

Circulating miRNA-24 and its target YKL-40 as potential biomarkers in patients with coronary heart disease and type 2 diabetes mellitus

SUPPLEMENTARY MATERIALS

Supplementary Table 1: General clinical data

Characteristics	Control	CHD	CHD-DM2
Number	31	35	28
Sex (male/female)	16(51.6)	18(51.4)	16(57.1)
Age (years)	60.3±7.3	61.3±6.6	65.1±7.2
Hypertension	15(48.4)	16(45.7)	15(53.6)
Smoker	12(38.7)	11(31.4)	9(32.1)
GLU/(mmol·L ⁻¹)	5.11±1.25	4.93±1.12	8.69±1.52 ^(a,b)
ALT/(U·L ⁻¹)	20.33±10.21	23.56±9.19	26.55±12.62
AST/(U·L ⁻¹)	21.92±6.98	25.39±7.18	29.14±11.12
TG(mmol·L ⁻¹)	1.15±0.67	1.41±1.02	1.43±1.15
TC (mmol·L ⁻¹)	4.29±0.71	4.28±0.55	4.91±1.06
LDL-C(mmol·L ⁻¹)	1.87±1.38	2.25±0.82	2.11±0.92
HDL-C(mmol·L ⁻¹)	1.05±0.33	1.12±0.29	1.03±0.62
Cr/(μmol·L ⁻¹)	43.30±5.80	41.48±6.81	43.62±6.82
BUN/(mmol·L ⁻¹)	5.16±1.61	5.29±1.22	5.18±1.83
UA/(μmol·L ⁻¹)	346.98±59.81	368.88±62.55	370.91±69.92
Gensini Score	0	46.4±9.73 ^(a)	64.6±9.64 ^(a,b)

Data are presented as number (percentage) for categorical data or mean ± standard error of mean (M ± SEM) for parametrically distributed data. DM2: type 2 diabetes mellitus; CHD: coronary heart disease; GLU: fasting glucose; ALT: alanine transaminase; AST: aspartate transaminase; LDL-C: low-density lipoprotein cholesterol; HDL-C: high-density lipoprotein cholesterol; TC: total cholesterol; TG: triglyceride. Cr: creatinine; BUN: blood urea nitrogen; UA: uric acid. ^ap<0.05, ^bp<0.005 compared to controls and CHD.

Supplementary Table 2: The sequences of primers used in the study

Stem-loop Q-RT-PCR for miR-24	Stem-loop RT primer of miR-24	5'-CTCAACTGGTGTCGTGGAGTCGGCAATTCA GTTGCTGCTGA -3'
	Sense primer of miR-24	5'- ACACTCCAGCTGGGTGGCTCAGTTCAGCA GG-3'
	Antisense primer of miR-24	5'- CTCAACTGGTGTCGTGGA -3'
	Sense primer of reference gene U6	5'-CTCGCTTCGGCAGCACACA-3'
	Antisense primer of reference gene U6	5'-AACGCTTCACGAATTTGCGT-3'
Real-time PCR for human YKL-40	Sense primer of YKL-40	5'-TGCCCTTGACCGCTCCTCTGTACC-3'
	Antisense primer of YKL-40	5'- GAGCGTCACATCATTCCACTC -3'
	Sense primer of reference gene 18S rRNA	5'-CCTGGATACCGCAGCTAGGA-3'
	Antisense primer of reference gene 18S rRNA	5'-GCGGCGCAATACGAATGCCCC-3'
Vector construction	Sense primer of YKL-40 XhoIF	5'-CCGCTCGAGCCCTCTGTTCTGCACACAGCAC GGGGGCCA-3'
	Antisense primer of YKL-40 NotIR	5'-ATAAGAATGCGGCCGCTCACTGTAAAGCTCTT GTACTTTAT-3'
	Sense primer of mut-YKL-40	5'-ATCACCTGCCCTGCTGAGTCCCAGGTGACAT TTCAGTCTCCCTCCCTTGGGGCCTATG -3'
	Antisense primer of mut-YKL-40	5'-CATAGGCCCAAGGGAGGGAGACTGAAATGTC ACCTGGGACTCAGCAGGGCAGGTGAT-3'