



**Figure S1** Expression level of 11 miRNA markers in the three groups using linear regression and AONANOVA, \*, P<0.05; \*\*, P<0.01; ns, P>0.05. Since the RF model can use non-linear correlation between the marker and the phenotype for classification prediction, it was normal to observe insignificant differences in linear regression analysis for some markers such as hsa-miR-3127-3p and hsa-miR-3186-5p.

**Table S1** 2 × 2 contingency table

Phenotype \ Prediction			
	AMI	Control	Sum
AMI	8	3	11
control	2	9	11
sum	10	12	22

**Table S2** RF\_Importance of 41 miRNAs

miRNA	Mean decrease accuracy
hsa-miR-1180-3p	17.19
hsa-miR-3615	14.84
hsa-miR-1227-3p	11.98
hsa-miR-5010-5p	11.95
hsa-let-7i-5p	8.61
hsa-miR-629-3p	5.74
hsa-miR-1976	5.10
hsa-miR-106b-5p	4.38
hsa-miR-143-3p	4.13
hsa-miR-23b-5p	3.03
hsa-miR-1843	2.90
hsa-miR-33a-5p	2.09
hsa-miR-3186-5p	1.70
hsa-miR-17-5p	1.64
hsa-miR-3127-3p	1.50
hsa-miR-1273h-3p	1.44
hsa-miR-144-5p	0.24
hsa-miR-203a-3p	0.09
hsa-miR-4638-3p	0.00
hsa-miR-1285-3p	0.00
hsa-miR-1343-5p	0.00
hsa-miR-5001-3p	0.00
hsa-miR-5589-5p	0.00
hsa-miR-4755-3p	0.00
hsa-miR-301b-5p	0.00
hsa-miR-6724-5p	0.00
hsa-miR-4724-5p	0.00
hsa-miR-135b-3p	0.00
hsa-miR-3189-3p	0.00
hsa-miR-141-5p	0.00
hsa-miR-4700-5p	0.00
hsa-miR-222-5p	-0.05
hsa-miR-1271-5p	-0.39
hsa-miR-31-5p	-0.72
hsa-miR-1908-3p	-0.94
hsa-miR-548q	-1.00
hsa-miR-365b-5p	-1.00
hsa-miR-1296-5p	-1.41
hsa-miR-210-3p	-1.90
hsa-miR-17-3p	-1.92
hsa-miR-664b-3p	-3.59