

Supplementary Information

Table S1. List of miRNA gene polymorphisms associated with cancer.

miRNA Name	rs Number	Cancer type	Effect	Ethnicity	Study type	No. of cases/controls	Reference
hsa-mir-27a	rs11671784	Bladder cancer	Better response to chemotherapy	Chinese	Expression study (Chemosensitivity)	89/n.p.	Deng <i>et al.</i> , 2015 [1]
		Gastric cancer	Decreased risk	Han Chinese	Case-control study, meta-analysis	278/278	Song <i>et al.</i> , 2014 [2]
hsa-mir-146a	rs895819	Colorectal cancer	Increased risk	Han Chinese	Case-control study	254/238	Cao <i>et al.</i> , 2014 [3]
		Breast cancer	Increased risk	Chinese	Case-control study	450/450	He <i>et al.</i> , 2015 [4]
hsa-mir-146a	rs2910164	Breast cancer	Increased risk	Caucasian	Meta-analysis, 8 studies	4314/4485	Dai <i>et al.</i> , 2015 [5]
		Breast cancer	Decreased risk	North Indian	Case-control study	121 BC, 115 BBD/164	Bansal <i>et al.</i> , 2014 [6]
		Breast cancer	Increased risk	Chinese	Case-control study	321/290	Qi <i>et al.</i> , 2015 [7]
		Colorectal cancer	Increased risk	Greek	Case-control study	157/299	Dikaiakos <i>et al.</i> , 2015 [8]
		Esophageal cancer	Increased risk	Asian	Meta-analysis, 14 studies	6053/6527	Xie <i>et al.</i> , 2015 [9]
		Follicular thyroid carcinoma	Increased risk	European	Expression study	39 FTC, 20 FTA/n.p.	Roncati <i>et al.</i> , 2014 [10]
		Gastric cancer	Increased risk	Asian	Meta-analysis, 14 studies	6053/6527	Xie <i>et al.</i> , 2015 [9]
		Gastric cancer	Decreased risk	Asian, Caucasian	Meta-analysis, 9 studies	4468/6844	Ni <i>et al.</i> , 2015 [11]
		Gastric cancer	Decreased risk in subgroups	Asian, Caucasian	Meta-analysis, 13 studies	9044/11762	Xu <i>et al.</i> , 2015 [12]
		Gastric cancer	Increased risk	Asian	Meta-analysis, 8 studies	4308/6370	Fu <i>et al.</i> , 2014 [13]
		Gastric cancer	Increased risk	Caucasian	Meta-analysis, 7 studies	4112/5811	Xie <i>et al.</i> , 2014 [14]
		Gastric cancer	Increased risk	Chinese	Meta-analysis, 9 studies	3885/5396	Xu <i>et al.</i> , 2014 [15]
hsa-mir-149	rs71428439	Hepatocellular carcinoma	Increased risk	Asian	Meta-analysis, 12 studies	4171/4901	Peng <i>et al.</i> , 2014 [16]
		Clear cell renal cell carcinoma	Increased risk	Han Chinese	Case-control study	1000/1000	Wang <i>et al.</i> , 2014 [17]
		Breast cancer	Decreased risk	Chinese	Case-control study	450/450	He <i>et al.</i> , 2015 [4]
		Colorectal cancer	Increased risk	Asian	Meta-analysis, 4 studies	1396/1574	Du <i>et al.</i> , 2014 [18]
		Gastric cancer	Decreased risk	Asian, Caucasian	Meta-analysis, 13 studies	9044/11762	Xu <i>et al.</i> , 2015 [12]
		Hepatocellular carcinoma	Increased risk	Eastern Chinese	Association study	993/992	Wang <i>et al.</i> , 2014 [19]
hsa-mir-149	rs2292832	Papillary thyroid cancer	Increased risk	Han Chinese	Case-control study	838/1006	Wei <i>et al.</i> , 2014 [20]
		T-cell lymphoma	Increased survival	Han Chinese	Case-control study	220/n.p.	Li <i>et al.</i> , 2014 [21]

Table S1. Cont.

miRNA Name	rs Number	Cancer type	Effect	Ethnicity	Study type	No. of cases/controls	Reference
hsa-mir-196a-2	rs11614913	Breast cancer	Decreased risk	Caucasian	Meta-analysis, 10 studies	4618/5590	Dai <i>et al.</i> , 2015 [5]
		Breast cancer	Increased risk	North Indian	Case-control study	121 BC, 115 BBD/164	Bansal <i>et al.</i> , 2014 [6]
		Breast cancer	Increased risk	Chinese	Case-control study	321/290	Qi <i>et al.</i> , 2015 [7]
		Chronic lymphocytic leukemia	Increased risk	West European (Spanish)	Association study	132/391	Martin-Guerrero <i>et al.</i> , 2015 [22]
		Colorectal cancer	Increased risk	Asian, Caucasian	Meta-analysis, 15 studies	5648/6607	Xie <i>et al.</i> , 2015 [9]
		Colorectal cancer	Increased risk	Asian	Meta-analysis, 9 studies	2209/2803	Wu <i>et al.</i> , 2015 [23]
		Colorectal cancer	Increased risk	Asian	Meta-analysis, 6 studies	1754/2430	Xu <i>et al.</i> , 2015 [24]
		Esophageal squamous cell carcinoma	Decreased risk	Han Chinese	Case-control study	381/426	Qu <i>et al.</i> , 2014 [25]
		Gastric cancer	Decreased risk (CC genotype)	Asian, Caucasian	Meta-analysis, 9 studies	3992/5418	Ni <i>et al.</i> , 2015 [11]
		Gastric cancer	Increased risk	Asian, Caucasian	Meta-analysis, 13 studies	9044/11762	Xu <i>et al.</i> , 2015 [12]
		Gastric cancer	Overall survival risk	Asian	Meta-analysis, 14 studies	8057/n.p.	Xia <i>et al.</i> , 2014 [26]
		Hepatocellular carcinoma	Increased risk	Asian	Case-control study	314/407	Qi <i>et al.</i> , 2014 [27]
		Lung cancer	Increased risk	East Asian	Meta-analysis, 7 studies	3705/4099	Fan and Wu, 2014 [28]
		Non-Hodgkin lymphoma	Increased risk	Han Chinese	Case-control study	318/320	Li <i>et al.</i> , 2014 [29]
		Non-small cell lung carcinoma	Overall survival risk	Asian	Meta-analysis, 14 studies	8057/n.p.	Xia <i>et al.</i> , 2014 [26]
hsa-mir-202	rs12355840	Breast cancer	Protective against mortality	European, Asian, African	Whole-genome sequencing	69/n.p.	Rawlings-Goss <i>et al.</i> , 2014 [30]
		Follicular lymphoma	Increased risk	Caucasian, African American, Other	Case-control study	455/527	Hoffman <i>et al.</i> , 2013 [31]

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miRNA Name	rs Number	Cancer type	Effect	Ethnicity	Study type	No. of cases/controls	Reference
hsa-mir-423	rs6505162	Bladder cancer	Increased risk	Caucasian	Association study	3527/5119	Hu <i>et al.</i> , 2014 [32]
		Breast cancer	Increased risk	Chinese	Genetic analysis, preliminary function study	114/114	Zhao <i>et al.</i> , 2015 [33]
		Breast cancer	Increased risk	Jewish Israeli	Preliminary study	140 BC, 63 OC/160 (BRCA1), 58 BC, 19 OC/48 (BRCA2)	Kontorovich <i>et al.</i> , 2010 [34]
		Colorectal cancer	Unfavorable overall and recurrence-free survival	Han Chinese	Association Study (Survival analysis)	408/n.p.	Xing <i>et al.</i> , 2012 [35]
		Esophageal cancer	Decreased risk	Caucasian	Case-control study	346/346	Ye <i>et al.</i> , 2008 [36]
		Esophageal squamous cell carcinoma	Increased risk	Chinese	Case-control study	629/686	Yin <i>et al.</i> , 2013 [37]
		Esophageal squamous cell carcinoma	Increased risk	Black, mixed ancestry (South Africa)	Case-control study	565/1000	Wang <i>et al.</i> , 2013 [38]
		Ovarian cancer	Increased risk	Jewish Israeli	Preliminary study	140 BC, 63 OC/160 (BRCA1), 58 BC, 19 OC/48 (BRCA2)	Kontorovich <i>et al.</i> , 2010 [34]
hsa-mir-499a	rs3746444	B-cell acute lymphoblastic leukemia	Increased risk	European Caucasian	Association study	213/387	Gutierrez-Camino <i>et al.</i> , 2014 [39]
		Breast cancer	Increased risk	Chinese	Case-control study	450/450	He <i>et al.</i> , 2015 [4]
		Breast cancer	Increased risk	Caucasian	Meta-analysis, 5 studies	2924/3563	Dai <i>et al.</i> , 2015 [5]
		Esophageal cancer	Increased risk	Asian (Iranian and Chinese)	Meta-analysis, 31 studies	12799/14507	Chen <i>et al.</i> , 2014 [40]
		Hepatocellular carcinoma	Increased risk	Asian	Case-control study	314/407	Qi <i>et al.</i> , 2014 [27]
		Hepatocellular carcinoma	Increased risk	East Chinese	Case-control study	984/991	Ma <i>et al.</i> , 2014 [41]
		Oral squamous cell carcinoma	Decreased risk	Chinese	2 case-control studies	155 OSCC, 169 OL, 80 OSF/204; 512 OSCC/668	Hou <i>et al.</i> , 2015 [42]
		Colorectal cancer	Increased risk	Chinese (Xiaoshan County)	Case-control study	102/204	Wang <i>et al.</i> , 2014 [43]

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miRNA Name	rs Number	Cancer type	Effect	Ethnicity	Study type	No. of cases/controls	Reference
hsa-mir-605	rs2043556	Bladder cancer	Increased risk	Caucasian	Association study	3527/5119	Hu <i>et al.</i> , 2014 [32]
		Breast cancer	Decreased risk	Asian	Meta-analysis, 12 studies	7170/8783	Chen <i>et al.</i> , 2014 [44]
		Prostate cancer	Increased risk	320 Asian, 526 Caucasian	Association study	846/n.p.	Huang <i>et al.</i> , 2014 [45]
hsa-mir-608	rs4919510	Breast cancer	Increased risk	Chinese	2 case-control studies	1138/1434, 294/500	Huang <i>et al.</i> , 2012 [46]
		Colorectal cancer	Favorable overall and recurrence-free survival	Han Chinese	Association study (Survival analysis)	408/n.p.	Xing <i>et al.</i> , 2012 [35]
		Colorectal cancer	Decreased risk of recurrence	Caucasian (Czech Republic)	Association study (Survival analysis)	1083/n.p.	Pardini <i>et al.</i> , 2015 [47]
		Colorectal cancer	Increased risk of recurrence and death	Caucasian, African American, Other	Association study	1097/n.p.	Lin <i>et al.</i> , 2012 [48]
		Colorectal cancer	Increased/ decreased death risk	Caucasian/African-Americans	Case-control study	245/446	Ryan <i>et al.</i> , 2012 [49]
		Nasopharyngeal carcinoma	Increased risk	Chinese	Case-control study	906/1072	Qiu <i>et al.</i> , 2015 [50]
hsa-mir-612	rs12803915	Papillary thyroid cancer	Increased risk	Han Chinese	Association study	828 PTC, 488 BN/1038	Wei <i>et al.</i> , 2014 [51]
		B-cell acute lymphoblastic leukemia	Increased risk	European Caucasian	Association study	213/387	Gutierrez-Camino <i>et al.</i> , 2014 [39]
hsa-mir-618	rs2682818	Follicular lymphoma	Increased risk	Caucasian, African-American, other	Case-control study	455/527	Fu <i>et al.</i> , 2014 [52]
hsa-mir-646	rs6513497	Hepatocellular carcinoma	Decreased risk	Chinese	Case-control study	997/993	Wang <i>et al.</i> , 2014 [53]
hsa-mir-933	rs79402775	Papillary thyroid cancer	Increased risk	Han Chinese	Association study	828 PTC, 488 BN/1038	Wei <i>et al.</i> , 2014 [51]
hsa-mir-1206	rs2114358	Chronic lymphocytic leukemia	Decreased risk	West European (Spanish)	Association study	132/391	Martin-Guerrero <i>et al.</i> , 2015 [22]
hsa-mir-1307	rs7911488	Colorectal cancer	Increased risk	Chinese (Jiangsu province)	Case-control study	1026/1026	Tang <i>et al.</i> , 2015 [54]
hsa-mir-3144	rs67106263	Papillary thyroid cancer	Increased risk	Han Chinese	Association study	828 PTC, 488 BN/1038	Wei <i>et al.</i> , 2014 [51]
hsa-mir-5197	rs2042253	Non-small cell lung cancer	Decreased risk	Caucasian	Association study	452 early-, 526 late-stage cases/0	Zhao <i>et al.</i> , 2014 [55]

BC—Breast cancer, BBD—Benign breast disease, FTC—Follicular thyroid cancer, FTA—Follicular thyroid adenoma, OL—Oral leukoplakia, OSF—Oral submucous fibrosis, PTC—Papillary thyroid cancer, OC—Ovarian cancer, BN—Benign thyroid tumor, n.p.—data not provided.

References

- Deng, Y.; Bai, H.; Hu, H. Rs11671784 g/a variation in mir-27a decreases chemo-sensitivity of bladder cancer by decreasing mir-27a and increasing the target runx-1 expression. *Biochem. Biophys. Res. Commun.* **2015**, *458*, 321–327.
- Song, B.; Yan, G.; Hao, H.; Yang, B. Rs11671784 G/A and rs895819 A/G polymorphisms inversely affect gastric cancer susceptibility and miR-27a expression in a Chinese population. *Med. Sci. Monit.* **2014**, *20*, 2318–2326.
- Cao, Y.; Hu, J.; Fang, Y.; Chen, Q.; Li, H. Association between a functional variant in microRNA-27a and susceptibility to colorectal cancer in a Chinese Han population. *Genet. Mol. Res.* **2014**, *13*, 7420–7427.
- He, B.; Pan, Y.; Xu, Y.; Deng, Q.; Sun, H.; Gao, T.; Wang, S. Associations of polymorphisms in microRNAs with female breast cancer risk in chinese population. *Tumour Biol.* **2015**, *36*, 4575–4582.
- Dai, Z.J.; Shao, Y.P.; Wang, X.J.; Xu, D.; Kang, H.F.; Ren, H.T.; Min, W.L.; Lin, S.; Wang, M.; Song, Z.J. Five common functional polymorphisms in microRNAs (rs2910164, rs2292832, rs11614913, rs3746444, rs895819) and the susceptibility to breast cancer: Evidence from 8361 cancer cases and 8504 controls. *Curr. Pharm. Des.* **2015**, *21*, 1455–1463.
- Bansal, C.; Sharma, K.L.; Misra, S.; Srivastava, A.N.; Mittal, B.; Singh, U.S. Common genetic variants in pre-microRNAs and risk of breast cancer in the north indian population. *Ecancermedicalscience* **2014**, *8*, 473.
- Qi, P.; Wang, L.; Zhou, B.; Yao, W.J.; Xu, S.; Zhou, Y.; Xie, Z.B. Associations of miRNA polymorphisms and expression levels with breast cancer risk in the chinese population. *Genet. Mol. Res.* **2015**, *14*, 6289–6296.
- Dikaiakos, P.; Gazouli, M.; Rizos, S.; Zografos, G.; Theodoropoulos, G.E. Evaluation of genetic variants in miRNAs in patients with colorectal cancer. *Cancer Biomark.* **2015**, *15*, 163–168.
- Xie, M.; Li, Y.; Wu, J. A risk of digestive tract neoplasms susceptibility in miR-146a and mir-196a2. *Fam. Cancer* **2015**, *14*, 229–239.
- Roncati, L.; Pignatti, E.; Vighi, E.; Magnani, E.; Kara, E.; Rochira, V.; Carani, C.; Simoni, M.; Maiorana, A. Pre-miR146a expression in follicular carcinomas of the thyroid. *Pathologica* **2014**, *106*, 58–60.
- Ni, Q.; Ji, A.; Yin, J.; Wang, X.; Liu, X. Effects of two common polymorphisms rs2910164 in miR-146a and rs11614913 in miR-196a2 on gastric cancer susceptibility. *Gastroenterol. Res. Pract.* **2015**, *2015*, 764163.
- Xu, Q.; Liu, J.W.; Yuan, Y. Comprehensive assessment of the association between miRNA polymorphisms and gastric cancer risk. *Mutat. Res. Rev. Mutat. Res.* **2015**, *763*, 148–160.
- Fu, B.; Song, P.; Lu, M.; Wang, B.; Zhao, Q. The association between miR-146a gene rs2910164 polymorphism and gastric cancer risk: A meta-analysis. *Biomed. Pharmacother.* **2014**, *68*, 923–928.
- Xie, W.Q.; Tan, S.Y.; Wang, X.F. MiR-146a rs2910164 polymorphism increases risk of gastric cancer: A meta-analysis. *World J. Gastroenterol.* **2014**, *20*, 15440–15447.
- Xu, Z.; Zhang, L.; Cao, H.; Bai, B. MiR-146a rs2910164 G/C polymorphism and gastric cancer susceptibility: A meta-analysis. *BMC Med. Genet.* **2014**, *15*, 117.

16. Peng, Q.; Li, S.; Lao, X.; Chen, Z.; Li, R.; Deng, Y.; Qin, X. The association of common functional polymorphisms in miR-146a and miR-196a2 and hepatocellular carcinoma risk: Evidence from a meta-analysis. *Medicine (Baltimore)* **2014**, *93*, e252.
17. Wang, Z.; Wei, M.; Ren, Y.; Liu, H.; Wang, M.; Shi, K.; Jiang, H. MiR149 rs71428439 polymorphism and risk of clear cell renal cell carcinoma: A case-control study. *Tumour Biol.* **2014**, *35*, 12127–12130.
18. Du, W.; Ma, X.L.; Zhao, C.; Liu, T.; Du, Y.L.; Kong, W.Q.; Wei, B.L.; Yu, J.Y.; Li, Y.Y.; Huang, J.W.; et al. Associations of single nucleotide polymorphisms in miR-146a, miR-196a, miR-149 and miR-499 with colorectal cancer susceptibility. *Asian Pac. J. Cancer Prev.* **2014**, *15*, 1047–1055.
19. Wang, R.; Zhang, J.; Ma, Y.; Chen, L.; Guo, S.; Zhang, X.; Wu, L.; Pei, X.; Liu, S.; Wang, J.; et al. Association study of miR-149 rs2292832 and miR-608 rs4919510 and the risk of hepatocellular carcinoma in a large-scale population. *Mol. Med. Rep.* **2014**, *10*, 2736–2744.
20. Wei, W.J.; Lu, Z.W.; Li, D.S.; Wang, Y.; Zhu, Y.X.; Wang, Z.Y.; Wu, Y.; Wang, Y.L.; Ji, Q.H. Association of the miR-149 rs2292832 polymorphism with papillary thyroid cancer risk and clinicopathologic characteristics in a chinese population. *Int. J. Mol. Sci.* **2014**, *15*, 20968–20981.
21. Li, X.; Tian, X.; Zhang, B.; Chen, J. Polymorphisms in microRNA-related genes are associated with survival of patients with T-cell lymphoma. *Oncologist* **2014**, *19*, 243–249.
22. Martin-Guerrero, I.; Gutierrez-Camino, A.; Lopez-Lopez, E.; Bilbao-Aldaiturriaga, N.; Pombar-Gomez, M.; Ardanaz, M.; Garcia-Orad, A. Genetic variants in mirna processing genes and pre-miRNAs are associated with the risk of chronic lymphocytic leukemia. *PLoS ONE* **2015**, *10*, e0118905.
23. Wu, Y.; Hao, X.; Feng, Z.; Liu, Y. Genetic polymorphisms in mirnas and susceptibility to colorectal cancer. *Cell Biochem. Biophys.* **2015**, *71*, 271–278.
24. Xu, L.; Tang, W. Associations of polymorphisms in miR-196a2, miR-146a and miR-149 with colorectal cancer risk: A meta-analysis. *Pathol. Oncol. Res.* **2015**, in press.
25. Qu, Y.; Qu, H.; Luo, M.; Wang, P.; Song, C.; Wang, K.; Zhang, J.; Dai, L. MicroRNAs related polymorphisms and genetic susceptibility to esophageal squamous cell carcinoma. *Mol. Genet. Genomics* **2014**, *289*, 1123–1130.
26. Xia, L.; Ren, Y.; Fang, X.; Yin, Z.; Li, X.; Wu, W.; Guan, P.; Zhou, B. Prognostic role of common microrna polymorphisms in cancers: Evidence from a meta-analysis. *PLoS ONE* **2014**, *9*, e106799.
27. Qi, J.H.; Wang, J.; Chen, J.; Shen, F.; Huang, J.T.; Sen, S.; Zhou, X.; Liu, S.M. High-resolution melting analysis reveals genetic polymorphisms in microRNAs confer hepatocellular carcinoma risk in chinese patients. *BMC Cancer* **2014**, *14*, 643.
28. Fan, X.; Wu, Z. Effects of four single nucleotide polymorphisms in microrna-coding genes on lung cancer risk. *Tumour Biol.* **2014**, *35*, 10815–10824.
29. Li, T.; Niu, L.; Wu, L.; Gao, X.; Li, M.; Liu, W.; Yang, L.; Liu, D. A functional polymorphism in microRNA-196a2 is associated with increased susceptibility to non-hodgkin lymphoma. *Tumour Biol.* **2015**, *36*, 3279–3284.
30. Rawlings-Goss, R.A.; Campbell, M.C.; Tishkoff, S.A. Global population-specific variation in mirna associated with cancer risk and clinical biomarkers. *BMC Med. Genomics* **2014**, *7*, 53.

31. Hoffman, A.E.; Liu, R.; Fu, A.; Zheng, T.; Slack, F.; Zhu, Y. Targetome profiling, pathway analysis and genetic association study implicate miR-202 in lymphomagenesis. *Cancer Epidemiol. Biomark. Prev.* **2013**, *22*, 327–336.
32. Hu, Y.; Yu, C.Y.; Wang, J.L.; Guan, J.; Chen, H.Y.; Fang, J.Y. MicroRNA sequence polymorphisms and the risk of different types of cancer. *Sci. Rep.* **2014**, *4*, 3648.
33. Zhao, H.; Gao, A.; Zhang, Z.; Tian, R.; Luo, A.; Li, M.; Zhao, D.; Fu, L.; Dong, J.T.; Zhu, Z. Genetic analysis and preliminary function study of miR-423 in breast cancer. *Tumour Biol.* **2015**, *36*, 4763–4771.
34. Kontorovich, T.; Levy, A.; Korostishevsky, M.; Nir, U.; Friedman, E. Single nucleotide polymorphisms in mirna binding sites and miRNA genes as breast/ovarian cancer risk modifiers in jewish high-risk women. *Int. J. Cancer* **2010**, *127*, 589–597.
35. Xing, J.; Wan, S.; Zhou, F.; Qu, F.; Li, B.; Myers, R.E.; Fu, X.; Palazzo, J.P.; He, X.; Chen, Z.; et al. Genetic polymorphisms in pre-microRNA genes as prognostic markers of colorectal cancer. *Cancer Epidemiol. Biomark. Prev.* **2012**, *21*, 217–227.
36. Ye, Y.; Wang, K.K.; Gu, J.; Yang, H.; Lin, J.; Ajani, J.A.; Wu, X. Genetic variations in microRNA-related genes are novel susceptibility loci for esophageal cancer risk. *Cancer Prev. Res. (Phila)* **2008**, *1*, 460–469.
37. Yin, J.; Wang, X.; Zheng, L.; Shi, Y.; Wang, L.; Shao, A.; Tang, W.; Ding, G.; Liu, C.; Liu, R.; et al. Hsa-miR-34b/c rs4938723 T>C and hsa-miR-423 rs6505162 C>A polymorphisms are associated with the risk of esophageal cancer in a chinese population. *PLoS ONE* **2013**, *8*, e80570.
38. Wang, Y.; Vogelsang, M.; Schäfer, G.; Matejcic, M.; Parker, M.I. MicroRNA polymorphisms and environmental smoke exposure as risk factors for oesophageal squamous cell carcinoma. *PLoS ONE* **2013**, *8*, e78520.
39. Gutierrez-Camino, A.; Lopez-Lopez, E.; Martin-Guerrero, I.; Piñan, M.A.; Garcia-Miguel, P.; Sanchez-Toledo, J.; Carbone Bañeres, A.; Uriz, J.; Navajas, A.; Garcia-Orad, A. Noncoding RNA-related polymorphisms in pediatric acute lymphoblastic leukemia susceptibility. *Pediatr. Res.* **2014**, *75*, 767–773.
40. Chen, C.; Yang, S.; Chaugai, S.; Wang, Y.; Wang, D.W. Meta-analysis of hsa-miR-499 polymorphism (rs3746444) for cancer risk: Evidence from 31 case-control studies. *BMC Med. Genet.* **2014**, *15*, 126.
41. Ma, Y.; Wang, R.; Zhang, J.; Li, W.; Gao, C.; Liu, J.; Wang, J. Identification of miR-423 and miR-499 polymorphisms on affecting the risk of hepatocellular carcinoma in a large-scale population. *Genet. Test. Mol. Biomark.* **2014**, *18*, 516–524.
42. Hou, Y.Y.; Lee, J.H.; Chen, H.C.; Yang, C.M.; Huang, S.J.; Liou, H.H.; Chi, C.C.; Tsai, K.W.; Ger, L.P. The association between miR-499a polymorphism and oral squamous cell carcinoma progression. *Oral Dis.* **2015**, *21*, 195–206.
43. Wang, F.J.; Ding, Y.; Mao, Y.Y.; Jing, F.Y.; Zhang, Z.Y.; Jiang, L.F.; Guo, J.F.; Sun, X.J.; Jin, M.J.; Chen, K. Associations between hsa-miR-603 polymorphism, lifestyle-related factors and colorectal cancer risk. *Cancer Biomark.* **2014**, *14*, 225–231.
44. Chen, Q.H.; Wang, Q.B.; Zhang, B. Ethnicity modifies the association between functional microRNA polymorphisms and breast cancer risk: A huge meta-analysis. *Tumour Biol.* **2014**, *35*, 529–543.

45. Huang, S.P.; Lévesque, E.; Guillemette, C.; Yu, C.C.; Huang, C.Y.; Lin, V.C.; Chung, I.C.; Chen, L.C.; Laverdière, I.; Lacombe, L.; *et al.* Genetic variants in microRNAs and microRNA target sites predict biochemical recurrence after radical prostatectomy in localized prostate cancer. *Int. J. Cancer* **2014**, *135*, 2661–2667.
46. Huang, A.J.; Yu, K.D.; Li, J.; Fan, L.; Shao, Z.M. Polymorphism rs4919510:C>G in mature sequence of human microRNA-608 contributes to the risk of her2-positive breast cancer but not other subtypes. *PLoS ONE* **2012**, *7*, e35252.
47. Pardini, B.; Rosa, F.; Naccarati, A.; Vymetalkova, V.; Ye, Y.; Wu, X.; di Gaetano, C.; Buchler, T.; Novotny, J.; Matullo, G.; *et al.* Polymorphisms in microRNA genes as predictors of clinical outcomes in colorectal cancer patients. *Carcinogenesis* **2015**, *36*, 82–86.
48. Lin, M.; Gu, J.; Eng, C.; Ellis, L.M.; Hildebrandt, M.A.; Lin, J.; Huang, M.; Calin, G.A.; Wang, D.; Dubois, R.N.; *et al.* Genetic polymorphisms in microRNA-related genes as predictors of clinical outcomes in colorectal adenocarcinoma patients. *Clin. Cancer Res.* **2012**, *18*, 3982–3991.
49. Ryan, B.M.; McClary, A.C.; Valeri, N.; Robinson, D.; Paone, A.; Bowman, E.D.; Robles, A.I.; Croce, C.; Harris, C.C. Rs4919510 in hsa-miR-608 is associated with outcome but not risk of colorectal cancer. *PLoS ONE* **2012**, *7*, e36306.
50. Qiu, F.; Yang, L.; Zhang, L.; Yang, X.; Yang, R.; Fang, W.; Wu, D.; Chen, J.; Xie, C.; Huang, D.; *et al.* Polymorphism in mature microRNA-608 sequence is associated with an increased risk of nasopharyngeal carcinoma. *Gene* **2015**, *565*, 180–186.
51. Wei, W.J.; Wang, Y.L.; Li, D.S.; Wang, Y.; Wang, X.F.; Zhu, Y.X.; Pan, X.D.; Wang, Z.Y.; Wu, Y.; Jin, L.; *et al.* Association study of single nucleotide polymorphisms in mature microRNAs and the risk of thyroid tumor in a Chinese population. *Endocrine* **2014**, doi:10.1007/s12020-014-0467-8.
52. Fu, A.; Hoffman, A.E.; Liu, R.; Jacobs, D.I.; Zheng, T.; Zhu, Y. Targetome profiling and functional genetics implicate miR-618 in lymphomagenesis. *Epigenetics* **2014**, *9*, 730–737.
53. Wang, R.; Zhang, J.; Jiang, W.; Ma, Y.; Li, W.; Jin, B.; Hu, H.; Wang, J.; Liu, Y.; Liu, J. Association between a variant in microRNA-646 and the susceptibility to hepatocellular carcinoma in a large-scale population. *Sci. World J.* **2014**, *2014*, 312704.
54. Tang, R.; Qi, Q.; Wu, R.; Zhou, X.; Wu, D.; Zhou, H.; Mao, Y.; Li, R.; Liu, C.; Wang, L.; *et al.* The polymorphic terminal-loop of pre-miR-1307 binding with MBNL1 contributes to colorectal carcinogenesis via interference with Dicer1 recruitment. *Carcinogenesis* **2015**, *36*, 867–875.
55. Zhao, Y.; Wei, Q.; Hu, L.; Chen, F.; Hu, Z.; Heist, R.S.; Su, L.; Amos, C.I.; Shen, H.; Christiani, D.C. Polymorphisms in microRNAs are associated with survival in non-small cell lung cancer. *Cancer Epidemiol. Biomark. Prev.* **2014**, *23*, 2503–2511.