Methods The levels of serum cardiac troponin I (cTnI) of 174 patients with chronic heart failure (CHF) were detected. The patients were divided into two groups: cTnI-positive group with serum cTnI $\geq 0.16$ ng/ml (n=78) and cTnI-negative group with serum cTnI $< 0.16$ ng/ml (n=96). Ventricular arrhythmia was assessed by 24 h Holter monitoring in two groups. The incidence of adverse cardiac events, re-hospitalisation mortality during the period of in-hospital and the 6 months of out-of-hospital were observed and followed up.

Results Mean hourly number of single ventricular premature beats, Mean hourly ventricular pairs, and the frequency of ventricular tachycardia episodes per 24 h in cTnI-positive group were significantly higher than those in cTnI-negative group (all $p<0.01$); during the period of observation and follow-up, the incidence of adverse cardiac events, re-hospitalisation and mortality of patients in cTnI-positive group were significantly higher than those in cTnI-negative group (all $p<0.05$).

Conclusions Serum cTnI levels correlated with ventricular arrhythmia and late prognosis, which could be used as a prognosis predicting for patients with CHF.