

Supplementary Table S1. The demographic characteristics between CRC patients and healthy controls

Variables	CRC patients (N = 300)	Healthy controls (N = 300)	P-value
Age (Mean ± SD)	59.1 ± 7.6	59.8 ± 8.1	0.28
Gender, n (%)			
Male	184 (61.3)	179 (59.7)	0.68
Female	116 (38.7)	121 (40.3)	
Tumor site, n (%)			
Colon	153 (51.0)		
Rectum	147 (49.0)		
Tumor stage, n (%)			
I + II	176 (58.7)		
III + IV	124 (41.3)		

Note. CRC: Colorectal cancer.

Supplementary Table S2. The correlation between *MALAT1* gene expression and drug sensitivity

GDSC			CTRP		
Drug	Correlation	FDR	Drug	Correlation	FDR
Lapatinib	-0.165	0.006	afatinib	-0.127	0.004
Afatinib	-0.164	< 0.001	VAF-347	-0.118	0.044
Cetuximab	-0.158	< 0.001	SB-743921	0.102	0.007
Gefitinib	-0.127	0.001	ouabain	0.102	0.008
AKT inhibitor VIII	-0.119	0.004	KW-2449	0.102	0.008
CCT007093	-0.101	0.012	COL-3	0.102	0.026
GSK1904529A	-0.101	0.018	marinopyrrole A	0.102	0.044
Gemcitabine	0.101	0.022	doxorubicin	0.103	0.006
PI-103	0.102	0.004	leptomycin B	0.105	0.005
QL-X-138	0.103	0.004	AT7867	0.106	0.009
KIN001-260	0.103	0.004	GSK-3 inhibitor IX	0.106	0.011
CX-5461	0.106	0.003	LY-2183240	0.106	0.005
NG-25	0.108	0.002	topotecan	0.106	0.005
XMD13-2	0.108	0.002	chlorambucil	0.107	0.006
ZSTK474	0.109	0.002	entinostat	0.107	0.006
Cytarabine	0.109	0.013	necrosulfonamide	0.108	0.024
Vinblastine	0.109	0.007	etoposide	0.108	0.005
Y-39983	0.110	0.002	SB-225002	0.108	0.004
PLX4720	0.110	0.004	SNX-2112	0.109	0.004
AICAR	0.111	0.004	BRD-K70511574	0.109	0.004
Phenformin	0.115	0.002	PIK-93	0.111	0.007
Dabrafenib	0.115	0.003	BMS-345541	0.111	0.005
Belinostat	0.116	0.001	daporinad	0.113	0.010
NU-7441	0.116	0.036	pazopanib	0.113	0.004
Foretinib	0.116	0.002	MK-1775	0.114	0.003

Continued

GDSC			CTRP		
Drug	Correlation	FDR	Drug	Correlation	FDR
T0901317	0.119	0.002	AT13387	0.116	0.048
PAC-1	0.119	0.002	BI-2536	0.120	0.001
KIN001-244	0.120	0.001	BRD-K11533227	0.120	0.005
KIN001-102	0.120	0.001	narciclasine	0.122	0.001
ATRA	0.120	0.004	GSK461364	0.122	0.001
BHG712	0.120	0.001	parbendazole	0.124	0.001
DMOG	0.123	0.002	N9-isopropylolomoucine	0.124	0.002
VNLG/124	0.123	0.001	KX2-391	0.125	0.001
KU-55933	0.124	0.009	STF-31	0.125	0.002
FK866	0.124	< 0.001	rigosertib	0.126	0.001
THZ-2-102-1	0.124	< 0.001	momeletinib	0.127	0.002
CUDC-101	0.125	0.001	CD-437	0.129	0.001
AZD8055	0.130	0.001	lovastatin	0.129	0.003
OSI-027	0.130	< 0.001	obatoclax	0.134	< 0.001
JW-7-24-1	0.133	< 0.001	alvocidib	0.136	0.018
Tubastatin A	0.133	< 0.001	GW-843682X	0.137	0.001
Camptothecin	0.134	0.001	cytarabine hydrochloride	0.141	< 0.001
WZ3105	0.134	< 0.001	tivantinib	0.143	0.011
SNX-2112	0.134	< 0.001	cucurbitacin I	0.145	< 0.001
UNC0638	0.134	< 0.001	clofarabine	0.148	< 0.001
TL-1-85	0.135	< 0.001	vincristine	0.149	< 0.001
ZM-447439	0.136	0.001	omacetaxine mepesuccinate	0.150	0.001
AT-7519	0.138	< 0.001	dinaciclib	0.154	0.006
Genentech Cpd 10	0.139	< 0.001	triazolothiadiazine	0.163	< 0.001
CAY10603	0.142	< 0.001	PF-3758309	0.175	0.002
THZ-2-49	0.142	< 0.001	docetaxel	0.179	0.002
QL-XII-61	0.144	0.013			
BIX02189	0.144	< 0.001			
AR-42	0.147	< 0.001			
BX-795	0.149	< 0.001			
Salubrinol	0.150	0.044			
Navitoclax	0.152	< 0.001			
PHA-793887	0.153	< 0.001			
GSK1070916	0.156	< 0.001			
NPK76-II-72-1	0.157	< 0.001			
I-BET-762	0.158	< 0.001			
CP466722	0.160	< 0.001			
Sunitinib	0.164	0.010			
TPCA-1	0.166	< 0.001			
PIK-93	0.167	< 0.001			

Continued

GDSC			CTRP		
Drug	Correlation	FDR	Drug	Correlation	FDR
MS-275	0.174	0.012			
BX-912	0.176	< 0.001			
TG101348	0.178	< 0.001			
BMS345541	0.181	< 0.001			
Vorinostat	0.209	< 0.001			
Methotrexate	0.218	< 0.001			
AZD7762	0.221	< 0.001			
CEP-701	0.226	< 0.001			

Note. GDSC: genomics of drug sensitivity in cancer; CTRP: cancer therapeutics response portal; FDR: false discovery rate.

Supplementary Table S3. Enrichment analysis for the genes co-expressed with MALAT1

Category	Term	FDR
GOTERM_MF_DIRECT	GO:0003676~nucleic acid binding	2.93E-13
GOTERM_CC_DIRECT	GO:0005634~nucleus	4.88E-07
GOTERM_BP_DIRECT	GO:0006351~transcription, DNA-templated	1.24E-05
GOTERM_BP_DIRECT	GO:0006355~regulation of transcription, DNA-templated	2.84E-05
GOTERM_CC_DIRECT	GO:0005622~intracellular	4.93E-05
GOTERM_MF_DIRECT	GO:0003677~DNA binding	1.10E-04
GOTERM_MF_DIRECT	GO:0046872~metal ion binding	5.08E-04
GOTERM_CC_DIRECT	GO:0005814~centriole	0.002

Note. FDR: false discovery rate.

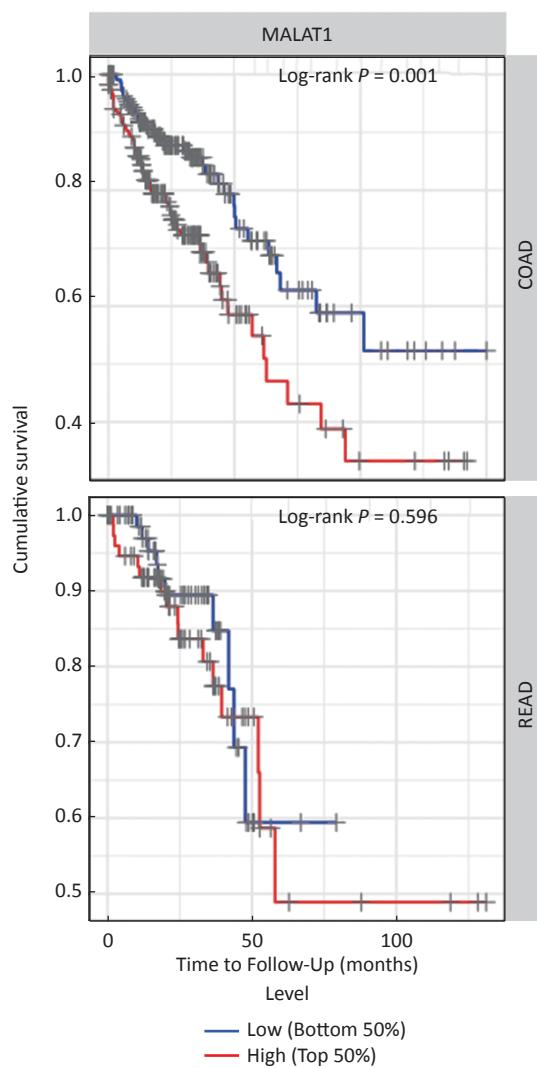
Supplementary Table S4. Main characteristics of case-control studies included in the pooled analysis

First author's name	PMID	Countries	Genotyping methods	Cases					Controls					P_{HWE}
				AA	AG	GG	A	G	AA	AG	GG	A	G	
Zhao KX	30538572	China	TaqMan	784	170	12	1738	194	750	213	25	1713	263	0.04
Gao XR	-	China	Sanger sequencing	244	52	4	540	60	220	72	8	512	88	0.48

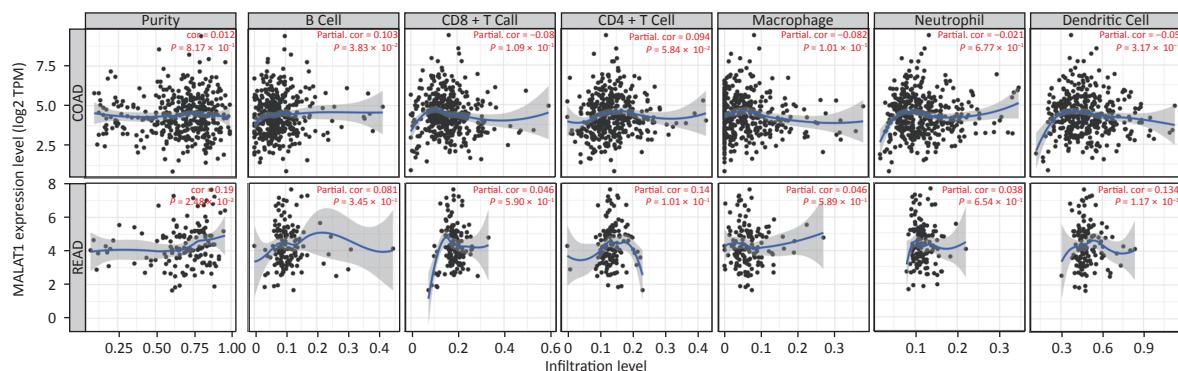
Note. PMID: PubMed Unique Identifier.

Supplementary Table S5. The effect of rs619586 polymorphism on the binding of MALAT1 to miRNA

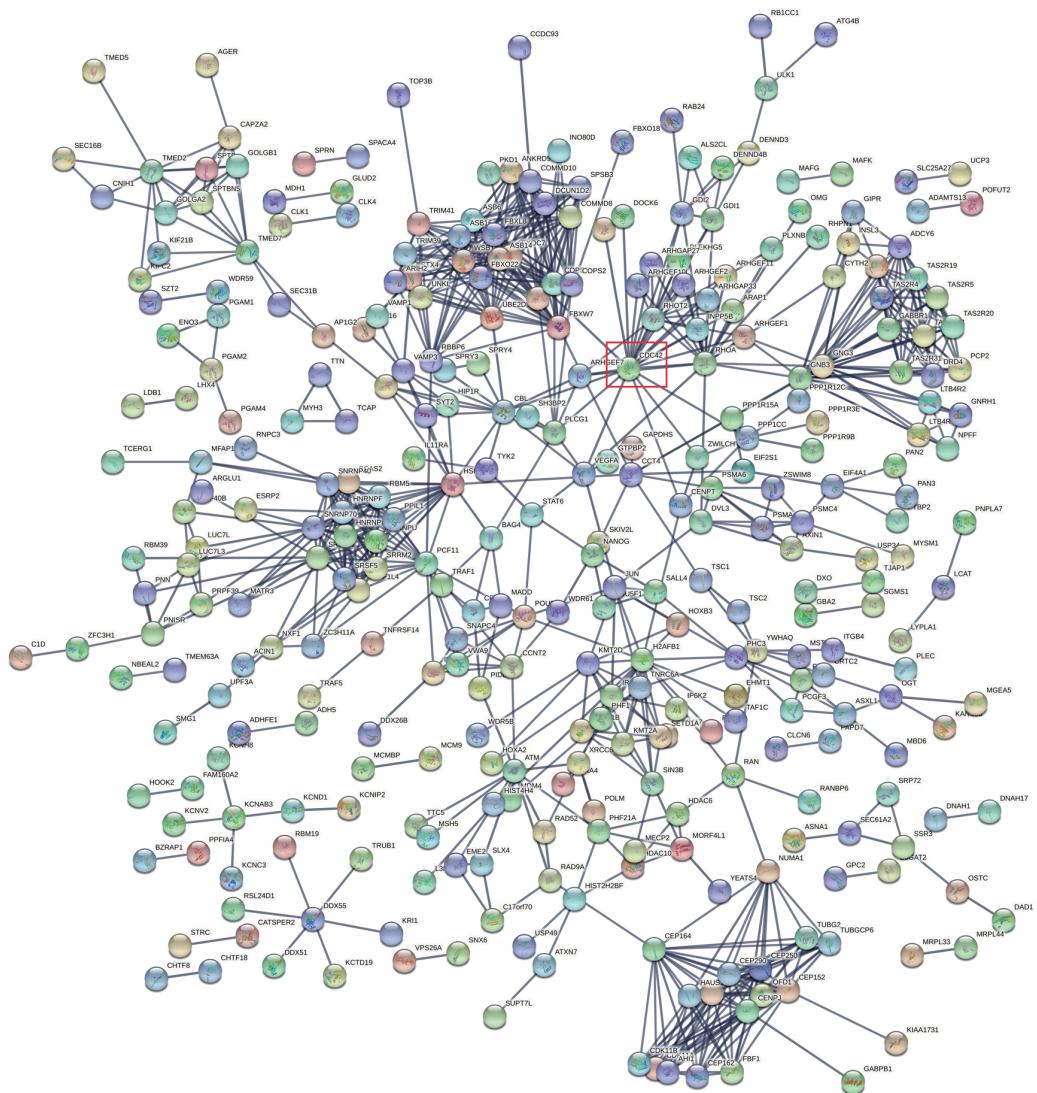
	miRNA target gain	miRNA target loss
	hsa-miR-214-3p, hsa-miR-3619-5p, hsa-mir-761, hsa-miR-2277-3p, hsa-miR-922,	hsa-miR-101-3p, hsa-miR-144-3p, hsa-mir-199a-3p, hsa-mir-199b-3p, hsa-mir-3129-5p,
The effect of rs619586 (A > G)	hsa-miR-3665, hsa-mir-657, hsa-miR-3120-3p, hsa-miR-4690-5p, hsa-miR-6165, hsa-miR-6510-5p	hsa-miR-331-5p, hsa-miR-4645-3p, hsa-miR-936



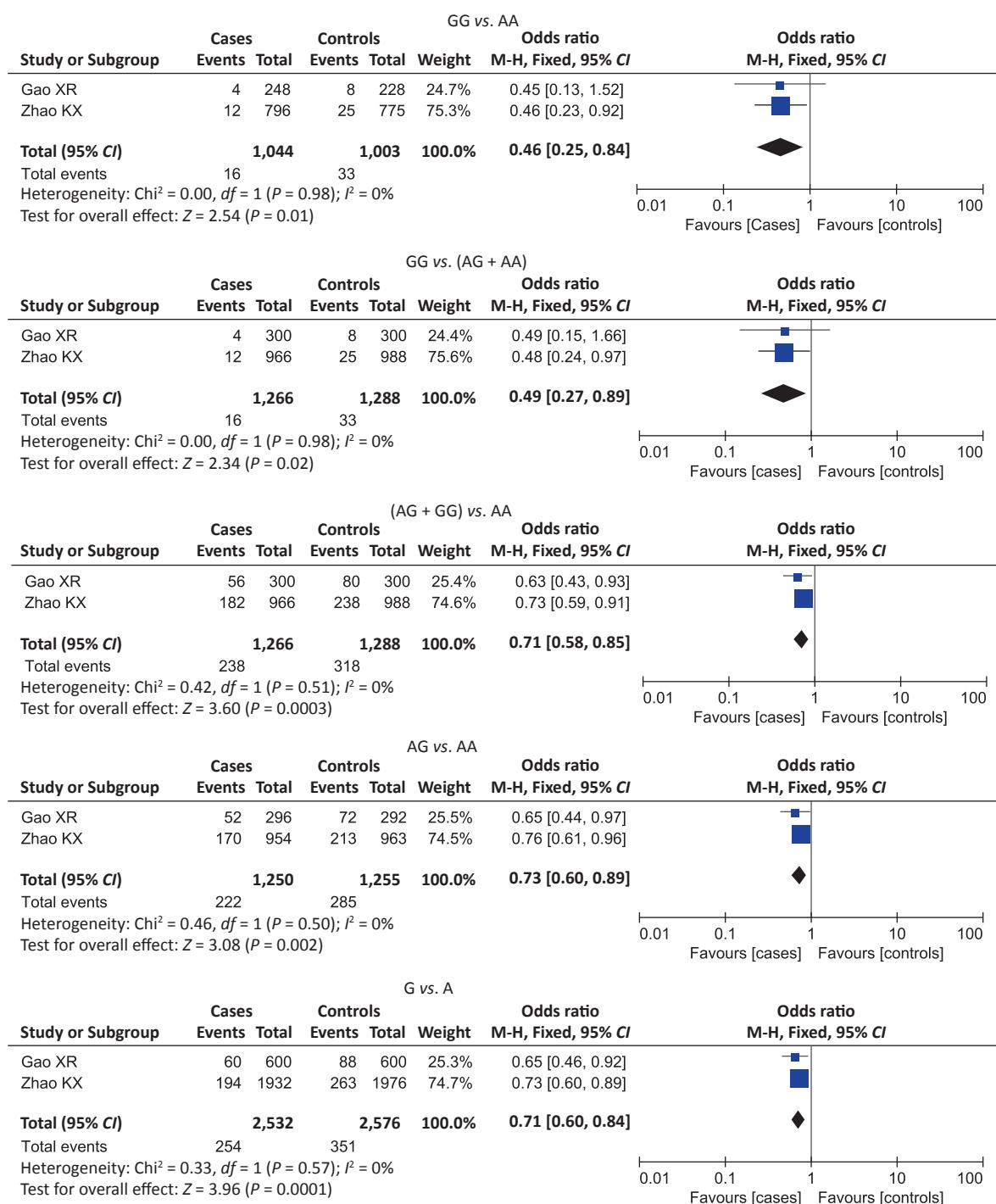
Supplementary Figure S1. The association of *MALAT1* gene expression with the survival of CRC patients.
CRC: colorectal cancer.



Supplementary Figure S2. The correlation of *MALAT1* gene expression with immune infiltration in CRC.
CRC: colorectal cancer.



Supplementary Figure S3. Protein-protein association networks of the genes co-expressed with MALAT1.



Supplementary Figure S4. Meta-analysis of the association of *MALAT1* rs619586 polymorphism with CRC risk in the Chinese population.