**Objectives** To explore clinical diagnostic value of 128-slice spiral CT coronary angiography (128-SCTCA) in the patients with coronary heart disease, and check the population adapt to 128-SCTCA.

**Methods** A retrospective analysis of 198 cases received 128-SCTCA, suspected coronary angiography (CAG) to check the patient’s clinical data in the 4 weeks. Duke model in accordance with coronary heart disease concept will be checked into coronary heart disease (n=48 cases) of low-risk, medium risk (n=64 cases) and high-risk (n=86) three group, as ‘standard’ analysis to CAG 128-SCTCA the accuracy of the diagnosis of coronary heart disease and coronary artery calci

**Results** Duke model of coronary artery disease probability low risk group, medium risk group, high-risk group, their coronary artery disease detection rates were 45.4%, 73.6%, 84.2%; 128-SCTCA in diagnosis of coronary heart disease risk group the sensitivity and positive The predictive value was significantly lower than the risk group and high-risk group. Right coronary artery Agatston calcium score >400 grouping, 128-SCTCA diagnostic sensitivity of coronary heart disease (95.6%) was significantly higher than 0–100
grouping and 101 to 400 group (76.3% was 78.7%, p<0.05). 128-SCTCA diagnosis of distal white tube lesion sensitivity, positive predictive value were lower than those near the middle of the white tube (p<0.05).

Conclusions 128-SCTCA in Intermediate risk group of DWKE model with coronary heart disease, its diagnostic accuracy was affected by coronary artery calcification, lesion and lumen diameter.