into the present study from January 2006 to July 2009. Demographic information, concomitant diseases, peri-operative laboratory examinations, angiographic features, and surgery information of consecutive patients who underwent PCI were collected.

**Results** A total of 13,922 patients were recorded in the database, of which 9.03% (1,257/13,922) had previous PCI. Univariate analysis revealed that patients with prior PCI had significant higher prevalence of hypertension, diabetes mellitus and hyperlipidemia than those without prior PCI. In addition, the percentage of patients with prior CABG was higher in the former group (6.0% vs 1.9%, p<0.001). In multivariable logistic regression analyses adjusted for demographic, clinical, angiographic and procedural factors, elderly age (OR 1.01, 95% CI 1.00 to 1.01), male (OR 1.74, 95% CI 1.48 to 2.04), hypertension (OR 1.36, 95% CI 1.19 to 1.54), diabetes mellitus (OR 1.43, 95% CI 1.24 to 1.65), hyperlipidemia (OR 1.30, 95% CI 1.06 to 1.57) and prior CABG (OR 3.57, 95% CI 2.52 to 4.51) were identified as independent risk factors of secondary PCI. Additionally, history of prior CABG was the most important predictor of secondary PCI.

**Conclusions** Risk factors associated with secondary PCI include elderly age, male, hypertension, diabetes mellitus, hyperlipidemia and prior CABG, of which previous CABG was the most important.

**Objective** To determine whether EECP-integrated standard therapy would reduce the major adverse coronary events in patients with coronary artery diseases and improve the quality of life.

**Method** A total of 194 patients aged from 32 to 75 years old with coronary artery diseases from Sept. 2008 to Dec. 2009 in 4 hospitals affiliated to Sun Yat-sen University were enrolled into the trial. Subjects were randomised to be allocated either to EECP plus standard therapy group or standard therapy group, and followed for 0.5 to 1.5-year. The coronary artery disease in all patients was documented by coronary angiography, or a history of prior myocardial infarction or prior coronary revascularization. Patients in standard therapy group were treated with guideline-driven therapeutic strategy, and patients in EECP group were given 36 h of EECP in addition to the guideline-driven therapeutic strategy. Repeated EECP were prescribed to patients with any reoccurred ischaemic symptoms, or new ischaemia, or no symptoms in 12 months later. Follow-up visits were performed at 1, 3, 6, 12 months and each year therefore from the inclusion.

**Results** The primary composite endpoints of myocardial infarction, revascularisation, readmission to hospital due to stroke and ACS occurred in 6 of 104 (5.77%) patients in EECP group compared with 9 of 91 (9.89%) in standard therapy group (p<0.05). There was 1 death in both groups respectively. The incidence of minor skin damage was about 8% in EECP group, causing EECP therapy in 3 patients to be prematurely terminated.

**Conclusion** An EECP-integrated standard therapy significantly reduced major cardiovascular events in patients with documented coronary artery disease.