Objective To probe into the use of TCM preparations in the secondary prevention and treatment of CHD in China and investigate its influencing factors and relationship with guideline-recommended therapies.

Methods A cross-sectional survey was conducted among 2,805 CHD outpatients, a representative sample of China. Interviewers (physicians) were assigned to collect information concerning patients’ medical care, previous diseases/treatments, and current medication. The use of TCM preparations and its influencing factors was analysed.

Results The rate of using TCM preparations was 29.5% in 2,712 patients with complete information; the rates of using four guideline-recommended Western medication classes, aspirin, β-blocker, statins and ACEI/ARB, were 84.0, 61.9, 56.8 and 60.1%, respectively. Multivariate analysis showed that the rate of using TCM preparations was higher in secondary hospitals than in tertiary hospitals and was higher in patients with a longer history of CHD and/or in patients who were not taking ACEI/ARB and statins. The rate of using TCM preparations was also higher in patients without a history of percutaneous coronary intervention (PCI). Compared with those who were not taking TCM preparations (non-TCM group), the rate of using any of the four major classes were relatively lower among patients who were taking TCM preparations (TCM group). The rate of using combined therapies was 21.8% in the TCM group and 34.8% in the non-TCM group. When other factors were adjusted, the rate of guideline-recommended therapy use in the non-TCM group was 1.7 times of that in the TCM group.

Conclusion Nearly 50% of Chinese CHD patients are taking TCM preparations to manage their heart disease, especially those with a long disease course, without a history of PCI and/or treated in secondary hospitals. The effectiveness of both TCM preparations and the four guideline-recommended drug classes requires further research.

**Investigation of Repeat Coronary Revascularization in Beijing Anzhen Hospital**

**Objectives** Although data of prevalence of prior percutaneous coronary intervention (PCI) and prior coronary artery bypass graft (CABG) are available in the European Heart Survey Programme, there is still lack of large scale cross-sectional study in China. This survey intended to investigate current status of secondary coronary revascularization in Beijing Anzhen Hospital, which is one of the largest cardiovascular centers in China.

**Methods** A comprehensive review of the institution’s database between January 2006 and July 2009 was conducted. Patients who received coronary revascularization were divided into PCI and CABG groups. Demographic information, concomitant diseases, peri-operative laboratory examinations, angiographic features and surgery information of consecutive patients who underwent coronary revascularization were collected.

**Results** A total of 20,299 patients were included in the analysis, of which 68.58% (13,922) received PCI and 31.42% (6377) underwent CABG. Compared to PCI group, the mean age of CABG group was significant older (61.8±9.4 vs 59.7±10.8, respectively, p<0.001). The proportion of male patients in CABG group was also higher than PCI group (70.4% vs 68.0%, respectively, p=0.001). The prevalence of prior PCI or CABG history was 9.03% (1257/13922) and 2.24% (312/13922) respectively, and 0.54% (75/13922) of patients had both of them. Of the 6377 patients underwent the index CABG, 5.41% (345/6377) had prior PCI, and 0.25% (16/6377) had prior CABG.

**Conclusions** The ratios of secondary coronary revascularization were still high in patients treated with PCI or CABG. The comprehensive control of cardiovascular risk factors is needed to strengthen.

**Alteration of Regional Pulse Wave Velocity in Beijing General Residents and Its Relationship with Metabolic Syndrome Components**

**Objective** To investigate the alteration of regional pulse wave velocity (PWV) in Beijing general residents with metabolic syndrome (MS) and analyse its related factors.

**Methods** All the adult participants in this cross-sectional investigation were recruited from 3 big communities during their annual physical examination. Regional arterial stiffness was assessed simultaneously by measuring PWV in three arterial segments, the carotid-femoral (cfPWV), carotid-radial (crPWV) and carotid-ankle PWV (caPWV). Demographic characteristics and basal biochemical parameters including height, weight, waist and hip circumference, blood pressure, and serum levels of glucose, lipid, uric acid and creatinine were collected. MS was identified according to the criteria from the International Diabetes Federation definition.

**Results** A total of 2459 citizens (age ranging from 18 to 92 years) were enrolled into this study, which included 732 participants with MS (prevalence, 30.01%). The subjects with MS were older (53.25±13.75 vs 50.03±15.73, p<0.001), had higher cfPWV, caPWV, crPWV (m/s), 11.68±2.92 vs 10.24±2.48, 9.46±1.75 vs 8.76±2.23, 9.76±1.52 vs 9.42±1.45, p<0.001 for all), and increased occurrence of cardiovascular diseases (18.3% vs 9.1%, p<0.001). Partial correlation analysis after adjustment for age and sex showed that pulse pressure, LDL-C, uric acid and all component of MS were significantly related to the values of cfPWV and caPWV (p<0.05 for all). In multivariate stepwise linear regression models, MS as a whole was an independent determinant for all the three regional PWV. The components of MS showed different effects on the regional PWV elevation. In detail, increased systolic blood pressure and hyperglycemia correlated with enhanced cfPWV and caPWV, while central obesity affected cfPWV only. Further, the diastolic blood pressure among the MS components was independently affected cfPWV, and serum triglyceride and high density lipoprotein level had little effect on PWV.

**Conclusion** MS contributes to the occurrence of increased arterial stiffness independently of other known cardiovascular risk factors. Among its related components, central obesity, hypertension and hyperglycemia are the critical factors determining arteriosclerosis.

**The Efforts of Swimming Exercise on the Expression of PPAR-γ and Lipid Metabolism in the ApoE Knockout Mice**

**Objectives** To establish a model of ApoE knockout mice with insulin resistance induced by high-fat diet, and observed the effect of