

Full text open access online (Since 2001) © Kamla-Raj IJHG 2023 PRINT: ISSN 0972-3757 ONLINE: ISSN 2456-6330 Int J Hum Genet, 23(1): 26-33 (2023) DOI: 10.31901/24566322.2023/23.01.846

Expressions of miR-132, miR-145 and miR-208 in Patients with Acute Myocardial Infarction and Correlations with Gensini Score

Ling Lin*, Mingguo Zhang, Yasha Liang, Tingjian Wang, Qiu He and Yunyu Cheng

The First Affiliated Hospital of Kunming Medical University, Kunming, Yunnan Province, China

KEYWORDS Acute Myocardial Infarction. Gensini Score. miRNA

ABSTRACT The researchers aimed to investigate the correlations of miR-132, miR-145 and miR-208 with the Gensini score (GS) of patients with acute myocardial infarction (AMI). Totally 120 AMI patients and 80 healthy volunteers undergoing physical examination were included into AMI group and healthy group, respectively. The AMI patients were subdivided into low GS (LGS) group (\leq 30 points) and high GS (HGS) group (>30 points). Independent risk factors included troponin I (TnI), creatine kinase (CK) isoenzyme, uric acid (UA), C-reactive protein (CRP), miR-132, miR-145, and miR-208, which affected the severity of coronary artery lesions (CALs) (P<0.05). Compared with miR-132, miR-145, and miR-208 alone, their combination had the highest diagnostic value, with the area under curve (95%CI) of 0.911 (0.869-0.978), sensitivity of 89.89 percent and specificity of 70.91 percent (P<0.001). MiR-132, miR-145, and miR-208 are abnormally expressed in AMI patients. Their combination has higher diagnostic value for the severity of CALs in AMI patients.