



**CONCLUSION** LV dysfunction is associated with increase of MACCE and major bleeding, which of MACCE was affected by HPR status in large, real-world PCI registry.

**CATEGORIES CORONARY:** Pharmacology/Pharmacotherapy

**CONCLUSION** Platelet reactivity was enhanced in patients with CKD, and HPR was an independent risk factor for MACCE in patients with CKD.

**CATEGORIES CORONARY:** Pharmacology/Pharmacotherapy

**TCT-33**

**Platelet Reactivity and Clinical Outcomes After Drug-Eluting Stent Implantation in East Asian Patients With Chronic Kidney Diabetes: Results From the PTRG-DES Registry**



Sang Yeub Lee,<sup>1</sup> Jang-Whan Bae,<sup>2</sup> Moonki Jung<sup>3</sup>  
<sup>1</sup>Chung-Ang University Gwangmyeong Hospital, Gwangmyeong, Korea;  
<sup>2</sup>Chungbuk National University Hospital, Chungbuk, Korea; <sup>3</sup>Chung-Ang University Hospital, Seoul, Korea

**BACKGROUND** This study aimed to investigate the association between CKD and platelet reactivity, and clinical outcomes according to CKD and high platelet reactivity (HPR)

**METHODS** The PTRG-DES (Platelet Function and Genotype-Related Long-Term Prognosis in DES-Treated Patients) registry is multicenter prospective registry to determine the relationship between platelet reactivity/genotyping and clinical outcomes in East Asian patients with coronary artery disease following PCI. We evaluated platelet reactivity and analyzed the effect of CKD on platelet reactivity and clinical events according to CKD and HPR.

**RESULTS** Between July 9, 2003, and Aug. 7, 2018, 13,160 patients were enrolled at 17 academic hospitals and the result of the VerifyNow P2Y12 assay was available in 11,714 patients. The platelet reactivity of patients with CKD was significantly higher than that of non-CKD patients (CKD vs non-CKD:  $236.4 \pm 81.3$  vs  $212.9 \pm 77.3$  PRU,  $P < 0.001$ ). In clinical outcomes, the highest rate of major adverse cardiac and cerebrovascular events (MACCE) was found in patients with CKD and HPR (adjusted hazard ratio 1.818,  $P$  value  $< 0.001$ , 95% confidence interval 1.421-2.324) during the 5year follow-up. The rate of bleeding events was higher in patients with CKD and HPR (adjusted hazard ratio 1.300,  $P$  value  $< 0.137$ , 95% confidence interval 0.920-1.838) but without statistical significance. Multivariate analysis revealed CKD with HPR was independent risk factors associated with MACCE.

**STEMI STRATEGIES AND OUTCOMES I**

**Abstract nos: 34-38**

**TCT-34**

**Reduction of Infarct Size in Anterior ST-Segment Elevation Myocardial Infarction (STEMI) With LAD Occlusion and LV Unloading Using a Micro-axial Pump for 30 Minutes Before PCI: Per-Protocol Analysis of the STEMI Door to Unload (DTU) Pilot Study**



Navin Kapur,<sup>1</sup> Jeffrey Moses,<sup>2</sup> Haroon Faraz,<sup>3</sup> Zachary George,<sup>4</sup> Vijay Iyer,<sup>5</sup> Richard Karas,<sup>6</sup> Carey Kimmelstiel,<sup>1</sup> Gerald Koenig,<sup>7</sup> Ryan Madder,<sup>8</sup> Perwaiz Meraj,<sup>9</sup> Raymond Kim,<sup>10</sup> Theodore Schreiber,<sup>11</sup> David Wohms, MD,<sup>12</sup> James Udelson,<sup>1</sup> Gregg Stone,<sup>13</sup> William O'Neill<sup>7</sup>  
<sup>1</sup>Tufts Medical Center, Boston, Massachusetts, USA; <sup>2</sup>St Francis Hospital and Heart Center, Roslyn, New York, USA; <sup>3</sup>Hackensack University Medical Center, Hoboken, USA; <sup>4</sup>Revere Health, St George, Utah, USA; <sup>5</sup>University at Buffalo/Gates Vascular Institute, East Amherst, New York, USA; <sup>6</sup>Unaffiliated, Franklin, Massachusetts, USA; <sup>7</sup>Henry Ford Hospital, Detroit, Michigan, USA; <sup>8</sup>Spectrum Health, Ada, Michigan, USA; <sup>9</sup>Northwell Health, Manhasset, New York, USA; <sup>10</sup>Duke University Medical Center, Durham, North Carolina, USA; <sup>11</sup>Ascension Macomb-Oakland Hospital, Warren, Michigan, USA; <sup>12</sup>Spectrum Health Meijer Heart and Vascular Institute, Grand Rapids, Michigan, USA; <sup>13</sup>Mount Sinai Heart Health System, New York, New York, USA

**BACKGROUND** The STEMI-DTU pilot trial identified that LV unloading before PCI is safe and feasible in anterior STEMI without shock. We now report findings from patients who met all protocol inclusion and exclusion criteria.

**METHODS** In a multicenter, randomized safety and feasibility trial, 50 patients with anterior STEMI were unloaded using the Impella CP followed by immediate (U-IR) or delayed PCI after 30 minutes of unloading (U-DR). Cardiac magnetic resonance (CMR) imaging assessed infarct size 3-5 days after PCI. Patients without CMR at 3-5 days (n = 10; 5/arm), without PCI of a culprit LAD lesion (n = 2; 1/arm) and without STEMI (n = 5; 4 U-IR, 1 U-DR) were not per protocol and thus excluded.

**RESULTS** 33 patients met all inclusion and exclusion criteria (U-IR n = 15, U-DR n = 18) with respective door-to-balloon times of  $75 \pm 26$  and  $89 \pm 23$  minutes ( $P = 0.10$ ) and mean unload-to-balloon times of  $10 \pm 5$