

Supplementary Files

Circulating microRNA Panel as a Potential Novel Biomarker for Oral Squamous Cell Carcinoma Diagnosis

Kodai Nakamura, Naomi Hiyake, Tomofumi Hamada, Seiya Yokoyama, Kazuki Mori, Kouta Yamashiro, Mahiro Beppu, Yasuaki Sagara, Yoshiaki Sagara and Tsuyoshi Sugiura

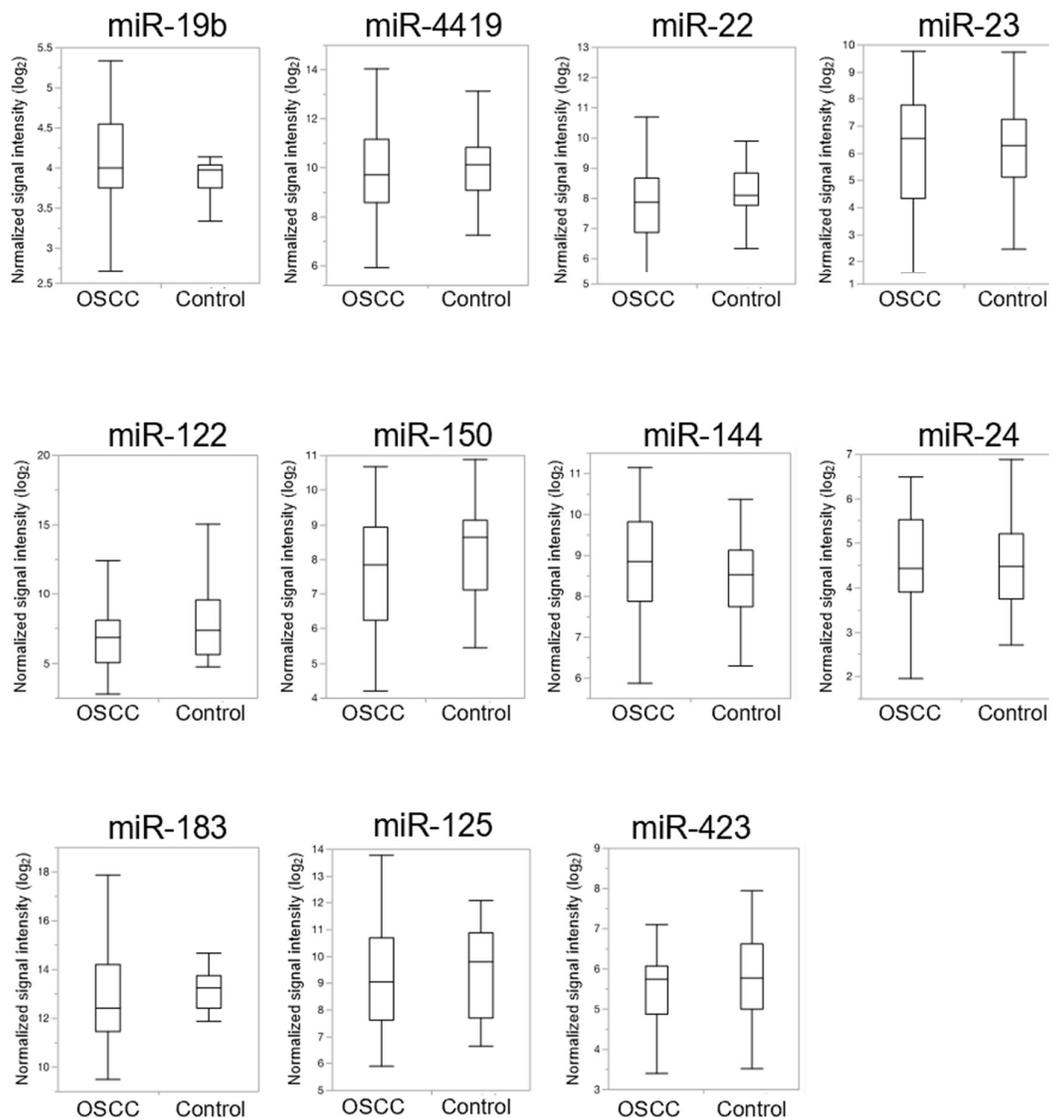


Figure S1. Comparison of normalized signal intensity levels of 11 microRNAs of oral squamous cell carcinoma (OSCC) patients and the control group. No significant difference was observed between these microRNAs.

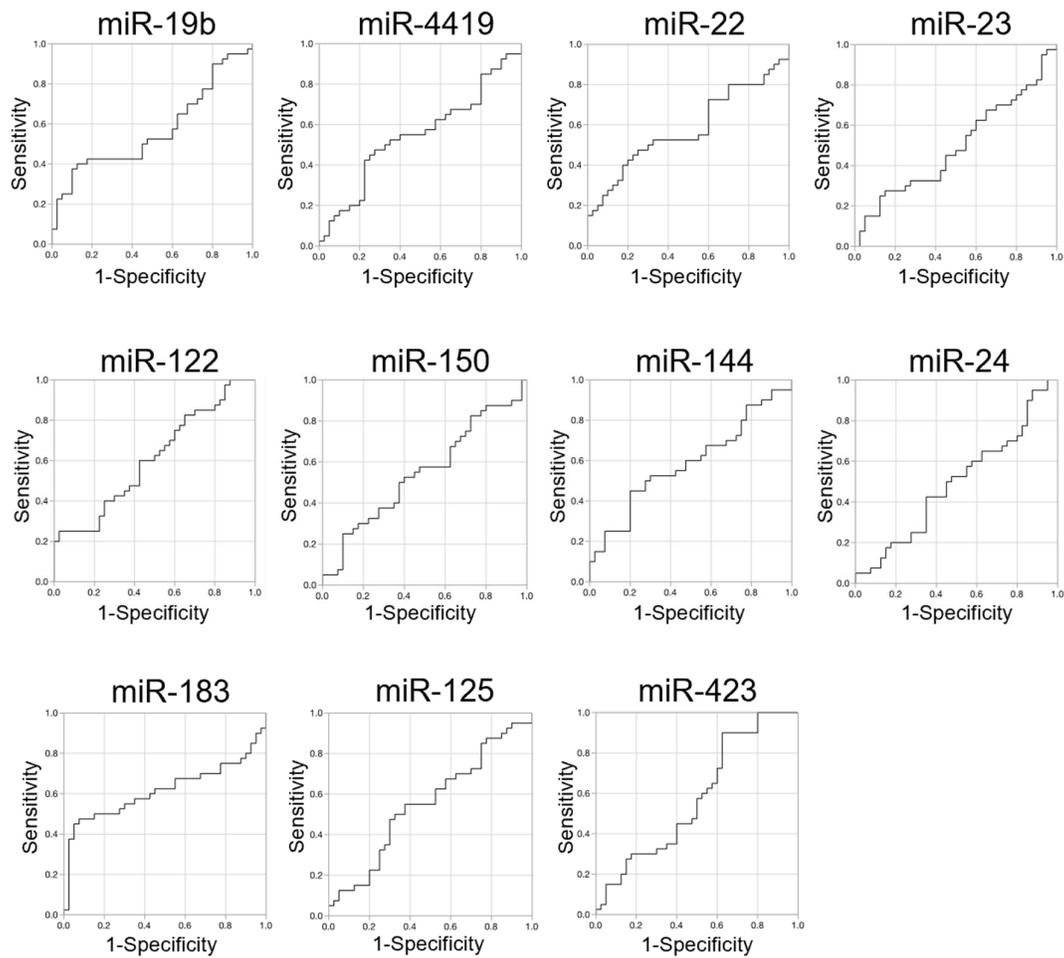


Figure S2. Receiver operating characteristic analyses for 11 miRNAs that did not exhibit significant differences between oral squamous cell carcinoma patients and the control group.

Table S1. Upregulated (>2-fold) and downregulated (<0.5-fold) miRNAs selected for miRNA microarray analysis from among OSCC patients.

Upregulated miRNA	Fold Change of OSCC/Control	Downregulated miRNA	Fold Change of OSCC/Control
hsa-miR-144-3p	10.62	hsa-miR-4745-3p	0.36
hsa-miR-19a-3p	8.27	hsa-miR-5195-5p	0.38
hsa-miR-20a-5p	4.86	hsa-miR-7153-5p	0.38
hsa-miR-451a	4.42	hsa-miR-5100	0.40
hsa-miR-26b-5p	4.40	hsa-miR-622	0.40
hsa-miR-130a-3p	4.27	hsa-miR-6842-3p	0.40
hsa-miR-18b-5p	4.24	hsa-miR-4307	0.43
hsa-miR-106b-5p	4.00	hsa-miR-7107-3p	0.44
hsa-miR-19b-3p	3.99	hsa-miR-6718-5p	0.45
hsa-miR-21-5p	3.94	hsa-miR-4644	0.46
hsa-miR-126-5p	3.91	hsa-miR-3666	0.47
hsa-miR-423-5p	3.89	hsa-miR-1285-5p	0.47
hsa-miR-29c-3p	3.85	hsa-miR-4502	0.48
hsa-miR-208a-5p	3.80	hsa-miR-4784	0.48
hsa-miR-3194-3p	3.65	hsa-miR-766-5p	0.48
hsa-miR-16-5p	3.40	hsa-miR-7112-3p	0.48
hsa-let-7i-5p	3.36	hsa-miR-29c-5p	0.49
hsa-miR-30e-5p	3.33	hsa-miR-363-5p	0.50
hsa-miR-23a-3p	3.31	hsa-miR-6864-3p	0.51
hsa-miR-143-3p	3.20	hsa-miR-3976	0.51
hsa-miR-363-3p	3.20	hsa-miR-6809-5p	0.51
hsa-miR-324-5p	3.19	hsa-miR-6739-3p	0.52
hsa-miR-525-5p	3.17	hsa-miR-7-2-3p	0.53
hsa-miR-452-5p	3.15	hsa-miR-4419a	0.53
hsa-miR-142-5p	3.03	hsa-miR-1266-5p	0.53
hsa-miR-5093	2.91	hsa-miR-4470	0.54
hsa-miR-24-3p	2.85	hsa-miR-181a-2-3p	0.55
hsa-miR-20b-5p	2.75	hsa-miR-125b-2-3p	0.55
hsa-miR-4800-3p	2.75	hsa-miR-519e-5p	0.55
hsa-miR-4289	2.75	hsa-miR-3927-5p	0.55
hsa-miR-22-3p	2.74	hsa-miR-5684	0.55
hsa-miR-15a-5p	2.72	hsa-miR-550a-5p	0.55
hsa-miR-3170	2.64	hsa-miR-4717-5p	0.56
hsa-miR-591	2.63	hsa-miR-150-3p	0.56
hsa-miR-194-5p	2.53	hsa-miR-4317	0.56
hsa-miR-122-5p	2.51	hsa-miR-4446-5p	0.56
hsa-miR-151a-3p	2.49	hsa-miR-4421	0.56
hsa-let-7f-5p	2.48	hsa-miR-6074	0.57
hsa-miR-8080	2.48	hsa-miR-517a-3p	0.57
hsa-miR-205-5p	2.45	hsa-miR-566	0.57
hsa-miR-27a-3p	2.45		
hsa-miR-181d-5p	2.43		
hsa-miR-93-5p	2.40		
hsa-miR-3660	2.35		
hsa-miR-146b-5p	2.32		
hsa-miR-7515	2.32		
hsa-miR-126-3p	2.30		
hsa-miR-183-5p	2.30		

Table S2. List of miRNAs used for RT-PCR validation.

miRNA
hsa-miR-144-3p
hsa-miR-19a-3p
hsa-miR-20a-5p
hsa-miR-19b-3p
hsa-miR-423-5p
hsa-miR-23a-3p
hsa-miR-24-3p
hsa-miR-22-3p
hsa-miR-122-5p
hsa-miR-183-5p
hsa-miR-5100
hsa-miR-4419a
hsa-miR-125b-2-3p
hsa-miR-150-3p

Table S3. CT value of each miRNA in all samples (cancer and control group, $n = 80$).

miRNA	CT Value				Shapiro-Wilk Test <i>p</i> Value	Normal Distribution
	Mean	Minimum	Maximum	SD		
miR-144-3p	34.90	30.86	38.08	1.68	0.0800	Yes
miR-19a-3p	31.13	26.57	35.30	1.72	0.0017	No
miR-20a-5p	31.33	27.67	35.70	1.67	0.0016	No
miR-19b-3p	30.28	25.96	33.83	1.64	0.0040	No
miR-423-5p	31.94	27.15	36.55	1.66	0.0990	Yes
miR-23a-3p	32.38	26.48	39.39	2.53	0.2620	Yes
miR-24-3p	30.78	27.03	35.33	1.63	0.0010	No
miR-22-3p	34.41	29.99	40.28	2.06	0.0006	No
miR-122-5p	33.95	28.92	44.66	3.63	<0.0001	No
miR-183-5p	39.50	33.50	47.48	1.05	<0.0001	No
miR-5100	31.34	25.97	35.79	1.71	0.0432	No
miR-4419a	36.27	33.37	39.94	1.38	0.1247	Yes
miR-125b-2-3p	35.59	29.95	40.26	2.05	0.2065	Yes
miR-150-3p	34.29	31.14	35.91	1.05	0.7484	Yes
miR-16-5p	26.28	21.49	30.39	1.80	0.0510	Yes

CT, threshold cycle; SD, standard deviation.