

Circulating miRNAs Are Associated with the Systemic Extent of Atherosclerosis: Novel Observations for miR-27b and miR-146

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Table S1. Association of clinical characteristics, laboratory results, and atherosclerosis data with miR-27b expression levels.

Clinical Data		ΔCt miR-27b	p-Value
Age, years ^a		<i>r</i> = 0.137	0.254
Sex ^b	Male	19.4 (15.16–23.11)	0.585
	Female	17.88 (13.63–23.24)	
Hypertension ^b	No	19.77 (15.81–22.16)	1.000
	Yes	18.71 (14.96–23.53)	
Systolic blood pressure ^a		<i>r</i> = −0.076	0.530
Diastolic blood pressure ^a		<i>r</i> = −0.174	0.149
Dyslipidemia ^b	No	19.93 (15.73–21.26)	0.649
	Yes	18.35 (14.97–23.79)	
Diabetes mellitus ^b	No	18.29 (15.75–22.12)	0.377
	Yes	22.09 (14.41–24.10)	
Smoking history ^b	No	19.29 (4.42)	0.892
	Yes	19.15 (4.34)	
Antiplatelet therapy ^b	No	17.03 (14.05–19.85)	0.014
	Yes	20.71 (16.18–23.89)	
Statin therapy ^b	No	17.89 (14.53–20.10)	0.118
	Yes	19.50 (15.33–23.83)	
Laboratory Data			
Hemoglobin, g/dL ^a		<i>r</i> = −0.200	0.097
Leukocyte count, 10 ⁹ /L ^a		<i>r</i> = 0.197	0.111
Neutrophil count, 10 ⁹ /L ^a		<i>r</i> = 0.188	0.122
Lymphocyte count, 10 ⁹ /L ^a		<i>r</i> = 0.081	0.512
Neutrophil/lymphocyte ratio ^a		<i>r</i> = 0.132	0.286
Platelet count, 10 ⁹ /L ^a		<i>r</i> = 0.185	0.132
Fasting glycaemia, mg/dL ^a		<i>r</i> = 0.023	0.849
Percentage of glycosylated hemoglobin ^a		<i>r</i> = 0.128	0.311
Creatinine, mg/dL ^a		<i>r</i> = 0.283	0.017
Total cholesterol, mg/dL ^a		<i>r</i> = −0.068	0.578
LDL-cholesterol, mg/dL ^a		<i>r</i> = −0.033	0.788
HDL-cholesterol, mg/dL ^a		<i>r</i> = −0.123	0.312
Triglycerides, mg/dL ^a		<i>r</i> = −0.041	0.737
C-reactive protein, mg/L ^a		<i>r</i> = 0.018	0.889
Atherosclerosis Data			
Coronary Artery Disease			
Nr. of vessels with obstructive disease ^a		<i>r</i> = 0.241	0.043
Nr. of obstructive lesions ^a		<i>r</i> = 0.241	0.043

SYNTAX score ^a		$r = 0.286$	0.019
Prior coronary artery bypass grafting ^b	No	20.68 (18.16–21.22)	0.301
	Yes	18.89 (16.27–19.04)	
LE Arterial Disease			
Nr. of sides affected ^b	One	20.35 (15.17–23.26)	0.041
	Two	24.02 (17.23–25.74)	
Nr. of segments with obstructive disease ^a		$r = 0.320$	0.008
Prior bypass surgery ^b	No	21.90 (15.51–23.92)	0.498
	Yes	22.06 (16.50–24.34)	
Carotid Artery Disease			
Nr. of sides affected ^b	One	19.89 (13.31–24.51)	0.857
	Two	23.41 (17.17–24.49)	

^a Correlations between miR-27b expression levels (Δ Ct miR-27b) and continuous variables were tested and the correlation coefficient (r) is presented for each; ^b miR-27b expression levels (Δ Ct miR-27b) were compared between groups for categorical variables and are expressed as the mean (standard deviation) or median (interquartile range). Higher Δ Ct miR-27b represent lower circulating levels of miR-27b. HDL—high-density lipoproteins; LDL—low-density lipoproteins; LE—lower extremity; Nr.—number; SYNTAX—SYNergy between percutaneous coronary intervention with TAXus and cardiac surgery; Δ Ct—delta cycle threshold.

Table S2. Association of clinical characteristics, laboratory results, and atherosclerosis data with miR-146 expression levels.

Clinical Data		ΔCt miR-146	p-Value
Age, years ^a		<i>r</i> = 0.139	0.234
Sex ^b	Male	19.46 (3.75)	0.643
	Female	18.79 (4.54)	
Hypertension ^b	No	19.60 (2.87)	0.833
	Yes	19.35 (3.99)	
Systolic blood pressure ^a		<i>r</i> = −0.081	0.494
Diastolic blood pressure ^a		<i>r</i> = −0.161	0.170
Dyslipidemia ^b	No	19.69 (2.71)	0.814
	Yes	19.35 (3.94)	
Diabetes mellitus ^b	No	19.09 (3.59)	0.357
	Yes	19.95 (4.21)	
Smoking history ^b	No	19.65 (3.61)	0.528
	Yes	19.09 (4.06)	
Antiplatelet therapy ^b	No	17.64 (2.91)	0.031
	Yes	19.90 (3.92)	
Statin therapy ^b	No	18.92 (3.67)	0.434
	Yes	19.72 (3.58)	
Laboratory Data			
Hemoglobin, g/dL ^a		<i>r</i> = −0.140	0.236
Leukocyte count, 10 ⁹ /L ^a		<i>r</i> = 0.161	0.178
Neutrophil count, 10 ⁹ /L ^a		<i>r</i> = 0.169	0.154
Lymphocyte count, 10 ⁹ /L ^a		<i>r</i> = 0.031	0.794
Neutrophil/lymphocyte ratio ^a		<i>r</i> = 0.157	0.192
Platelet count, 10 ⁹ /L ^a		<i>r</i> = 0.201	0.091
Fasting glycaemia, mg/dL ^a		<i>r</i> = 0.071	0.550
Percentage of glycosylated hemoglobin ^a		<i>r</i> = 0.179	0.142
Creatinine, mg/dL ^a		<i>r</i> = 0.202	0.082
Total cholesterol, mg/dL ^a		<i>r</i> = −0.079	0.505

LDL-cholesterol, mg/dL ^a		$r = -0.043$	0.713
HDL-cholesterol, mg/dL ^a		$r = -0.039$	0.741
Triglycerides, mg/dL ^a		$r = -0.080$	0.501
C-reactive protein, mg/L ^a		$r = -0.100$	0.419
Atherosclerosis Data			
Coronary Artery Disease			
Nr. of vessels with obstructive disease ^a		$r = 0.242$	0.036
Nr. of obstructive lesions ^a		$r = 0.289$	0.012
SYNTAX score ^a		$r = 0.257$	0.037
Prior coronary artery bypass grafting ^b	No	20.97 (16.94–22.80)	0.209
	Yes	18.34 (15.74–20.81)	
LE Arterial Disease			
Nr. of sides affected ^b	One	18.21 (4.47)	0.021
	Two	21.87 (3.51)	
Nr. of segments with obstructive disease ^a		$r = 0.352$	0.003
Prior bypass surgery ^b	No	20.13 (4.17)	0.437
	Yes	21.59 (4.55)	
Carotid Artery Disease			
Nr. of sides affected ^b	One	19.58 (4.95)	0.352
	Two	21.40 (3.18)	

^a Correlations between miR-146 expression levels (ΔCt miR-146) and continuous variables were tested and the correlation coefficient (r) is presented for each; ^b miR-146 expression levels (ΔCt miR-146) were compared between groups for categorical variables and are expressed as the mean (standard deviation) or median (interquartile range). Higher ΔCt miR-146 represent lower circulating levels of miR-146. HDL—high-density lipoproteins; LDL—low-density lipoproteins; LE—lower extremity; Nr.—number; SYNTAX—SYNergy between percutaneous coronary intervention with TAXus and cardiac surgery; ΔCt —delta cycle threshold.