2173.2±786 (days) was not significantly different from that in the PES group (6.2%, 1921.696 days). However, the incidence of very late definite stent thrombosis (VLST) in the SES group (1.1%) was significantly greater than that in the PES group (0, p=0.041). However, after adjusting the 29 baselines by a propensity-score matched analysis produced 231 patients in each arm, the incidence of severe cardiac events including VLST (0.4%) in the SES group (5.6%) was not significantly different from that in the PES group (6.1%). Cox proportional hazard model showed that patients with LMCA disease (hazard ratio≈11.6, 95% CI: 1.98-68.1, p=0.007) and final TIMI-grade flow 2-3 (0.145, 95% CI: 0.025-0.83, p=0.030) were the predictors of severe cardiac events.

**CONCLUSION** Thus, very long-term clinical outcomes of the first-generation DESs (SES vs. PES) for first STEMI patients were favorable and statistically equivalent in Japan.