Supplementary Information

Table S1 The top 50 potential microRNA-disease associations predicted by NSIM

rank	microRNA name	disease name	evidences	rank	microRNA name	disease name	evidences
1	hsa-let-7a	Breast Neoplasms	dbDEMC, miRCancer	26	hsa-mir-9	Breast Neoplasms	dbDEMC
2	hsa-mir-200c	Breast Neoplasms	dbDEMC, miRCancer	27	hsa-mir-126	Breast Neoplasms	dbDEMC, miRCancer
3	hsa-mir-218	Breast Neoplasms	dbDEMC, miRCancer	28	hsa-mir-101	Breast Neoplasms	dbDEMC, miRCancer
4	hsa-mir-200c	Carcinoma, Hepatocellular	miRCancer	29	hsa-mir-200a	Carcinoma, Hepatocellular	dbDEMC
5	hsa-mir-145	Breast Neoplasms	dbDEMC, miRCancer	30	hsa-mir-143	Breast Neoplasms	dbDEMC, miRCancer
6	hsa-mir-125b	Breast Neoplasms	miRCancer	31	hsa-let-7c	Breast Neoplasms	dbDEMC, miRCancer
7	hsa-mir-17	Neoplasms	dbDEMC, miRCancer	32	hsa-mir-17	Breast Neoplasms	miRCancer
8	hsa-mir-10b	Carcinoma, Hepatocellular	miRCancer	33	hsa-let-7g	Breast Neoplasms	dbDEMC, miRCancer
9	hsa-mir-31	Breast Neoplasms	dbDEMC, miRCancer	34	hsa-mir-34a	Neoplasms	dbDEMC, miRCancer
10	hsa-mir-20a	Neoplasms	dbDEMC, miRCancer	35	hsa-mir-19a	Neoplasms	dbDEMC, miRCancer
11	hsa-mir-18a	Neoplasms	dbDEMC, miRCancer	36	hsa-mir-205	Breast Neoplasms	dbDEMC, miRCancer
12	hsa-let-7b	Breast Neoplasms	dbDEMC, miRCancer	37	hsa-mir-20a	Breast Neoplasms	miRCancer
13	hsa-mir-92a	Neoplasms	dbDEMC, miRCancer	38	hsa-mir-27a	Breast Neoplasms	dbDEMC, miRCancer
14	hsa-mir-145	Carcinoma, Hepatocellular	dbDEMC, miRCancer	39	hsa-mir-375	Breast Neoplasms	dbDEMC
15	hsa-mir-10b	Breast Neoplasms	dbDEMC, miRCancer	40	hsa-mir-200a	Breast Neoplasms	dbDEMC, miRCancer
16	hsa-mir-21	Breast Neoplasms	dbDEMC, miRCancer	41	hsa-mir-100	Breast Neoplasms	dbDEMC, miRCancer
17	hsa-mir-34c	Breast Neoplasms	dbDEMC, miRCancer	42	hsa-mir-92a	Breast Neoplasms	miRCancer
18	hsa-let-7d	Breast Neoplasms	dbDEMC, miRCancer	43	hsa-mir-21	Neoplasms	dbDEMC, miRCancer
19	hsa-mir-34a	Breast Neoplasms	dbDEMC, miRCancer	44	hsa-mir-18a	Breast Neoplasms	dbDEMC, miRCancer

20	hsa-mir-200b	Breast Neoplasms	dbDEMC, miRCancer	45	hsa-mir-143	Carcinoma, Hepatocellular	dbDEMC, miRCancer
21	hsa-let-7a	Carcinoma, Hepatocellular	dbDEMC, miRCancer	46	hsa-let-7f	Breast Neoplasms	dbDEMC, miRCancer
22	hsa-mir-200b	Carcinoma, Hepatocellular	miRCancer	47	hsa-mir-146a	Breast Neoplasms	dbDEMC, miRCancer
23	hsa-mir-200c	Stomach Neoplasms	miRCancer	48	hsa-mir-145	Neoplasms	dbDEMC, miRCancer
24	hsa-mir-125b	Neoplasms	dbDEMC,	49	hsa-let-7a	Stomach	miRCancer
			miRCancer			Neoplasms	
25	hsa-mir-34b	Breast Neoplasms	dbDEMC,	50	hsa-let-7e	Breast	dbDEMC,
			miRCancer			Neoplasms	miRCancer