

Table SI. Relative plasma levels of 12 miRNAs chosen from earlier reports of NSCLC studies in training set.

miRNA	Supplementary references	Healthy control (n=20)	NSCLC (n=40)	Fold change	P-value
miR-210	(1,2,4,5,14)	0.95	3.65	3.84	<0.0001 ^b
miR-1290	(3,7,18)	1.12	5.76	5.14	<0.0001 ^b
miR-150	(6,23,24)	0.82	8.14	9.93	<0.0001 ^b
miR-21-5p	(3,5,25)	1.63	4.86	4.86	<0.0001 ^b
miR-25	(10,11,22)	0.52	0.98	1.88	0.001 ^a
miR-190b	(15,20)	2.64	1.52	1.74	0.001 ^a
miR-29c	(12,13)	0.76	1.48	1.95	0.001 ^a
miR-22	(8,9)	0.94	1.64	1.74	0.001 ^a
miR-939	(19,26)	1.18	1.79	1.52	0.003 ^a
miR-1246	(21,18)	1.35	2.15	1.59	0.003 ^a
miR-214	(16,22)	0.98	1.36	1.39	0.005 ^a
miR-1254	(17)	2.45	3.61	1.47	0.005 ^a

^aP<0.01; ^bP<0.0001. miRNA/miR, microRNA; NSCLC, non-small cell lung cancer.

Table SII. Diagnostic Performance of the four miRNAs and CEA in distinguishing NSCLC from health control by the ROC curve analyses.

Group	Parameter	AUC	95% CI	P-value	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Accuracy (%)
Training set (n=60)	miR-210	0.75	0.69-0.89	0.006	75	75	86	50	75
	miR-1290	0.88	0.67-0.95	0.001	88	85	81	68	87
	miR-150	0.91	0.80-1.04	<0.001	90	85	84	71	88
	miR-21-5p	0.77	0.62-0.87	0.003	78	75	70	52	77
	Combined miRNA	0.96	0.82-1.10	<0.001	95	95	93	86	95
	CEA	0.69	0.51-0.79	0.012	68	65	57	40	67
	Combined miRNA and CEA	0.95	0.79-1.12	<0.001	93	95	90	83	93
Testing set (n=128)	miR-210	0.71	0.60-0.88	0.006	70	70	62	42	70
	miR-1290	0.82	0.68-0.94	0.001	82	80	75	57	81
	miR-150	0.85	0.76-1.08	<0.001	85	85	80	64	85
	miR-21-5p	0.75	0.58-0.86	0.005	75	75	67	48	75
	Combined miRNA	0.93	0.78-1.08	<0.001	93	90	89	78	92
	CEA	0.67	0.53-0.82	0.012	66	65	57	37	66
	Combined miRNA and CEA	0.92	0.81-1.09	<0.001	93	88	88	76	91

CEA, carcinoembryonic antigenic; ROC, receiver operating characteristic; AUC, area under the curve; PPV, positive predictive value; NPV, negative predictive value.

Table SIII. Diagnostic Performance of the four miRNAs and CEA in distinguishing NSCLC from BLD by the ROC curve analyses.

Group	Parameter	AUC	95% CI	P-value	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Accuracy (%)
Training set (n=60)	miR-210	0.73	0.68-0.86	0.006	73	70	63	45	72
	miR-1290	0.83	0.68-0.95	0.001	83	80	75	59	82
	miR-150	0.91	0.72-1.08	<0.001	90	85	84	71	88
	miR-21-5p	0.74	0.58-0.86	0.005	73	75	64	48	73
	Combined miRNA	0.96	0.80-1.05	<0.001	95	90	90	82	93
	CEA	0.68	0.47-0.76	0.028	68	60	56	36	65
	Combined miRNA and CEA	0.93	0.78-1.08	<0.001	93	85	86	74	90
Testing set (n=138)	miR-210	0.71	0.58-0.87	0.014	72	70	61	47	72
	miR-1290	0.80	0.64-0.92	0.004	80	80	71	59	80
	miR-150	0.89	0.76-1.09	<0.001	90	86	83	73	88
	miR-21-5p	0.78	0.64-0.85	0.006	77	76	68	54	77
	Combined miRNA	0.94	0.81-1.12	<0.001	94	94	90	85	94
	CEA	0.65	0.56-0.82	0.010	64	60	74	66	62
	Combined miRNA and CEA	0.91	0.79-1.10	<0.001	91	90	86	78	91

CEA, carcinoembryonic antigenic; BLD, benign lung disease; ROC, receiver operating characteristic; AUC, area under the curve; PPV, positive predictive value; NPV, negative predictive value.

Table SIV. Univariate and multivariate logistic regression analyses of parameters associated with non-small cell lung cancer in the two sets combined.

Parameter	Univariate analysis			Multivariate analysis		
	OR	95% CI	P-value	OR	95% CI	P-value
Age, years (<60 vs. ≥60)	1.56	1.20-1.69	0.15	-	-	0.48
Sex (Male vs. female)	1.32	0.27-2.48	0.43	-	-	0.89
Smoking status (Ever and current vs. never)	1.84	1.15-2.54	0.11	-	-	0.56
miR-210 expression (Low vs. high)	4.63	2.24-6.62	0.009 ^b	2.05	0.83-3.85	0.095
miR-1290 expression (Low vs. high)	8.32	5.44-13.76	0.002 ^b	4.13	2.12-6.89	0.011 ^a
miR-150 expression (Low vs. high)	14.75	11.32-19.47	<0.001 ^c	11.42	8.25-14.53	0.001 ^b
miR-21-5p expression (Low vs. high)	6.94	4.25-9.05	0.004 ^b	3.92	1.58-6.16	0.018 ^a
CEA expression (Low vs. high)	2.40	1.13-4.38	0.025 ^a	-	-	0.260

^aP<0.05; ^bP<0.01; ^cP<0.001. CEA, carcinoembryonic antigen; OR, odds ratio; CI, confidence interval; miR, microRNA.

Supplementary References

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