

## Article

# A Physically Active Status Affects the Circulating Profile of Cancer-Associated miRNAs

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**Table S2.** List of the miRNAs and miRNA signatures associated with diagnosis in Liver Cancer from literature. Only miRNAs with significant clinical relevance ( $AUC \geq 0.7$ ), and signature with at least one modulated miRNA from our experimental setting were considered.

Cancer	Sample	miRNAs	miRNA signatures	Regulation	AUC	Reference
LA	Serum	miR-210-3p		miR-210-3p ↑	miR-210-3p: 0.840	[1]
		miR-126-3p		miR-126-3p ↑	miR-126-3p: 0.910	
LA	Serum exosomes	miR-140-5p		miR-140-5p ↑	miR-140-5p: 0.880	[2]
		miR-21-5p		miR-21-5p ↑	miR-21-5p: 0.970	
LA	Serum	miR-30c-1*		miR-30c-1* ↑	miR-30c-1*: 0.740	[3]
					miR-142-5p: 0.743	
		miR-142-5p	miR-142-5p	miR-142-5p ↑	miR-146a-5p: 0.745	
LA	Serum	miR-146a-5p	miR-146a-5p	miR-146a-5p ↓	miR-223-3p: 0.828	[4]
		miR-223-3p	miR-223-3p	miR-223-3p ↑	miR-409-3p: 0.755	
		miR-409-3p	miR-409-3p	miR-409-3p ↓	signature: 0.933	
LC	Serum	miR-125b		miR-125b ↑	miR-125b: 0.877	[5]
		miR-21		miR-21 ↑	miR-21: 0.821	
LC	Serum	miR-154-5p		miR-154-5p ↓	miR-154-5p: 0.957	[6]
LC	Serum	miR-155		miR-155 ↑	miR-155: 0.761	[7]
					miR-92a: 0.781	
					signature miR-92a, miR-140-5p: 0.923	
					signature miR-92a, miR-140-5p, miR-331-3p: 0.969	
					signature miR-92a, miR-140-5p, miR-331-3p, miR-374a: 0.970	
					signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223: 0.986	
			let-7d	let-7d ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a: 0.987	
			miR-140-5p	miR-140-5p ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484: 0.988	
			miR-148a	miR-148a ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328: 0.989	
			miR-191	miR-191 ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c: 0.996	
			miR-223	miR-223 ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c: 0.996	
			miR-29a	miR-29a ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c, miR-29a: 0.996	
LC	Serum	miR-92a	miR-30b	miR-30b ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c, miR-29a, let-7d: 0.997	[8]
			miR-30c	miR-30c ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c, miR-29a, let-7d, miR-30b: 0.996	
			miR-328	miR-328 ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c, miR-29a, let-7d, miR-30b: 0.996	
			miR-331-3p	miR-331-3p ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c, miR-29a, let-7d, miR-30b: 0.996	
			miR-374a	miR-374a ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c, miR-29a, let-7d, miR-30b: 0.996	
			miR-484	miR-484 ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c, miR-29a, let-7d, miR-30b: 0.996	
			miR-92a	miR-92a ↑	signature miR-92a, miR-140-5p, miR-331-3p, miR-374a, miR-223, miR-148a, miR-484, miR-328, miR-191, miR-30c, miR-29a, let-7d, miR-30b: 0.996	
					Normal subjects vs. stage I-III patients AUC:	
					miR-17: 0.810	
					miR-18a: 0.739	
					miR-20a: 0.897	
					miR-92a: 0.810	
NSCLC	Serum	miR-17			Normal subjects vs. stage IV patients AUC:	[9]
		miR-18a			miR-17: 1.000	
		miR-20a			miR-18a: 0.991	
		miR-92a			miR-20a: 1.000	
					miR-92a: 0.834	
NSCLC	Serum	miR-30		miR-30 ↓	miR-30: 0.802	[10]
NSCLC	Serum	miR-233		miR-233 ↑	miR-233: 0.808	[11]
NSCLC	Serum exosomes	miR-17-5p		miR-17-5p ↑	miR-17-5p: 0.738	[12]
					let-7a: 0.711	
NSCLC	Serum	let-7a	let-7a	let-7a ↓	miR-21: 0.831	[13]
		miR-21	miR-21	miR-21 ↑	signature: 0.879	
NSCLC	Serum exosomes	miR-126		miR-126 ↑	miR-126: 0.859	[14]
		miR-126		miR-126 ↓	miR-126: 0.874	
NSCLC	Serum	miR-22		miR-22 ↑	miR-22: 0.916	[15]
					miR-125b: 0.704	
NSCLC	Serum	miR-125b		miR-125b ↑	miR-22: 0.725	[16]
		miR-22		miR-22 ↑	miR-125b: 0.765	
NSCLC	Serum	miR-125b		miR-125b ↑	miR-205: 0.800	[17]
		miR-205		miR-205 ↑	miR-126: 0.793	
NSCLC	Serum	miR-126		miR-126 ↑	miR-21: 0.918	[18]
NSCLC	Serum	miR-21		miR-21 ↑		[19]

NSCLC	Serum	miR-15b-5p miR-16-5p miR-20a-5p	miR-15b-5p miR-16-5p miR-20a-5p	miR-15b-5p ↑ miR-16-5p ↓ miR-20a-5p ↓	miR-15b-5p: >0.700 miR-16-5p: >0.700 miR-20a-5p: >0.700 signature: 0.930 Chinese cohort: miR-25: 0.835 miR-7 0.806 American cohort: miR-483-5p: 0.932 miR-7: 0.964 let-7g: 0.840 miR-106a: 0.958 miR-106b: 0.838 miR-141: 0.875 miR-17: 0.918 miR-19a: 0.948 miR-19b: 0.916 miR-200c: 0.820 miR-20b: 0.875 miR-215: 0.828 miR-24: 0.715 miR-25: 0.826 miR-301: 0.841 miR-331: 0.748 miR-93: 0.899 miR-125a-5p: 0.710 miR-145: 0.840 miR-146a: 0.780 miR-125a-5p: 0.833 miR-126: 0.786 miR-25: 0.818 signature: 0.936 miR-148a: 0.900 miR-148b: 0.900 miR-152: 0.820 miR-21: 0.810 signature: 0.970 miR-145: > 0.800 miR-152: > 0.800 miR-199a-5p: > 0.800 miR-20a: > 0.800 miR-221: > 0.800 miR-222: > 0.800 miR-223: > 0.800 miR-24: > 0.800 miR-25: > 0.800 miR-320: > 0.800 signature: 0.972 miR-29c: 0.723 miR-125b: 0.786 miR-146b: 0.850 miR-205: 0.920 miR-29c: 0.890 miR-30b: 0.76 signature: 0.930 miR-146b: 0.930 miR-205: 0.930 miR-29c: 0.980 miR-30b: 0.870 signature: 0.980 miR-146b: 0.770 miR-205: 0.880 miR-29c: 0.830 signature: 0.930 miR-146b: 0.840 miR-205: 0.900 miR-29c: 0.910 miR-30b: 0.710 signature: 0.960 miR-146b: 0.880 miR-205: 0.910	[20]
NSCLC	Serum	miR-25 miR-483-5p miR-7		miR-25 ↑ miR-483-5p ↑ miR-7 ↑		[21]
NSCLC	Serum	let-7g miR-106a miR-106b miR-141 miR-17 miR-19a miR-19b miR-200c miR-20b miR-215 miR-24 miR-25 miR-301 miR-331 miR-93 miR-125a-5p miR-145 miR-146a		let-7g ↑ miR-106a ↑ miR-106b ↑ miR-141 ↑ miR-17 ↑ miR-19a ↑ miR-19b ↑ miR-200c ↑ miR-20b ↑ miR-215 ↑ miR-24 ↑ miR-25 ↑ miR-301 ↑ miR-331 ↑ miR-93 ↑ miR-125a-5p ↑ miR-145 ↑ miR-146a ↑		[22]
NSCLC	Serum	miR-125a-5p miR-145 miR-146a		miR-125a-5p ↑ miR-145 ↑ miR-146a ↑		[23]
NSCLC	Serum	miR-125a-5p miR-126 miR-25	miR-125a-5p miR-126 miR-25	miR-125a-5p ↓ miR-126 ↓ miR-25 ↓		[24]
NSCLC	Serum	miR-148a miR-148b miR-152 miR-21	miR-148a miR-148b miR-152 miR-21	miR-148a ↓ miR-148b ↓ miR-152 ↓ miR-21 ↑		[25]
NSCLC	Serum	miR-145 miR-152 miR-199a-5p miR-20a miR-221 miR-222 miR-223 miR-24 miR-25 miR-320	miR-145 miR-152 miR-199a-5p miR-20a miR-221 miR-222 miR-223 miR-24 miR-25 miR-320	miR-145 ↑ miR-152 ↑ miR-199a-5p ↑ miR-20a ↑ miR-221 ↑ miR-222 ↑ miR-223 ↑ miR-24 ↑ miR-25 ↑ miR-320 ↑		[26]
NSCLC	Serum	miR-29c		miR-29c ↑		[27]
NSCLC	Serum	miR-125b		miR-125b ↓		[28]
LC	Serum					
LA	Serum					
LSCC	Serum	miR-146b miR-205 miR-29c miR-30b	miR-146b miR-205 miR-29c miR-30b	miR-146b ↑ miR-205 ↑ miR-29c ↑ miR-30b ↑		[29]
NSCLC stage I	Serum					
NSCLC stage II	Serum					

					miR-29c: 0.960 miR-30b: 0.780 signature: 0.950 miR-194-5p: 0.749 miR-451a: 0.904 miR-486-5p: 0.957 Signature: 0.965 miR-21: 0.880 miR-339-5p: 0.900 signature: 0.963	
LA	Plasma extracellular vesicles	miR-194-5p miR-451a miR-486-5p	miR-194-5p miR-451a miR-486-5p	miR-194-5p ↑ miR-451a ↑ miR-486-5p ↑		[30]
LA	Plasma	miR-21 miR-339-5p	miR-21 miR-339-5p	miR-21 ↑ miR-339-5p ↑		[31]
LA	Plasma		miR-19b-3p miR-21-5p miR-221-3p miR-409-3p miR-425-5p miR-584-5p	miR-19b-3p ↑ miR-21-5p ↑ miR-221-3p ↑ miR-409-3p ↑ miR-425-5p ↑ miR-584-5p ↑	signature: 0.740	[32]
LC	Plasma	miR-30a-5p		miR-30a-5p ↑	miR-30a-5p: 0.820	[33]
LC	Plasma	miR-21		miR-21 ↑	miR-21: 0.891 miR-21: 0.709 miR-155: 0.740	[34]
LC	Plasma	miR-145 miR-155 miR-21	miR-145 miR-155 miR-21	miR-145 ↓ miR-155 ↑ miR-21 ↑	signature miR-145, miR-21: 0.847 signature miR-145, miR-155: 0.833 signature miR-155, miR-21: 0.727 signature miR-145, miR-155, miR-21: 0.872	[35]
LC	Plasma	miR-155 miR-197		miR-155 ↑ miR-197 ↑	miR-155: 0.865 miR-197: 0.879	[36]
LSCC	Plasma	miR-106a-5p miR-181a-5p miR-21-5p	miR-106a-5p miR-181a-5p miR-93-5p	miR-106a-5p ↑ miR-181a-5p ↑ miR-21-5p ↑ miR-93-5p ↑	miR-106a-5p: 0.737 miR-181a-5p: 0.731 miR-21-5p: 0.739 signature: 0.827	[37]
LSCC	Plasma	miR-324-3p		miR-324-3p ↑	miR-324-3p: 0.790	[38]
NSCLC	Plasma		miR-23a miR-451	miR-23a ↑ miR-451 ↓	signature: 0.900	[39]
NSCLC	Plasma	miR-126-3p miR-145 miR-205-5p	miR-126-3p miR-145 miR-205-5p miR-210-3p		miR-126-3p: 0.768 miR-145: 0.713 miR-205-5p: 0.732 signature: 0.963	[40]
NSCLC	Plasma	miR-25		miR-25 ↑	miR-25: 0.832	[41]
NSCLC	Plasma	miR-17		miR-17 ↑	miR-17: 0.833	[42]
NSCLC	plasma	miR-23a		miR-23a ↑	miR-23a: 0.742	[43]
NSCLC	Plasma	miR-16 miR-486	miR-16 miR-205 miR-486	miR-16 ↑ miR-205 ↑ miR-486 ↑	miR-16: >0.700 miR-486: >0.700 signature: 0.890	[44]
NSCLC	Plasma exosomes		let-7b-5p let-7e-5p miR-21-5p miR-24-3p	let-7b-5p ↑ let-7e-5p ↓ miR-21-5p ↓ miR-24-3p ↑	signature: 0.899	[45]
NSCLC	Plasma	miR-339-3p miR-425-3p		miR-339-3p ↑ miR-425-3p ↑	miR-339-3p: 0.723 miR-425-3p: 0.738	[46]
NSCLC	Plasma	miR-30a		miR-30a ↑	miR-30a: 0.727	[47]
NSCLC	Plasma	miR-150 miR-486 miR-145 miR-155		miR-150 ↑ miR-486 ↑ miR-145 ↑ miR-155 ↑	miR-150: 0.752 miR-486: 0.926 miR-145: 0.770 miR-155: 0.920	[48]
NSCLC	Plasma	miR-20a miR-21 miR-223		miR-20a ↑ miR-21 ↑ miR-223 ↑	miR-20a: 0.890 miR-21: 0.770 miR-223: 0.940	[49]
NSCLC	Plasma	miR-21		miR-21 ↑	miR-21: 0.775	[50]
NSCLC	Plasma	miR-126 miR-210 miR-21 miR-486-5p	miR-126 miR-210 miR-21 miR-486-5p	miR-126 ↓ miR-210 ↑ miR-21 ↑ miR-486-5p ↓	miR-126: 0.760 miR-210: 0.746 miR-21: 0.816 miR-486-5p: 0.878 signature: 0.926 miR-195: 0.820	[51]
NSCLC	Plasma				miR-27-3p: 0.950	
LC	Plasma	miR-195 miR-27a-3p		miR-195 ↓ miR-27-3p ↑	miR-195: 0.760 miR-27a-3p: 0.900	[52]
SCLC	Plasma				miR-195: 0.710 miR-27a-3p: 0.900	
LA	Plasma	miR-126a-5p miR-139-5p		miR-126a-5p ↑ miR-139-5p ↑	miR-126a-5p: 0.798 miR-139-5p: 0.969	[53]

LSCC	Plasma	miR-152-3p	miR-152-3p ↑	miR-152-3p: 0.941	
		miR-200c-3p	miR-200c-3p ↑	miR-200c-3p: 0.948	
		miR-26a-5p	miR-26a-5p ↑	miR-26a-5p: 0.757	
		miR-451a	miR-451a ↓	miR-451a: 0.7971	
		miR-126-5p	miR-126-5p ↑	miR-126-5p: 0.957	
		miR-139-5p	miR-139-5p ↑	miR-139-5p: 0.992	
		miR-151a-5p	miR-151a-5p ↑	miR-151a-5p: 0.953	
		miR-151a-3p	miR-151a-3p ↑	miR-151a-3p: 0.915	
		miR-152-3p	miR-152-3p ↑	miR-152-3p: 0.991	
		miR-26a-5p	miR-26a-5p ↑	miR-26a-5p: 0.917	
LA+LSCC	Plasma	miR-126-5p	miR-126-5p ↑	miR-126-5p: 0.880	
		miR-139-5p	miR-139-5p ↑	miR-139-5p: 0.980	
		miR-152-3p	miR-152-3p ↑	miR-152-3p: 0.965	
		miR-26a-5p	miR-26a-5p ↑	miR-26a-5p: 0.834	
NSCLC	Plasma			miR-141: 0.972	[54]
LA	Plasma	miR-141	miR-141 ↑	miR-141: 0.969	
LSCC	Plasma			miR-141: 0.976	
NSCLC	Blood	miR-148a-3p	miR-148a-3p ↓	miR-148a-3p: 0.826	[55]
		miR-152	miR-152 ↓	miR-152: 0.757	
		miR-21-5p	miR-21-5p ↑	miR-21-5p: 0.850	

LA: lung adenocarcinoma; LC: lung cancer; NSCLC: non-small cell lung cancer; SCLC small cell lung carcinoma; LSCC: lung squamous cell carcinoma; AUC: area under the ROC curve.

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