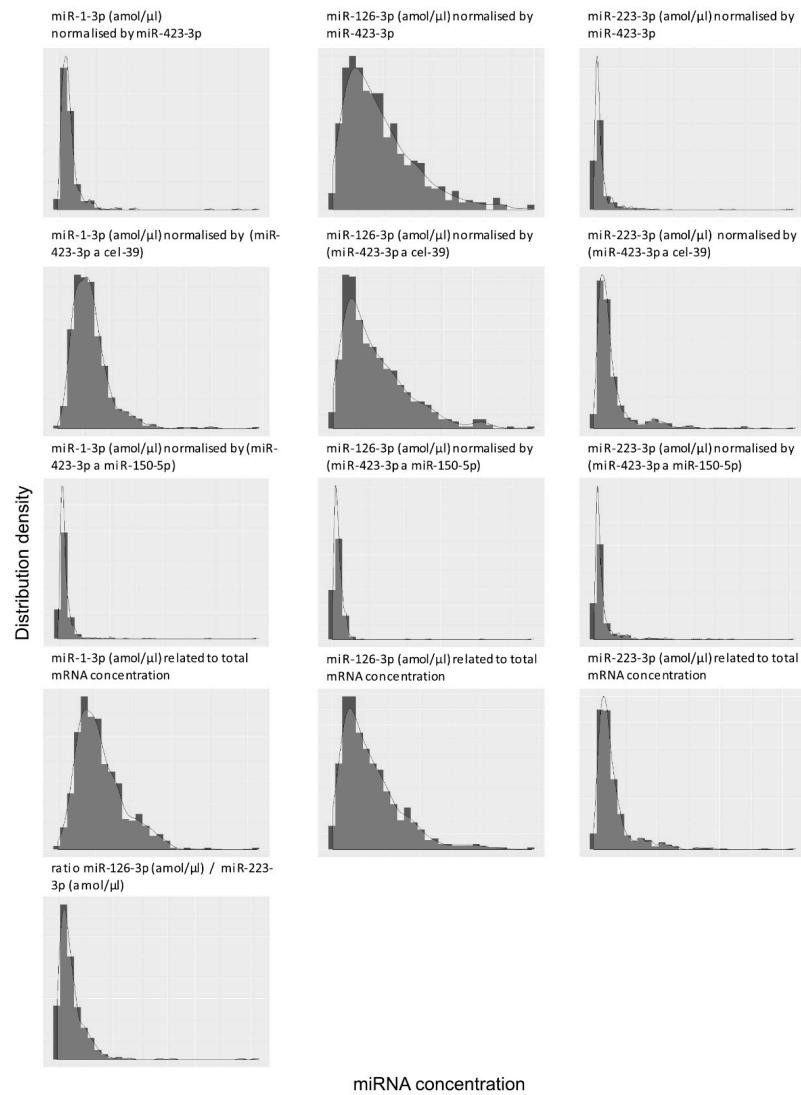


MiR-126-3p and MiR-223-3p as Biomarkers for Prediction of Thrombotic Risk in Patients with Acute Myocardial Infarction and Primary Angioplasty.

The PRAGUE-18 Genetic Substudy.

Hromadka, et al.

SUPPLEMENTARY DATA



Supplementary Figure 1 Distribution of miRNA concentration values: charts show the shape of statistical distribution of measured miRNA concentration with individual scale of axis for each chart

The data in our study demonstrate the importance of the normalization strategy when investigating miRNAs in blood. Four miRNAs were selected from publications for data normalization: cel-miR-39-3p, miR-93-5p, miR-150-5p and miR-423-3p. Among them, geNorm suggested using the combination of miR-423 and cell-39 (M-value 0.75), while NormFinder ranked individual miRNA by stability values as follows: miR-150 (0.198) < 423 (0.222) < 39 (0.452) < 93 (0.592). A stability value of 0.2 or less is generally accepted for use in data normalization. Overall, the combinations of miR-150 and 423 (NormFinder), miR-423-3p and cel-miR-39-3p (geNorm), individual miR-423-3p (both NormFinder and geNorm), and additionally the total RNA concentration and the miR-126-3p/miR-223-3p ratio were selected for data normalization.

Table S_1A. MiR-223-3p (amol/μl) normalised by (miR-423-3p a miR-150-5p)

	Below median ¹	Above median ¹	Nonadjusted OR (95% CI) ²	p ²
30 days				
Cardiovascular death	0 (0.0%)	11 (3.7%)		
Re-MI	0 (0.0%)	6 (2.0%)		
Stroke	1 (0.3%)	0 (0.0%)		
Cardiovascular death Re-MI Stroke	1 (0.3%)	15 (5.0%)	15.739 (2.066; 119.932)	0.008
Mortality	0 (0.0%)	11 (3.7%)		
Stent thrombosis	0 (0.0%)	6 (2.0%)		
Bleeding	9 (3.0%)	17 (5.7%)	1.942 (0.852; 4.430)	0.114
TIMI - major bleeding	2 (0.7%)	1 (0.3%)	0.498 (0.045; 5.525)	0.570
BARC > 3 bleeding	3 (1.0%)	2 (0.7%)	0.664 (0.110; 4.005)	0.656
365 days				
Cardiovascular death	1 (0.3%)	15 (5.0%)	15.739 (2.066; 119.932)	0.008
Re-MI	6 (2.0%)	11 (3.7%)	1.865 (0.681; 5.110)	0.225
Stroke	2 (0.7%)	1 (0.3%)	0.498 (0.045; 5.525)	0.570
Cardiovascular death Re-MI Stroke	8 (2.7%)	24 (8.0%)	3.175 (1.402; 7.186)	0.006
Mortality	3 (1.0%)	19 (6.4%)	6.695 (1.960; 22.873)	0.002

Stent thrombosis	2 (0.7%)	8 (2.7%)	4.082 (0.860; 19.387)	0.077
Bleeding	22 (7.4%)	31 (10.4%)	1.456 (0.822; 2.579)	0.197
TIMI - major bleeding	2 (0.7%)	1 (0.3%)	0.498 (0.045; 5.525)	0.570
BARC > 3 bleeding	3 (1.0%)	2 (0.7%)	0.664 (0.110; 4.005)	0.656

¹ absolute and relative frequencies for categorical variables

² odds ratio and its statistical significance

MI, myocardial infarction; PCI, percutaneous coronary intervention; TIMI, Thrombolysis in Myocardial Infarction; BARC indicates Bleeding Academic Research Consortium.

Table S_1B. MiR-126-3p (amol/μl) to miR-223-3p (amol/μl) ratio

	Below median ¹	Above median ¹	Nonadjusted OR (95% CI) ²	p ²
30 days				
Cardiovascular death	10 (3.3%)	1 (0.3%)	0.097 (0.012; 0.762)	0.027
Re-MI	5 (1.7%)	1 (0.3%)	0.197 (0.023; 1.699)	0.140
Stroke	1 (0.3%)	0 (0.0%)		
Cardiovascular death Re-MI Stroke	14 (4.7%)	2 (0.7%)	0.137 (0.031; 0.609)	0.009
Mortality	10 (3.3%)	1 (0.3%)	0.097 (0.012; 0.762)	0.027
Stent thrombosis	5 (1.7%)	1 (0.3%)	0.197 (0.023; 1.699)	0.140
Bleeding	17 (5.7%)	9 (3.0%)	0.515 (0.226; 1.174)	0.114
TIMI - major bleeding	1 (0.3%)	2 (0.7%)	2.007 (0.181; 22.250)	0.570
BARC > 3 bleeding	2 (0.7%)	3 (1.0%)	1.505 (0.250; 9.073)	0.656
365 days				
Cardiovascular death	14 (4.7%)	2 (0.7%)	0.137 (0.031; 0.609)	0.009
Re-MI	10 (3.3%)	7 (2.3%)	0.693 (0.260; 1.845)	0.463
Stroke	2 (0.7%)	1 (0.3%)	0.498 (0.045; 5.525)	0.570

Cardiovascular death Re-MI Stroke	23 (7.7%)	9 (3.0%)	0.372 (0.169; 0.819)	0.014
Mortality	16 (5.4%)	6 (2.0%)	0.362 (0.140; 0.939)	0.037
Stent thrombosis	7 (2.3%)	3 (1.0%)	0.423 (0.108; 1.651)	0.215
Bleeding	30 (10.0%)	23 (7.7%)	0.747 (0.423; 1.319)	0.315
TIMI - major bleeding	1 (0.3%)	2 (0.7%)	2.007 (0.181; 22.250)	0.570
BARC > 3 bleeding	2 (0.7%)	3 (1.0%)	1.505 (0.250; 9.073)	0.656

¹ absolute and relative frequencies for categorical variables

² odds ratio and its statistical significance

MI, myocardial infarction; PCI, percutaneous coronary intervention; TIMI, Thrombolysis in Myocardial Infarction; BARC indicates Bleeding Academic Research Consortium.

