[gw22-e0988] **RISK SCORE FOR PREDICTION OF CONTRAST INDUCE NEPHROPATHY IN PATIENTS UNDERWENT PERCUTANEOUS CORONARY INTERVENTION**

Fu Naikuan, Chen Yongli, Xu Jing, Yang Shicheng *Tianjin Chest Hospital, Tianjin, China*

Objective To develop a simplified risk score of contrast induced nephropathy (CIN) after percutaneous coronary intervention (PCI).

Methods A retrospective study was performed on 1500 patients for the development dataset, who had undergone PCI from January 2009 to May 2010. One thousand patients from June 2010 to March 2011 were studied prospectively for the validation set. Logistic regression analysis was applied to identify risk factors for CIN. Based on the odds ration, 11 identified variables were assigned a weighted integer: diabetes, hypotension (3), heart failure (3), creatinine clearance rate (Ccr) $\leq$ 60 ml/min (3), age $\geq$70 years (2), myocardial infarction (2), emergency PCI (2), anaemia (2), decreased high-density lipoprotein (HDL) concentration (<1 mmol/l) (2), contrast agent dose of $\geq$200 ml (2), low permeability contrast agent (1). The sum of the integers was a total risk score for each patient.

Results Among the 1500 patients, CIN occurred in 246 patients and the overall incidence of CIN was 16.4%. The incidence of CIN was 5.2% in low risk group ($\leq$4), 13.6% in the moderate risk group (5–10), 32.3% in the high risk group (11–14) and 59.0% in the very high risk group ($\geq$15). The model demonstrated good discriminative power in the validation population, showing that the increasing risk score was strongly associated with CIN (c-statistic=0.82).

Conclusion This simple scoring system proposed here provides a good estimate of the risk of CIN after PCI. This risk score can be used for the prevention and treatment of CIN.