Table S1. The position and primer sequences of the 7 CpG regions of H19 and MALAT1 promoters

Regions	Chr[a]	Gene	TSS[b]	Start	End	Length	Distance[c]	Primer sequences	
								Forward sequence	Reverse sequence
H19A	11	H19	2019105	2019782	2019585	198	-677	GTTTGGGAGAGTTTGTGAGGT	ACCRATTCCCATCCAATTAACC
H19B	11	H19	2019105	2018197	2017978	220	908	AGGTAGTGTTYGGGGAGTTGTAG	ACCAAACCAACCCCAAAAAC
H19C	11	H19	2019105	2017992	2017753	240	1113	TGGGGTTGGTTTGGTAGATAG	TCTCCAACCCRAACRCTAAAACA
H19D[d]	11	H19	2019105	2019951	2020241	291	-1136	GGAGTATTAGGGTTAAGGGATTTAGA	AAACTAAACTCCACTTTTAACAAAATATAAA
MALAT1A	11	MALAT1	65265208	65263406	65263611	206	-1802	GGTTGGGTATAGTGGTTTAAGTTTG	TAATTCAAACAATTCACTTACTCAAC
MALAT1B	11	MALAT1	65265208	65265040	65264855	186	-353	GGTTTTAGTYGGTTTTGGTYGTTTT	AAAAACCAACCCCCAAATACA
MALAT1C[d]	11	MALAT1	65265208	65262562	65262748	187	-2646	TTGTYGTTTAGGTTGGAGTGTAGTGA	CCAAACCAACCTATCCAACTTAATAAC

a: *Chr* Chromosome, b: *TSS* transcription start site, c: *Distance* CpG site relative distance (in bp) to TSS, d: *H19D* H19 CpG island shore, e: *MALAT1C* MALAT1 CpG island shore

Table S2. The position of the 91 CpG sites of H19 and MALAT1 promoters

CpG sites	Position	Chromosome	Genome Position	Distance
H19a1	22	11	2019761	-656
H19a2	29	11	2019754	-649
H19a3	46	11	2019737	-632
H19a4	50	11	2019733	-628
H19a5	52	11	2019731	-626
H19a6	57	11	2019726	-621
H19a7	70	11	2019713	-608
H19a8	80	11	2019703	-598
H19a9	103	11	2019680	-575
H19a10	105	11	2019678	-573
H19a11	115	11	2019668	-563
H19a12	127	11	2019656	-551
H19a13	149	11	2019634	-529
H19a14	156	11	2019627	-522
H19a15	158	11	2019625	-520
H19a16	176	11	2019607	-502
H19b1	29	11	2018169	936
H19b2	43	11	2018155	950
H19b3	48	11	2018150	955
H19b4	54	11	2018144	961
H19b5	68	11	2018130	975
H19b6	78	11	2018120	985
H19b7	102	11	2018096	1009
H19b8	109	11	2018089	1016
H19b9	113	11	2018085	1020
H19b10	116	11	2018082	1023
H19b11	124	11	2018074	1031
H19b12	134	11	2018064	1041
H19b13	151	11	2018047	1058
H19b14	179	11	2018019	1086
H19b15	195	11	2018003	1102
H19c1	53	11	2017940	1165
H19c2	68	11	2017925	1180
H19c3	73	11	2017920	1185
H19c4	77	11	2017916	1189
H19c5	82	11	2017911	1194
H19c6	133	11	2017860	1245
H19c7	138	11	2017855	1250
H19c8	142	11	2017851	1254
H19c9	145	11	2017848	1257
H19c10	149	11	2017844	1261
H19c11	173	11	2017820	1285

H19c12	184	11	2017809	1296
H19c13	191	11	2017802	1303
H19c14	193	11	2017800	1305
H19c15	197	11	2017796	1309
H19c16	200	11	2017793	1312
H19c17	203	11	2017790	1315
H19c18	209	11	2017784	1321
H19c19	215	11	2017778	1327
H19d1	32	11	2019982	-877
H19d2	78	11	2020028	-923
H19d3	80	11	2020030	-925
H19d4	86	11	2020036	-931
H19d5	115	11	2020065	-960
H19d6	151	11	2020101	-996
H19d7	154	11	2020104	-999
H19d8	164	11	2020114	-1009
H19d9	168	11	2020118	-1013
H19d10	179	11	2020129	-1024
MALAT1a1	48	11	65263453	-1755
MALAT1a2	53	11	65263458	-1750
MALAT1a3	57	11	65263462	-1746
MALAT1a4	64	11	65263469	-1739
MALAT1a5	98	11	65263503	-1705
MALAT1a6	138	11	65263543	-1665
MALAT1a7	142	11	65263547	-1661
MALAT1a8	150	11	65263555	-1653
MALAT1a9	154	11	65263559	-1649
MALAT1a10	174	11	65263579	-1629
MALAT1b1	28	11	65265013	-195
MALAT1b2	39	11	65265002	-206
MALAT1b3	46	11	65264995	-213
MALAT1b4	51	11	65264990	-218
MALAT1b5	53	11	65264988	-220
MALAT1b6	61	11	65264980	-228
MALAT1b7	65	11	65264976	-232
MALAT1b8	67	11	65264974	-234
MALAT1b9	69	11	65264972	-236
MALAT1b10	74	11	65264967	-241
MALAT1b11	82	11	65264959	-249
MALAT1b12	115	11	65264926	-282
MALAT1b13	143	11	65264898	-310
MALAT1b14	147	11	65264894	-314
MALAT1b15	157	11	65264884	-324
MALAT1c1	29	11	65262590	-2618

MALAT1c2	35	11	65262596	-2612
MALAT1c3	49	11	65262610	-2598
MALAT1c4	59	11	65262620	-2588
MALAT1c5	111	11	65262672	-2536
MALAT1c6	115	11	65262676	-2532

Table S3. Association between methylation levels of H19 or MALAT1 promoters in peripheral blood and GC risk among all participants[*]

	Name	Methylation level[a]		Z-value	*P*-value	Logistic regression analysis		
		GC	HCs			Odds Ratio	95%CI	*P*-value
Genes	H19	76.61(75.71,77.44)	76.1(75.22,76.98)	-2.735	**0.006**	1.224	1.029-1.455	**0.022**
	MALAT1	8.86(8.68,9.05)	8.87(8.70,9.07)	-0.18	0.857	0.929	0.389-2.218	0.868
Regions	H19A	46.74(45.68,47.94)	46.75(45.60,47.90)	-0.022	0.982	0.985	0.882-1.100	0.788
	H19B	92.88(91.67,94.65)	92.38(91.45,94.48)	-1.461	0.144	1.085	0.951-1.238	0.226
	H19C	95.72(95.38,96.03)	95.36(94.95,95.72)	-5.285	**1.25×10^{-7}**	3.085	1.868-5.094	**1.10×10^{-5}**
	H19D	63.04(58.89,66.90)	61.53(57.76,65.76)	-1.876	0.061	1.032	0.988-1.078	0.159
	MALAT1A	21.03(20.5,21.51)	21.04(20.63,21.69)	-0.677	0.499	0.884	0.626-1.248	0.483
	MALAT1B	0.75(0.69,0.80)	0.72(0.68,0.77)	-2.25	**0.024**	94.912	3.629-2482.615	**0.006**

Sites	MALAT1C	72.41(68.9,74.47)	72.53(69.15,75.37)	-1.05	0.294	0.967	0.919-1.018	0.205
	H19a1	43.17(41.77,44.92)	42.86(41.95,43.95)	-1.458	0.145	1.058	0.953-1.176	0.292
	H19a2	44.23(43,45.97)	44.47(43.15,45.43)	-0.087	0.931	0.967	0.904-1.033	0.318
	H19a3	45.59(44.53,47.08)	45.56(44.44,46.76)	-0.362	0.718	1.014	0.910-1.129	0.804
	H19a4	45.21(43.85,46.69)	45.23(43.98,46.53)	-0.204	0.838	0.969	0.871-1.077	0.556
	H19a5	45.30(44.06,46.98)	45.20(44.03,46.6)	-0.285	0.776	0.998	0.901-1.106	0.970
	H19a6	45.65(44.55,47.24)	45.77(44.35,46.72)	-0.552	0.581	1.015	0.913-1.128	0.786
	H19a7	45.67(44.43,47.19)	45.66(44.68,46.71)	-0.004	0.996	0.977	0.903-1.057	0.561
	H19a8	46.42(45.11,47.89)	46.69(45.24,47.68)	-0.406	0.685	0.988	0.886-1.101	0.826
	H19a9	47.25(46.10,48.65)	47.51(46.05,48.59)	-0.059	0.953	0.996	0.891-1.112	0.938
	H19a10	47.34(46.31,48.67)	47.35(46.30,48.51)	-0.365	0.715	1.012	0.907-1.130	0.828
	H19a11	47.49(46.31,48.72)	47.63(46.05,48.71)	-0.039	0.969	0.991	0.890-1.102	0.864

H19a12	47.27(45.94,48.68)	47.49(46.06,48.81)	-0.476	0.634	0.963	0.873-1.062	0.446
H19a13	48.79(47.44,50.18)	48.82(47.55,50.10)	-0.31	0.757	0.979	0.881-1.087	0.685
H19a14	49.10(48.11,50.67)	49.17(47.83,50.50)	-0.037	0.971	0.977	0.884-1.080	0.653
H19a15	49.08(48.07,50.61)	49.26(47.87,50.54)	-0.115	0.908	0.996	0.896-1.108	0.948
H19a16	49.04(48.01,50.86)	49.30(47.63,50.28)	-0.286	0.775	0.993	0.893-1.103	0.892
H19b1	52.76(46.92,88.92)	51.77(47.73,88.57)	-0.417	0.677	1.001	0.991-1.010	0.861
H19b2	97.41(96.99,97.85)	97.20(96.85,97.58)	-2.71	**0.007**	2.000	1.275-3.137	**0.003**
H19b3	96.26(95.82,96.81)	96.25(95.85,96.75)	-0.647	0.518	1.302	0.926-1.829	0.129
H19b4	89.12(88.13,90.56)	89.21(88.01,90.17)	-0.35	0.726	0.975	0.909-1.046	0.477
H19b5	93.68(92.74,94.30)	93.36(92.42,94.03)	-2.317	**0.02**	1.374	1.085-1.74)	**0.008**
H19b6	97.97(97.62,98.32)	97.87(97.49,98.09)	-2.365	**0.018**	1.801	1.069-3.033	**0.027**
H19b7	92.45(91.29,93.30)	91.77(90.48,92.49)	-4.081	**4.50×10^{-5}**	1.496	1.238-1.807	**3.00×10^{-5}**

H19b8	96.22(95.75,96.67)	95.86(95.35,96.42)	-3.236	**0.001**	1.487	1.099-2.012	**0.01**
H19b9	94.60(93.77,95.54)	94.18(92.82,95.04)	-3.535	**4.08×10^{-4}**	1.428	1.185-1.721	**1.84×10^{-4}**
H19b10	97.38(96.95,97.8)	97.31(96.93,97.69)	-0.935	0.35	1.153	0.770-1.726	0.489
H19b11	90.66(89.71,91.52)	90.14(89.28,91.24)	-2.399	**0.016**	1.203	1.019-1.419	**0.029**
H19b12	97.13(96.61,97.48)	96.74(96.36,97.15)	-3.607	**3.10×10^{-4}**	2.001	1.336-2.998	**0.001**
H19b13	96.74(96.24,97.21)	96.65(96.18,97.04)	-1.061	0.289	1.295	0.904-1.856	0.159
H19b14	95.30(94.67,95.91)	94.93(94.35,95.46)	-2.935	**0.003**	1.324	1.058-1.658	**0.014**
H19b15	97.71(97.24,98.03)	97.53(97.31,97.86)	-1.365	0.172	1.268	0.804-1.998	0.307
H19c1	93.74(92.81,94.67)	92.68(91.9,93.68)	-4.845	**1.00×10^{-6}**	1.503	1.255-1.800	**9.00×10^{-6}**
H19c2	86.69(84.89,88.78)	85.27(83.62,87.49)	-3.571	**3.55×10^{-4}**	1.184	1.073-1.306	**0.001**
H19c3	95.85(94.94,96.54)	94.96(93.97,95.9)	-4.082	**4.50×10^{-5}**	1.453	1.201-1.757	**1.20×10^{-4}**
H19c4	95.63(94.78,96.43)	94.95(94.02,95.69)	-4.105	**4.00×10^{-5}**	1.399	1.145-1.710	**0.001**

H19c5	96.34(95.55,96.94)	95.81(95.18,96.36)	-3.648	**2.64×10^{-4}**	1.535	1.186-1.987	**0.001**
H19c6	97.02(96.40,97.66)	96.8(96.17,97.18)	-2.551	**0.011**	1.276	0.991-1.644	0.059
H19c7	97.94(97.37,98.40)	97.76(97.45,98.23)	-1.004	0.315	1.056	0.778-1.434	0.725
H19c8	96.99(96.5,97.67)	96.57(96.14,97.05)	-3.904	**9.40×10^{-5}**	1.355	1.069-1.719	**0.012**
H19c9	93.61(92.61,94.44)	92.98(92.06,93.88)	-2.99	**0.003**	0.998	0.944-1.055	0.943
H19c10	96.80(96.22,97.44)	96.61(96.04,97.09)	-2.429	**0.015**	1.300	1.001-1.688	**0.049**
H19c11	89.52(87.83,91.19)	89.43(87.96,90.48)	-0.931	0.352	1.049	0.929-1.184	0.439
H19c12	97.5(97.09,98.03)	97.29(96.89,97.88)	-1.697	0.09	1.236	0.950-1.608	0.114
H19c13	98.00(97.53,98.58)	97.96(97.67,98.27)	-0.606	0.544	1.104	0.799-1.526	0.548
H19c14	98.41(98.01,98.79)	98.34(98.05,98.76)	-0.511	0.609	0.997	0.722-1.377	0.987
H19c15	98.16(97.75,98.52)	98.18(97.75,98.56)	-0.376	0.707	0.973	0.667-1.417	0.885
H19c16	97.63(97.11,98.02)	97.55(97.15,98.06)	-0.545	0.586	1.025	0.760-1.383	0.869
H19c17	97.67(97.26,98.08)	97.65(97.11,97.99)	-1.174	0.24	1.211	0.901-1.629	0.205
H19c18	95.04(94.09,95.69)	94.68(94.01,95.39)	-1.401	0.161	1.074	0.959-1.204	0.218
H19c19	97.19(96.61,97.59)	97.07(96.5,97.54)	-1.15	0.25	1.124	0.836-1.512	0.439

H19d1	52.67(47.20,57.14)	50.00(45.54,55.48)	-2.355	**0.019**	1.031	0.998-1.065	0.063
H19d2	52.47(48.19,57.10)	52.31(47.67,56.78)	-0.403	0.687	1.003	0.969-1.037	0.882
H19d3	53.00(49.11,57.06)	52.55(48.71,56.29)	-0.402	0.688	0.997	0.962-1.034	0.874
H19d4	52.40(49.18,56.46)	51.62(48.00,56.11)	-0.932	0.351	1.011	0.974-1.049	0.580
H19d5	53.72(49.58,57.96)	53.88(49.31,57.62)	-0.142	0.887	0.995	0.960-1.032	0.806
H19d6	82.48(78.51,87.10)	80.37(76.76,84.83)	-2.335	**0.02**	1.049	1.007-1.094	**0.022**
H19d7	73.55(69.14,79.42)	72.48(68.02,76.48)	-1.528	0.126	1.018	0.986-1.052	0.272
H19d8	70.66(65.50,76.87)	68.63(63.94,73.20)	-2.327	**0.02**	1.037	1.004-1.072	**0.029**
H19d9	76.82(71.17,82.47)	74.51(70.21,79.43)	-2.142	**0.032**	1.040	1.004-1.078	**0.031**
H19d10	62.04(56.65,66.67)	60.6(55.51,65.15)	-1.318	0.187	1.020	0.987-1.054	0.243
MALAT1a1	33.17(31.82,34.49)	32.92(31.73,34.66)	-0.755	0.45	1.036	0.918-1.170	0.564
MALAT1a2	26.13(24.90,27.37)	26.35(25.16,27.69)	-0.957	0.339	0.945	0.832-1.074	0.388
MALAT1a3	20.16(18.92,21.10)	19.97(18.72,21.04)	-0.373	0.709	1.024	0.891-1.177	0.736
MALAT1a4	12.36(11.53,13.42)	12.56(11.58,13.21)	-0.356	0.722	0.973	0.815-1.162	0.764

MALAT1a5	4.94(4.46,5.51)	5.45(4.82,6.06)	-3.91	**9.20×10^{-5}**	0.584	0.436-0.782	**3.11×10^{-4}**
MALAT1a6	19.77(18.73,21.11)	19.80(19.00,21.09)	-0.833	0.405	0.927	0.802-1.072	0.307
MALAT1a7	25.71(24.63,26.78)	25.70(24.76,27.17)	-0.489	0.625	0.976	0.849-1.122	0.730
MALAT1a8	21.53(20.35,22.56)	21.50(20.4,22.59)	-0.282	0.778	0.979	0.852-1.125	0.766
MALAT1a9	19.82(18.77,20.88)	19.16(18.07,20.68)	-1.946	0.052	1.141	0.995-1.307	0.058
MALAT1a10	26.55(25.19,27.69)	26.91(25.76,28.07)	-1.445	0.148	0.935	0.822-1.064	0.310
MALAT1b1	0.63(0.47,0.85)	0.65(0.51,0.83)	-0.478	0.632	0.910	0.367-2.259	0.839
MALAT1b2	0.53(0.41,0.72)	0.55(0.43,0.72)	-0.569	0.57	1.006	0.393-2.570	0.991
MALAT1b3	0.73(0.54,0.90)	0.75(0.60,0.89)	-0.719	0.472	1.001	0.420-2.383	0.999
MALAT1b4	0.69(0.48,0.92)	0.66(0.51,0.81)	-1.072	0.284	2.004	0.855-4.701	0.110
MALAT1b5	0.69(0.54,0.88)	0.65(0.47,0.83)	-1.326	0.185	2.009	0.754-5.352	0.163
MALAT1b6	0.71(0.51,0.92)	0.75(0.55,0.90)	-0.652	0.515	1.083	0.502-2.338	0.839
MALAT1b7	0.73(0.56,0.91)	0.76(0.55,0.88)	-0.053	0.958	1.316	0.591-2.934	0.502
MALAT1b8	0.79(0.6,1.00)	0.84(0.59,1.01)	-0.32	0.749	0.852	0.365-1.989	0.711

MALAT1b9	0.76(0.54,0.92)	0.66(0.52,0.82)	-1.947	0.052	3.210	1.250-8.244	**0.015**
MALAT1b10	0.73(0.52,0.93)	0.69(0.54,0.89)	-0.738	0.46	1.649	0.739-3.677	0.222
MALAT1b11	0.52(0.35,0.76)	0.53(0.37,0.66)	-0.166	0.868	1.695	0.698-4.117	0.244
MALAT1b12	1.40(1.13,1.65)	1.27(1.06,1.56)	-2.082	**0.037**	1.874	0.971-3.618	0.061
MALAT1b13	0.55(0.35,0.71)	0.51(0.37,0.75)	-0.019	0.985	1.082	0.424-2.760	0.869
MALAT1b14	0.70(0.52,0.84)	0.69(0.57,0.84)	-0.089	0.929	1.190	0.432-3.277	0.737
MALAT1b15	0.70(0.53,0.86)	0.72(0.58,0.85)	-0.545	0.586	1.349	0.648-2.809	0.424
MALAT1c1	69.14(65.82,71.42)	69.64(66.93,72.13)	-1.237	0.216	0.959	0.903-1.019	0.176
MALAT1c2	74.01(70.91,76.58)	74.47(71.43,77.31)	-1.018	0.309	0.977	0.926-1.030	0.387
MALAT1c3	67.32(62.61,70.36)	67.90(63.67,71.72)	-1.263	0.207	0.970	0.934-1.008	0.116
MALAT1c4	69.94(66.31,71.92)	69.90(66.66,73.50)	-1.085	0.278	0.969	0.925-1.016	0.190
MALAT1c5	75.56(72.07,78.30)	75.81(72.71,78.66)	-1.141	0.254	0.974	0.930-1.021	0.271
MALAT1c6	79.74(77.16,82.34)	80.26(77.44,82.58)	-0.656	0.512	0.976	0.922-1.032	0.391

*Adjusted for age and gender; a: Methylation level is expressed as a percentage. Data was expressed as median (P_{25}, P_{75}). GC: gastric cancer, HCs: healthy controls.

Table S4. Association between methylation levels of H19 or MALAT1 promoters in peripheral blood and GC risk in female patients and controls*

	Name	Methylation level[a]		Logistic regression analysis		
		GC	HCs	Odds Ratio	95%CI	*P*-value
Genes	H19	76.97(76.13,77.84)	76.07(75.24,76.94)	1.587	1.038-2.425	**0.033**
	MALAT1	8.84(8.66,8.96)	8.87(8.70,9.05)	0.559	0.062-5.016	0.603
Regions	H19A	46.75(45.99,47.31)	46.57(45.1,47.35)	1.063	0.794-1.423	0.681
	H19B	94.10(92.09,94.79)	92.29(91.34,94.51)	1.311	0.976-1.761	0.072
	H19C	95.78(95.55,96.14)	95.45(95.10,95.91)	5.039	1.416-17.926	**0.013**
	H19D	65.12(62.27,68.82)	61.27(57.51,66.57)	1.048	0.966-1.137	0.261
	MALAT1A	20.81(20.48,21.26)	21.03(20.73,21.44)	0.584	0.250-1.364	0.214
	MALAT1B	0.78(0.72,0.84)	0.70(0.68,0.76)	8824087.000	6.428-12113612.022	**0.014**
	MALAT1C	70.72(66.47,73.13)	72.37(67.69,74.52)	0.955	0.879-1.038	0.281
Sites	H19a1	43.49(42.46,44.71)	42.8(41.61,44.04)	1.471	1.039-2.084	**0.030**
	H19a2	44.68(43.22,45.30)	44.63(42.94,45.28)	0.959	0.859-1.071	0.456
	H19a3	45.82(45.16,46.77)	45.69(44.22,46.43)	1.279	0.916-1.787	0.149
	H19a4	45.58(44.63,46.07)	45.02(43.67,46.04)	1.192	0.881-1.613	0.255
	H19a5	45.63(44.59,46.61)	45.39(43.79,46.03)	1.079	0.843-1.383	0.545
	H19a6	45.84(45.09,47.14)	45.9(43.96,46.37)	1.257	0.926-1.706	0.143
	H19a7	46.05(44.96,46.57)	45.44(44.5,46.48)	1.233	0.893-1.703	0.203
	H19a8	46.45(45.49,47.42)	46.46(45.22,47.3)	1.102	0.796-1.525	0.559

H19a9	47.05(46.20,48.57)	47.28(45.51,48.31)	1.042	0.792-1.370	0.771
H19a10	47.44(46.51,48.37)	47.17(45.22,47.89)	1.112	0.842-1.469	0.454
H19a11	47.54(46.53,48.2)	47.27(45.39,48.09)	1.069	0.808-1.414	0.640
H19a12	47.21(45.67,48.15)	47.30(45.78,48.15)	0.949	0.784-1.15)	0.595
H19a13	48.77(47.28,49.56)	48.76(47.00,49.79)	0.995	0.771-1.285	0.971
H19a14	49.08(48.28,50.10)	48.91(47.42,50.06)	0.989	0.803-1.216	0.913
H19a15	48.93(47.68,49.95)	48.49(47.32,50.25)	1.019	0.788-1.318	0.887
H19a16	48.70(47.96,50.40)	48.93(47.39,50.16)	0.972	0.762-1.241	0.821
H19b1	86.55(49.13,89.11)	50.35(45.09,88.66)	1.013	0.993-1.033	0.208
H19b2	97.49(97.20,97.98)	97.24(96.85,97.50)	4.057	1.348-12.21	**0.013**
H19b3	96.40(95.95,96.98)	96.29(95.91,96.99)	1.698	0.851-3.392	0.133
H19b4	88.89(88.24,90.98)	89.58(88.95,89.98)	0.897	0.671-1.200	0.465
H19b5	93.82(92.82,94.66)	93.22(92.24,94.12)	1.671	1.050-2.661	**0.030**
H19b6	97.89(97.53,98.27)	97.83(97.56,98.02)	1.387	0.440-4.370	0.577
H19b7	92.33(90.96,92.71)	91.94(90.42,92.48)	1.494	0.963-2.317	0.073
H19b8	96.32(96.03,96.82)	95.78(95.34,96.47)	1.822	0.952-3.489	0.070
H19b9	94.50(93.88,95.42)	94.18(92.78,95.15)	1.506	1.012-2.239	**0.043**
H19b10	97.42(96.98,97.78)	97.35(97.03,97.66)	1.313	0.552-3.122	0.538
H19b11	90.95(90.13,92.10)	90.35(89.47,91.38)	1.264	0.902-1.770	0.174
H19b12	97.39(96.90,97.71)	96.85(96.54,97.47)	2.704	1.139-6.416	**0.024**

H19b13	96.52(96.14,97.13)	96.85(96.40,97.39)	0.700	0.341-1.437	0.330
H19b14	95.50(94.28,96.29)	95.03(94.64,95.61)	1.245	0.826-1.877	0.294
H19b15	97.59(97.21,98.01)	97.50(97.17,97.81)	1.489	0.582-3.806	0.406
H19c1	93.66(93.08,94.73)	92.51(92.03,93.87)	1.356	0.950-1.934	0.093
H19c2	87.07(84.85,88.86)	85.62(83.58,87.74)	1.353	1.071-1.711	**0.011**
H19c3	96.02(95.31,96.61)	95.39(94.07,96.1)	1.891	1.173-3.049	**0.009**
H19c4	95.61(94.64,96.48)	94.95(93.78,95.55)	1.729	1.084-2.759	**0.022**
H19c5	96.29(95.16,97.00)	96.10(95.17,96.64)	1.291	0.813-2.051	0.279
H19c6	96.80(95.99,97.53)	96.86(96.64,97.13)	1.012	0.587-1.747	0.965
H19c7	97.92(97.43,98.23)	97.56(97.46,98.13)	1.364	0.685-2.719	0.377
H19c8	97.21(96.52,98.13)	96.75(96.31,97.17)	1.686	0.985-2.885	0.057
H19c9	93.57(92.72,94.38)	93.13(92.42,93.97)	1.217	0.810-1.827	0.345
H19c10	97.02(96.35,97.57)	96.77(96.29,97.13)	1.686	0.933-3.049	0.084
H19c11	89.90(87.57,91.06)	89.75(88.41,90.74)	0.917	0.710-1.182	0.503
H19c12	97.53(97.22,98.05)	97.59(96.65,97.92)	1.218	0.687-2.159	0.499
H19c13	97.98(97.51,98.60)	97.95(97.8,98.25)	1.091	0.513-2.323	0.820
H19c14	98.57(98.14,98.93)	98.32(98.00,98.71)	2.955	1.060-8.239	**0.038**
H19c15	98.30(97.66,98.53)	98.37(97.74,98.6)	0.950	0.426-2.118	0.900
H19c16	97.63(97.00,98.13)	97.55(97.14,98.04)	1.028	0.599-1.763	0.920
H19c17	97.60(97.27,98.14)	97.85(97.10,98.13)	1.072	0.589-1.950	0.820
H19c18	95.14(94.07,95.94)	94.57(94.27,95.28)	1.166	0.778-1.748	0.457
H19c19	97.17(96.59,97.74)	97.05(96.50,97.39)	1.379	0.744-2.557	0.307
H19d1	55.01(51.74,59.32)	50.00(45.10,55.56)	1.082	1.006-1.163	**0.034**
H19d2	54.58(48.76,57.23)	50.56(47.13,57.38)	1.012	0.960-1.068	0.654

H19d3	54.60(50.82,57.35)	51.35(48.62,56.38)	1.009	0.943-1.079	0.795
H19d4	53.77(49.30,56.60)	50.00(47.22,56.38)	1.011	0.946-1.080	0.747
H19d5	54.63(51.12,58.63)	53.42(48.89,59.30)	1.011	0.945-1.082	0.743
H19d6	85.92(79.72,89.11)	82.73(78.48,87.91)	1.050	0.968-1.139	0.238
H19d7	76.77(70.70,80.00)	73.41(70.07,76.84)	1.006	0.952-1.063	0.832
H19d8	73.01(66.67,81.17)	68.87(63.92,75.68)	1.055	0.992-1.123	0.089
H19d9	79.63(74.77,84.69)	75.29(71.96,80.65)	1.061	0.985-1.142	0.117
H19d10	65.30(58.74,68.51)	61.63(54.64,67.74)	1.026	0.970-1.085	0.373
MALAT1a1	32.69(31.52,34.18)	33.30(31.91,34.75)	0.882	0.681-1.143	0.343
MALAT1a2	26.58(24.60,28.72)	27.34(25.55,28.17)	0.954	0.742-1.227	0.716
MALAT1a3	19.70(18.45,20.73)	20.08(18.47,20.90)	0.954	0.705-1.291	0.760
MALAT1a4	12.06(11.38,12.78)	12.31(11.57,12.82)	0.849	0.540-1.336	0.480
MALAT1a5	4.64(4.26,5.64)	5.34(4.79,5.67)	0.504	0.266-0.955	**0.036**
MALAT1a6	19.23(18.55,20.69)	19.98(18.77,21.31)	0.863	0.625-1.190	0.369
MALAT1a7	25.55(24.87,26.70)	25.87(25.20,27.12)	0.935	0.659-1.326	0.705
MALAT1a8	21.14(20.13,22.17)	21.19(20.16,22.47)	0.99	0.735-1.334	0.946
MALAT1a9	20.01(18.81,20.89)	19.07(18.17,20.75)	1.066	0.783-1.449	0.686
MALAT1a10	26.25(25.19,27.53)	26.63(26.06,27.31)	0.974	0.724-1.311	0.864
MALAT1b1	0.66(0.51,0.90)	0.62(0.49,0.81)	2.408	0.275-21.087	0.427
MALAT1b2	0.55(0.41,0.72)	0.54(0.39,0.64)	1.478	0.167-13.067	0.725
MALAT1b3	0.73(0.53,1.10)	0.78(0.66,0.94)	1.106	0.251-4.878	0.894
MALAT1b4	0.66(0.45,0.97)	0.66(0.55,0.82)	1.520	0.562-4.1080	0.410
MALAT1b5	0.62(0.53,0.84)	0.75(0.62,0.88)	0.682	0.132-3.530	0.648
MALAT1b6	0.75(0.48,1.02)	0.68(0.52,0.88)	1.708	0.447-6.520	0.434

MALAT1b7	0.66(0.49,0.85)	0.68(0.54,0.90)	0.962	0.171-5.403	0.965
MALAT1b8	0.78(0.65,0.98)	0.88(0.68,0.97)	0.464	0.075-2.860	0.408
MALAT1b9	0.79(0.53,1.06)	0.68(0.50,0.87)	3.905	0.815-18.710	0.088
MALAT1b10	0.78(0.51,1.17)	0.64(0.55,0.76)	2.314	0.576-9.288	0.237
MALAT1b11	0.47(0.24,0.78)	0.60(0.51,0.68)	0.954	0.305-2.988	0.936
MALAT1b12	1.52(1.23,1.73)	1.25(1.02,1.34)	7.919	1.604-39.106	**0.011**
MALAT1b13	0.60(0.27,0.75)	0.43(0.31,0.76)	3.184	0.518-19.574	0.211
MALAT1b14	0.71(0.56,0.94)	0.65(0.60,0.83)	3.201	0.473-21.634	0.233
MALAT1b15	0.70(0.51,1.03)	0.68(0.54,0.76)	2.540	0.589-10.947	0.211
MALAT1c1	67.38(64.50,70.62)	68.05(65.82,71.13)	0.959	0.866-1.062	0.419
MALAT1c2	71.56(68.96,75.24)	73.57(69.12,78.27)	0.960	0.881-1.046	0.350
MALAT1c3	65.12(59.30,68.76)	67.03(61.66,70.74)	0.956	0.897-1.019	0.168
MALAT1c4	68.49(65.12,71.04)	69.03(64.84,73.53)	0.960	0.887-1.038	0.303
MALAT1c5	73.29(70.05,76.48)	74.04(69.90,78.66)	0.972	0.905-1.043	0.426
MALAT1c6	79.24(76.60,81.42)	79.60(76.76,82.45)	0.961	0.876-1.055	0.403

*Adjusted for age. a: Methylation level is expressed as a percentage. Data was expressed as median (P_{25}, P_{75}). GC: gastric cancer, HCs: healthy controls.

Table S5. Association between methylation levels of H19 or MALAT1 promoters in peripheral blood and GC risk in male patients and controls*

	Name	Methylation level[a]		Logistic regression analysis		
		GC	HCs	Odds Ratio	95%CI	*P*-value
Genes	H19	76.55(75.26,77.39)	76.13(75.15,77.08)	1.154	0.954-1.397	0.140
	MALAT1	8.90(8.70,9.06)	8.88(8.69,9.11)	1.034	0.399-2.679	0.946
Regions	H19A	46.71(45.55,48.19)	46.78(45.75,47.98)	0.972	0.863-1.096	0.644

	H19B	92.69(91.60,94.53)	92.45(91.53,94.47)	1.032	0.889-1.198	0.679
	H19C	95.67(95.33,96.01)	95.33(94.9,95.64)	2.852	1.646-4.944	**1.87×10-4**
	H19D	63.01(58.43,66.31)	61.93(57.86,65.14)	1.026	0.973-1.081	0.340
	MALAT1A	21.15(20.61,21.6)	21.05(20.57,21.74)	0.967	0.661-1.414	0.861
	MALAT1B	0.74(0.69,0.78)	0.73(0.68,0.77)	18.524	0.415-826.39	0.132
	MALAT1C	72.88(69.77,74.76)	72.55(70.28,75.4)	0.976	0.914-1.041	0.459
Sites	H19a1	43.11(41.35,44.93)	42.89(41.97,43.94)	1.015	0.908-1.133	0.798
	H19a2	44.14(42.72,46.19)	44.37(43.23,45.59)	0.968	0.889-1.054	0.455
	H19a3	45.48(44.01,47.27)	45.51(44.65,46.87)	0.984	0.878-1.103	0.781
	H19a4	45.05(43.60,46.93)	45.34(44.20,46.65)	0.939	0.837-1.053	0.282
	H19a5	45.12(43.9,47.09)	45.19(44.24,46.65)	0.982	0.877-1.100	0.757
	H19a6	45.52(44.34,47.29)	45.72(44.46,46.88)	0.983	0.878-1.100	0.762
	H19a7	45.60(44.12,47.33)	45.82(44.82,46.96)	0.960	0.875-1.052	0.381
	H19a8	46.34(44.93,48.10)	46.81(45.27,47.77)	0.974	0.868-1.093	0.656
	H19a9	47.38(46.08,48.85)	47.52(46.43,48.73)	0.987	0.874-1.114	0.829
	H19a10	47.28(46.17,48.86)	47.41(46.41,48.75)	0.994	0.882-1.121	0.926
	H19a11	47.47(46.17,48.93)	47.76(46.28,48.91)	0.977	0.870-1.097	0.695
	H19a12	47.27(45.94,48.93)	47.50(46.33,49.13)	0.969	0.862-1.089	0.594
	H19a13	48.80(47.47,50.48)	48.84(47.82,50.19)	0.975	0.869-1.094	0.669
	H19a14	49.15(47.96,50.75)	49.36(48.26,50.86)	0.975	0.869-1.094	0.663

H19a15	49.12(48.11,50.95)	49.39(48.13,50.68)	0.992	0.882-1.115	0.891
H19a16	49.22(48.01,51.25)	49.37(47.64,50.55)	0.998	0.887-1.122	0.973
H19b1	52.05(45.96,88.84)	53.09(48.23,88.57)	0.997	0.987-1.008	0.624
H19b2	97.40(96.93,97.81)	97.20(96.83,97.62)	1.677	1.018-2.762	**0.042**
H19b3	96.20(95.77,96.73)	96.21(95.80,96.71)	1.187	0.801-1.759	0.394
H19b4	89.24(88.11,90.45)	89.05(87.96,90.26)	0.980	0.915-1.050	0.569
H19b5	93.63(92.74,94.20)	93.46(92.51,94.03)	1.282	0.970-1.695	0.081
H19b6	98.01(97.69,98.32)	97.87(97.48,98.10)	1.926	1.066-3.480	**0.030**
H19b7	92.57(91.30,93.38)	91.66(90.50,92.57)	1.503	1.217-1.857	**1.56×10^{-4}**
H19b8	96.15(95.69,96.64)	95.91(95.35,96.39)	1.404	1.007-1.958	**0.046**
H19b9	94.60(93.72,95.60)	94.17(92.82,94.95)	1.413	1.142-1.747	**0.001**
H19b10	97.38(96.94,97.80)	97.30(96.93,97.70)	1.115	0.706-1.761	0.641
H19b11	90.62(89.62,91.25)	90.02(89.22,91.09)	1.185	0.982-1.430	0.076
H19b12	96.97(96.54,97.40)	96.69(96.26,97.10)	1.824	1.155-2.881	**0.010**
H19b13	96.76(96.28,97.22)	96.61(96.09,96.98)	1.626	1.057-2.500	**0.027**
H19b14	95.26(94.73,95.89)	94.88(94.32,95.41)	1.379	1.048-1.815	**0.022**
H19b15	97.73(97.24,98.03)	97.57(97.32,97.89)	1.201	0.712-2.025	0.493
H19c1	93.76(92.58,94.67)	92.70(91.71,93.68)	1.576	1.271-1.955	**3.40×10^{-5}**
H19c2	86.63(84.91,88.64)	85.20(83.62,87.49)	1.149	1.032-1.278	**0.011**
H19c3	95.72(94.61,96.54)	94.72(93.88,95.81)	1.364	1.105-1.683	**0.004**
H19c4	95.65(94.81,96.43)	94.96(94.08,95.70)	1.325	1.061-1.657	**0.013**

H19c5	96.38(95.60,96.92)	95.80(95.19,96.25)	1.651	1.206-2.259	**0.002**
H19c6	97.11(96.44,97.67)	96.71(95.93,97.36)	1.359	1.016-1.819	**0.039**
H19c7	97.94(97.30,98.41)	97.82(97.35,98.24)	0.992	0.702-1.401	0.962
H19c8	96.97(96.46,97.65)	96.48(95.99,96.98)	1.280	0.997-1.644	0.053
H19c9	93.64(92.57,94.44)	92.90(91.91,93.72)	0.994	0.939-1.053	0.850
H19c10	96.77(96.20,97.39)	96.50(95.95,97.00)	1.210	0.905-1.619	0.199
H19c11	89.45(87.85,91.30)	89.26(87.82,90.47)	1.092	0.950-1.255	0.214
H19c12	97.48(97.02,98.02)	97.27(96.96,97.87)	1.240	0.921-1.669	0.157
H19c13	98.00(97.55,98.56)	97.96(97.56,98.29)	1.111	0.776-1.591	0.564
H19c14	98.38(97.99,98.77)	98.37(98.11,98.78)	0.851	0.580-1.249	0.410
H19c15	98.15(97.78,98.51)	98.12(97.74,98.53)	0.985	0.641-1.513	0.945
H19c16	97.63(97.14,97.98)	97.54(97.14,98.07)	1.029	0.717-1.476	0.878
H19c17	97.68(97.23,98.06)	97.63(97.12,97.95)	1.259	0.892-1.779	0.190
H19c18	94.98(94.09,95.68)	94.69(93.92,95.46)	1.057	0.940-1.189	0.353
H19c19	97.20(96.67,97.56)	97.08(96.44,97.55)	1.052	0.748-1.481	0.769
H19d1	52.63(46.54,56.56)	50.00(45.85,55.55)	1.017	0.980-1.056	0.368
H19d2	51.91(48.03,56.90)	52.39(48.06,56.67)	0.996	0.953-1.042	0.876
H19d3	52.24(48.96,56.61)	52.83(48.71,56.33)	0.993	0.951-1.036	0.742
H19d4	52.30(49.08,56.46)	52.11(48.19,56.01)	1.011	0.967-1.058	0.631
H19d5	53.72(49.26,57.85)	53.92(49.38,57.43)	0.990	0.948-1.033	0.638
H19d6	82.04(77.83,85.73)	80.30(75.54,84.55)	1.050	1.000-1.101	**0.049**
H19d7	73.31(68.57,78.26)	72.22(67.81,76.21)	1.025	0.984-1.067	0.235
H19d8	70.36(64.98,75.36)	68.44(63.65,72.34)	1.030	0.991-1.070	0.138
H19d9	75.69(70.73,81.04)	73.81(69.02,78.84)	1.033	0.992-1.076	0.116
H19d10	61.80(55.97,65.68)	60.48(56.22,64.44)	1.017	0.976-1.059	0.428

MALAT1a1	33.29(31.98,34.55)	32.87(31.67,34.54)	1.090	0.947-1.255	0.229
MALAT1a2	25.97(25.00,27.26)	26.14(25.09,27.59)	0.941	0.811-1.092	0.424
MALAT1a3	20.25(19.11,21.36)	19.70(18.76,21.07)	1.046	0.893-1.225	0.575
MALAT1a4	12.46(11.56,13.63)	12.65(11.57,13.33)	1.004	0.823-1.224	0.971
MALAT1a5	5.03(4.57,5.51)	5.49(4.91,6.18)	0.609	0.438-0.847	**0.003**
MALAT1a6	19.83(18.79,21.21)	19.74(19.01,21.09)	0.945	0.804-1.112	0.498
MALAT1a7	25.82(24.60,27.13)	25.61(24.69,27.21)	0.985	0.846-1.148	0.848
MALAT1a8	21.60(20.49,22.82)	21.62(20.57,22.81)	0.975	0.833-1.142	0.756
MALAT1a9	19.81(18.72,20.82)	19.19(17.77,20.50)	1.159	0.995-1.349	0.058
MALAT1a10	26.58(25.17,27.81)	27.09(25.58,28.54)	0.927	0.803-1.071	0.302
MALAT1b1	0.62(0.45,0.83)	0.66(0.54,0.86)	0.722	0.263-1.983	0.527
MALAT1b2	0.53(0.40,0.71)	0.55(0.44,0.73)	0.919	0.326-2.586	0.872
MALAT1b3	0.72(0.54,0.90)	0.73(0.58,0.88)	0.951	0.326-2.773	0.926
MALAT1b4	0.71(0.49,0.92)	0.66(0.48,0.81)	2.548	0.847-7.664	0.096
MALAT1b5	0.71(0.54,0.88)	0.62(0.46,0.78)	3.713	1.057-13.048	**0.041**
MALAT1b6	0.71(0.51,0.92)	0.76(0.59,0.91)	0.850	0.330-2.195	0.738
MALAT1b7	0.75(0.57,0.92)	0.79(0.55,0.88)	1.466	0.578-3.719	0.421
MALAT1b8	0.8(0.59,1.03)	0.83(0.55,1.01)	1.006	0.382-2.649	0.991
MALAT1b9	0.75(0.54,0.91)	0.65(0.53,0.80)	2.914	0.859-9.889	0.086
MALAT1b10	0.72(0.52,0.88)	0.70(0.52,0.90)	1.364	0.502-3.703	0.542
MALAT1b11	0.52(0.39,0.76)	0.51(0.35,0.66)	3.005	0.882-10.244	0.079
MALAT1b12	1.39(1.07,1.62)	1.32(1.10,1.61)	1.300	0.629-2.686	0.479
MALAT1b13	0.53(0.38,0.71)	0.55(0.40,0.74)	0.717	0.237-2.164	0.555
MALAT1b14	0.70(0.52,0.82)	0.71(0.57,0.84)	0.771	0.228-2.606	0.675

MALAT1b15	0.7(0.54,0.86)	0.77(0.59,0.88)	0.746	0.241-2.304	0.610
MALAT1c1	69.68(66.73,71.50)	69.79(67.61,72.49)	0.959	0.890-1.034	0.274
MALAT1c2	74.55(71.29,76.69)	74.75(71.89,77.26)	0.988	0.923-1.058	0.735
MALAT1c3	67.94(64.08,71.16)	68.72(64.72,71.88)	0.978	0.933-1.027	0.374
MALAT1c4	70.07(66.61,72.12)	70.03(67.23,73.46)	0.975	0.919-1.034	0.402
MALAT1c5	75.94(72.89,78.38)	76.31(73.35,78.77)	0.977	0.917-1.040	0.459
MALAT1c6	80.26(77.61,82.52)	80.33(77.92,82.81)	0.985	0.917-1.057	0.669

*Adjusted for age. a: Methylation level is expressed as a percentage. Data was expressed as median (P_{25}, P_{75}). GC: gastric cancer, HCs: healthy controls.

Table S6. Differences of methylation levels of H19, MALAT1 promoters with differentiated GC tumors*

	Name	Methylation level[a]		Logistic regression analysis		
		Poorly differentiated	Well/Moderately differentiated	Odds Ratio	95%CI	*P*-value
Genes	H19	76.58(75.81,77.51)	76.61(75.65,77.44)	0.921	0.704-1.206	0.550
	MALAT1	8.89(8.62,9.14)	8.85(8.69,9.03)	1.120	0.295-4.249	0.868
Regions	H19A	46.90(45.25,48.39)	46.63(45.76,47.93)	0.961	0.825-1.120	0.613
	H19B	93.80(91.95,94.68)	92.75(91.60,94.62)	1.114	0.899-1.381	0.322
	H19C	95.72(95.21,95.93)	95.71(95.45,96.07)	0.731	0.387-1.384	0.337
	H19D	62.67(59.06,67.12)	63.10(58.62,66.90)	0.991	0.929-1.057	0.791
	MALAT1A	21.12(20.38,21.81)	20.95(20.51,21.47)	1.133	0.668-1.920	0.644
	MALAT1B	0.74(0.68,0.78)	0.75(0.70,0.81)	0.057	0.001-3.982	0.186
	MALAT1C	72.64(70.51,75.51)	72.25(68.13,74.21)	1.078	0.991-1.173	0.081
Sites	H19a1	43.02(40.98,44.44)	43.38(41.84,44.98)	0.908	0.781-1.057	0.214
	H19a2	44.15(42.63,45.62)	44.26(43.03,46.12)	0.951	0.893-1.013	0.121
	H19a3	45.51(43.63,47.30)	45.65(44.54,46.94)	0.939	0.805-1.097	0.428
	H19a4	45.03(43.40,46.99)	45.28(43.93,46.53)	0.941	0.811-1.093	0.428
	H19a5	45.04(43.37,46.99)	45.34(44.07,46.98)	0.948	0.821-1.094	0.462
	H19a6	45.52(43.87,47.30)	45.67(44.71,47.18)	0.946	0.814-1.098	0.465
	H19a7	45.69(44.04,47.28)	45.67(44.46,47.19)	1.012	0.928-1.104	0.783
	H19a8	46.62(44.87,48.02)	46.38(45.17,47.89)	0.977	0.841-1.135	0.764
	H19a9	47.34(45.99,49.03)	47.25(46.17,48.61)	0.970	0.827-1.137	0.705
	H19a10	47.32(45.85,48.98)	47.37(46.38,48.60)	0.955	0.814-1.121	0.574
	H19a11	47.59(46.14,48.85)	47.45(46.31,48.72)	0.984	0.841-1.151	0.840
	H19a12	47.80(46.04,48.90)	47.16(45.92,48.50)	0.963	0.852-1.088	0.541
	H19a13	49.14(47.88,50.56)	48.72(47.40,49.97)	1.025	0.886-1.187	0.740
	H19a14	49.56(47.91,50.99)	49.05(48.11,50.61)	0.997	0.871-1.141	0.963
	H19a15	49.36(48.40,50.94)	49.04(48.01,50.50)	1.028	0.882-1.198	0.725

H19a16	48.71(47.67,51.49)	49.18(48.01,50.59)	1.038	0.892-1.209	0.629
H19b1	84.93(48.35,89.09)	52.27(45.96,88.84)	1.006	0.991-1.021	0.442
H19b2	97.47(97.02,97.96)	97.41(96.93,97.85)	1.568	0.829-2.964	0.166
H19b3	96.44(95.85,96.84)	96.20(95.81,96.81)	1.174	0.691-1.995	0.552
H19b4	89.70(88.68,90.83)	88.92(87.90,90.33)	1.106	0.927-1.319	0.263
H19b5	93.68(92.95,94.16)	93.68(92.72,94.39)	1.182	0.835-1.674	0.347
H19b6	97.97(97.73,98.31)	97.97(97.60,98.32)	1.279	0.600-2.727	0.524
H19b7	92.14(91.14,93.16)	92.47(91.30,93.38)	0.947	0.720-1.246	0.698
H19b8	96.35(95.65,96.63)	96.16(95.77,96.69)	0.767	0.528-1.116	0.166
H19b9	94.47(93.17,95.29)	94.61(93.83,95.67)	0.892	0.679-1.173	0.415
H19b10	97.38(96.78,97.62)	97.37(96.97,97.80)	0.896	0.508-1.580	0.705
H19b11	90.78(89.90,91.57)	90.64(89.61,91.47)	1.152	0.88-1.507)	0.303
H19b12	97.22(96.63,97.50)	97.06(96.58,97.46)	1.200	0.686-2.100	0.523
H19b13	96.85(96.27,97.22)	96.70(96.18,97.21)	1.268	0.726-2.213	0.404
H19b14	95.25(94.46,95.93)	95.37(94.67,95.91)	0.955	0.691-1.320	0.781
H19b15	97.56(96.95,97.88)	97.74(97.32,98.03)	0.602	0.308-1.175	0.137
H19c1	93.51(92.37,94.03)	93.95(92.97,94.71)	0.720	0.553-0.937	**0.015**
H19c2	86.32(84.04,88.20)	86.86(85.29,88.81)	0.896	0.778-1.031	0.126
H19c3	95.69(94.61,96.19)	95.92(95.05,96.60)	0.772	0.575-1.036	0.084
H19c4	95.74(94.83,96.19)	95.58(94.71,96.44)	0.910	0.689-1.201	0.504
H19c5	96.05(95.21,96.78)	96.41(95.63,97.00)	0.702	0.481-1.024	0.066
H19c6	97.14(96.13,97.45)	96.99(96.43,97.73)	1.016	0.726-1.423	0.924
H19c7	97.91(97.40,98.20)	98.05(97.33,98.50)	0.784	0.514-1.195	0.258
H19c8	97.08(96.52,97.68)	96.97(96.44,97.68)	1.154	0.842-1.580	0.374
H19c9	93.36(92.16,94.15)	93.70(92.71,94.47)	1.017	0.937-1.105	0.680
H19c10	96.82(96.16,97.31)	96.80(96.22,97.57)	0.819	0.581-1.154	0.254
H19c11	89.64(87.73,91.16)	89.52(87.83,91.23)	1.033	0.870-1.227	0.711
H19c12	97.52(97.11,97.97)	97.48(97.06,98.04)	0.998	0.662-1.505	0.993
H19c13	97.94(97.53,98.48)	98.01(97.53,98.63)	0.764	0.469-1.243	0.278
H19c14	98.38(98.06,98.75)	98.42(98.00,98.80)	1.214	0.708-2.081	0.481
H19c15	98.05(97.64,98.55)	98.20(97.77,98.52)	0.905	0.524-1.562	0.719
H19c16	97.68(97.16,97.91)	97.62(97.09,98.05)	1.132	0.744-1.721	0.564
H19c17	97.70(97.31,98.06)	97.67(97.23,98.10)	0.937	0.595-1.476	0.778
H19c18	95.15(94.21,95.43)	94.98(94.07,95.75)	1.033	0.770-1.386	0.827
H19c19	97.19(96.75,97.66)	97.19(96.59,97.59)	1.076	0.686-1.686	0.751
H19d1	54.49(45.97,56.95)	52.67(47.66,57.49)	0.966	0.919-1.016	0.176
H19d2	52.50(48.65,58.49)	52.44(47.96,56.87)	1.012	0.964-1.061	0.641
H19d3	53.59(50.31,57.53)	52.92(48.68,56.72)	1.012	0.958-1.068	0.678
H19d4	51.98(50.10,57.24)	52.69(48.74,56.16)	1.007	0.956-1.060	0.796
H19d5	54.55(49.56,58.58)	53.72(49.58,57.85)	1.008	0.956-1.063	0.770
H19d6	81.00(77.25,85.71)	82.82(79.13,87.67)	0.949	0.892-1.009	0.094
H19d7	74.39(69.14,77.27)	73.55(69.14,79.70)	1.012	0.966-1.060	0.610
H19d8	70.34(65.32,77.25)	70.66(65.50,76.87)	0.994	0.948-1.042	0.799
H19d9	75.29(71.05,81.73)	76.85(71.36,82.64)	0.985	0.935-1.039	0.583

H19d10	62.29(56.64,65.75)	62.04(57.05,66.71)	0.990	0.945-1.037	0.664
MALAT1a1	33.36(32.08,34.50)	33.00(31.79,34.49)	0.990	0.945-1.037	0.664
MALAT1a2	26.76(25.01,27.79)	25.97(24.86,27.34)	1.104	0.910-1.341	0.316
MALAT1a3	20.23(18.99,20.95)	20.14(18.89,21.32)	1.076	0.875-1.324	0.486
MALAT1a4	12.60(11.55,13.62)	12.33(11.46,13.35)	1.077	0.832-1.394	0.576
MALAT1a5	5.07(4.60,5.79)	4.93(4.40,5.46)	1.222	0.802-1.862	0.351
MALAT1a6	19.67(18.20,21.11)	19.78(18.76,21.12)	0.921	0.747-1.136	0.442
MALAT1a7	25.91(24.53,27.07)	25.68(24.72,26.73)	1.050	0.849-1.299	0.655
MALAT1a8	21.36(20.24,22.46)	21.63(20.48,22.63)	0.928	0.748-1.152	0.499
MALAT1a9	20.00(18.65,21.05)	19.81(18.77,20.78)	1.052	0.849-1.303	0.644
MALAT1a10	26.40(24.90,27.41)	26.55(25.21,27.81)	0.914	0.752-1.112	0.371
MALAT1b1	0.71(0.49,0.92)	0.62(0.46,0.84)	1.913	0.543-6.736	0.312
MALAT1b2	0.47(0.37,0.76)	0.56(0.41,0.71)	0.595	0.153-2.313	0.453
MALAT1b3	0.70(0.55,0.84)	0.75(0.53,0.91)	0.735	0.229-2.359	0.605
MALAT1b4	0.76(0.59,0.94)	0.66(0.47,0.91)	0.902	0.449-1.812	0.772
MALAT1b5	0.68(0.54,0.87)	0.69(0.54,0.88)	0.818	0.190-3.529	0.788
MALAT1b6	0.72(0.52,0.92)	0.71(0.50,0.91)	0.898	0.311-2.594	0.842
MALAT1b7	0.69(0.57,0.84)	0.74(0.55,0.93)	0.635	0.197-2.051	0.448
MALAT1b8	0.72(0.52,1.04)	0.81(0.63,0.98)	0.708	0.207-2.422	0.583
MALAT1b9	0.74(0.52,0.82)	0.77(0.55,0.93)	0.365	0.100-1.333	0.127
MALAT1b10	0.77(0.54,0.96)	0.72(0.50,0.93)	1.282	0.437-3.766	0.651
MALAT1b11	0.51(0.40,0.80)	0.52(0.35,0.75)	1.004	0.353-2.856	0.994
MALAT1b12	1.35(1.06,1.61)	1.41(1.15,1.65)	0.738	0.303-1.794	0.502
MALAT1b13	0.51(0.32,0.70)	0.57(0.37,0.74)	0.615	0.150-2.520	0.500
MALAT1b14	0.65(0.47,0.77)	0.72(0.55,0.85)	0.523	0.118-2.321	0.394
MALAT1b15	0.71(0.53,0.86)	0.69(0.53,0.86)	0.768	0.289-2.041	0.597
MALAT1c1	70.04(67.33,72.39)	68.99(65.21,71.19)	1.105	1.002-1.219	**0.046**
MALAT1c2	74.55(71.43,77.72)	73.87(70.55,75.97)	1.071	0.981-1.170	0.126
MALAT1c3	67.63(64.12,70.96)	67.25(61.78,70.30)	1.048	0.987-1.113	0.129
MALAT1c4	70.07(67.70,73.61)	69.76(66.04,71.62)	1.066	0.988-1.151	0.098
MALAT1c5	75.45(73.26,78.75)	75.56(71.37,78.08)	1.057	0.979-1.141	0.159
MALAT1c6	80.14(77.8,83.05)	79.70(76.89,82.33)	1.075	0.981-1.178	0.123

*Adjusted for age, gender, smoking and drinking. a: Methylation level is expressed as a percentage. Data was expressed as median (P_{25}, P_{75}).

Table S7. Differences of methylation levels of H19, MALAT1 promoters among GC tumors with different TNM staging[*]

	Name	Methylation level[a]				Logistic regression analysis (I-III and IV)		
		Stage I	Stage II	Stage III	Stage IV	Odds Ratio	95%CI	*P*-value
Genes	H19	76.44(75.85,77.27)	76.71(76.11,78.59)	76.95(75.24,77.6)	76.55(75.69,77.36)	0.874	0.689-1.109	0.267
	MALAT1	8.75(8.62,9.19)	8.79(8.71,8.88)	8.81(8.56,8.99)	8.93(8.71,9.12)	4.622	1.339-15.947	**0.015**
Regions	H19A	47.08(46.40,49.28)	47.92(46.17,49.41)	46.53(45.15,47.91)	46.61(45.8,47.6)	0.933	0.812-1.072	0.329
	H19B	91.78(91.61,92.14)	93.95(91.50,94.65)	94.26(91.22,94.64)	92.71(91.79,94.78)	1.02	0.855-1.217	0.826
	H19C	95.82(95.06,96.05)	95.71(95.31,95.93)	95.63(95.16,95.93)	95.81(95.45,96.12)	1.439	0.812-2.549	0.213
	H19D	62.80(58.74,68.00)	65.39(61.14,69.04)	63.01(59.03,66.25)	63.01(58.24,67.16)	0.974	0.920-1.032	0.372
	MALAT1A	20.76(20.35,21.89)	20.78(20.61,21.12)	20.85(20.41,21.4)	21.18(20.60,21.74)	1.717	1.057-2.790	**0.029**
	MALAT1B	0.75(0.72,0.81)	0.75(0.69,0.82)	0.73(0.68,0.77)	0.75(0.69,0.81)	8.111	0.206-319.113	0.264
	MALAT1C	74.68(70.71,78.60)	72.53(67.49,74.85)	72.00(67.98,73.69)	72.31(69.09,74.41)	0.964	0.895-1.038	0.335
Sites	H19a1	43.22(41.08,44.59)	44.52(41.82,45.53)	42.98(40.77,44.16)	43.18(41.85,44.92)	0.998	0.879-1.133	0.974
	H19a2	44.95(43.28,46.42)	45.80(43.29,47.83)	43.93(42.61,45.60)	44.20(43.08,45.79)	0.996	0.937-1.058	0.896
	H19a3	45.94(44.60,47.93)	47.13(44.79,48.55)	45.09(43.79,46.99)	45.65(44.54,46.87)	0.956	0.840-1.090	0.504
	H19a4	45.05(43.87,47.53)	46.15(42.24,48.20)	45.01(43.51,46.54)	45.20(43.97,46.39)	0.934	0.818-1.066	0.31
	H19a5	45.73(44.25,47.39)	46.43(44.64,48.03)	44.85(43.62,46.69)	45.30(44.06,46.97)	0.967	0.851-1.099	0.609
	H19a6	46.49(44.69,48.14)	46.99(44.80,48.74)	45.37(44.14,46.96)	45.64(44.58,47.16)	0.951	0.834-1.085	0.453
	H19a7	46.32(45.23,48.18)	46.90(44.50,48.34)	45.24(44.24,47.32)	45.65(44.45,46.98)	0.929	0.821-1.052	0.244
	H19a8	46.67(45.83,49.17)	47.77(46.14,49.04)	46.14(44.94,47.80)	46.38(45.04,47.61)	0.912	0.797-1.043	0.177
	H19a9	47.61(46.78,50.02)	48.80(46.52,50.15)	47.13(45.88,48.50)	47.11(46.12,48.59)	0.93	0.807-1.073	0.322
	H19a10	47.89(46.87,50.31)	48.71(46.98,50.02)	47.09(46.02,48.55)	47.28(46.20,48.44)	0.924	0.801-1.067	0.281
	H19a11	48.19(46.87,50.12)	48.55(45.39,50.41)	47.42(46.17,48.79)	47.44(46.37,48.49)	0.931	0.809-1.072	0.323

H19a12	47.82(46.87,49.89)	48.36(45.25,49.61)	47.32(45.67,48.82)	47.15(45.97,48.36)	0.989	0.879-1.114	0.858
H19a13	49.83(48.78,52.1)	50.32(47.89,51.90)	49.03(47.21,50.08)	48.63(47.38,49.87)	0.906	0.791-1.038	0.153
H19a14	50.35(48.93,52.24)	51.00(48.71,52.37)	49.57(47.86,50.32)	48.96(48.00,50.17)	0.939	0.825-1.069	0.34
H19a15	50.43(48.80,52.18)	50.85(48.87,52.12)	49.33(47.58,50.57)	48.82(48.10,50.30)	0.885	0.766-1.022	0.097
H19a16	51.02(49.00,52.61)	50.21(48.49,52.23)	48.77(47.37,51.17)	48.83(48.00,50.59)	0.914	0.794-1.053	0.213
H19b1	49.31(43.73,50.38)	88.06(43.44,89.66)	86.70(44.92,89.88)	52.33(47.49,88.74)	0.999	0.987-1.011	0.876
H19b2	97.50(97.14,97.60)	96.98(96.66,97.35)	97.45(97.08,97.97)	97.45(97.01,97.86)	1.186	0.685-2.052	0.543
H19b3	96.19(95.86,96.97)	95.87(95.49,96.16)	96.36(95.97,96.62)	96.41(95.83,96.92)	1.507	0.924-2.458	0.101
H19b4	89.80(87.47,91.55)	88.75(87.16,89.35)	89.29(87.30,90.60)	89.21(88.37,90.58)	0.984	0.917-1.056	0.655
H19b5	94.19(93.26,94.76)	93.17(92.44,93.78)	93.96(93.12,94.48)	93.67(92.72,94.29)	1.01	0.740-1.380	0.948
H19b6	98.01(97.83,98.20)	97.91(97.70,98.21)	97.87(97.63,98.27)	98.00(97.58,98.35)	1.384	0.713-2.686	0.337
H19b7	91.25(90.24,92.71)	92.51(90.65,93.76)	92.12(90.87,93.13)	92.63(91.66,93.34)	1.172	0.916-1.500	0.207
H19b8	96.07(94.87,96.59)	95.97(95.33,96.80)	96.22(95.68,96.64)	96.27(95.91,96.67)	1.04	0.733-1.475	0.828
H19b9	94.00(93.13,96.09)	94.40(93.15,95.57)	94.51(93.12,95.04)	94.74(94.12,95.68)	1.345	1.041-1.737	**0.023**
H19b10	97.40(97.03,97.84)	97.57(96.96,97.93)	97.62(96.66,97.96)	97.34(96.95,97.71)	0.67	0.394-1.139	0.139
H19b11	90.08(88.77,91.30)	89.51(88.90,91.08)	90.58(89.90,91.11)	90.79(89.96,91.76)	1.248	0.988-1.575	0.063
H19b12	96.51(96.01,97.17)	96.86(96.47,97.38)	97.13(96.36,97.47)	97.21(96.76,97.52)	1.582	0.964-2.595	0.07
H19b13	96.73(95.81,97.11)	96.68(96.49,97.11)	96.80(96.19,97.42)	96.74(96.24,97.18)	0.843	0.523-1.357	0.482
H19b14	95.6(94.02,96.47)	95.09(93.85,95.73)	95.11(94.53,95.59)	95.47(94.76,96.16)	1.313	0.973-1.773	0.075
H19b15	97.51(96.88,98.12)	97.45(96.96,97.88)	97.50(97.15,98.01)	97.76(97.39,98.04)	1.469	0.809-2.668	0.206
H19c1	93.63(92.76,94.3)	93.71(92.33,94.23)	93.72(92.73,94.78)	93.76(92.85,94.68)	1.154	0.925-1.439	0.205
H19c2	84.97(82.85,87.79)	86.80(85.35,87.69)	86.19(84.26,88.08)	86.89(85.07,88.96)	1.098	0.969-1.244	0.143
H19c3	95.71(94.39,96.13)	95.75(95.05,96.39)	95.31(94.61,96.17)	96.01(95.11,96.77)	1.32	1.014-1.718	**0.039**
H19c4	95.63(95.08,96.43)	94.51(94.12,95.47)	95.41(94.86,96.21)	95.80(94.96,96.57)	1.295	0.996-1.684	0.054
H19c5	95.96(95.43,97.08)	96.47(95.61,96.96)	96.37(95.69,96.89)	96.34(95.46,96.95)	1.008	0.737-1.379	0.961
H19c6	97.40(95.96,98.28)	96.81(95.82,97.40)	97.27(96.14,97.82)	97.04(96.49,97.64)	1.028	0.769-1.373	0.853

H19c7	98.21(97.17,98.63)	98.01(97.18,98.36)	97.86(96.83,98.55)	97.92(97.46,98.40)	1.269	0.874-1.842	0.211
H19c8	96.06(95.09,97.44)	96.92(96.51,98.17)	97.30(96.69,97.79)	96.95(96.49,97.58)	0.855	0.649-1.126	0.265
H19c9	93.77(92.57,94.65)	94.13(93.20,94.86)	92.71(91.62,93.95)	93.70(92.79,94.47)	0.975	0.904-1.051	0.51
H19c10	96.49(96.07,97.62)	96.79(96.36,97.81)	96.73(95.79,97.26)	96.89(96.40,97.56)	1.164	0.856-1.582	0.334
H19c11	89.99(89.09,91.88)	89.71(87.63,91.34)	89.29(87.48,91.10)	89.63(87.88,91.24)	1.004	0.867-1.163	0.957
H19c12	97.78(97.18,98.26)	97.63(96.82,98.34)	97.43(96.79,97.97)	97.51(97.19,97.96)	1.296	0.892-1.883	0.174
H19c13	97.78(96.89,98.22)	97.66(97.22,98.32)	98.01(97.52,98.49)	98.04(97.62,98.63)	1.507	0.973-2.334	0.066
H19c14	98.31(97.76,98.72)	98.27(97.94,98.70)	98.31(97.89,98.62)	98.48(98.07,98.85)	1.09	0.742-1.601	0.661
H19c15	97.71(97.55,98.25)	97.89(97.77,98.48)	98.12(97.62,98.47)	98.19(97.82,98.53)	1.175	0.715-1.929	0.524
H19c16	97.38(96.68,97.91)	97.79(97.06,98.28)	97.75(97.19,97.95)	97.60(97.13,98.06)	1.013	0.699-1.469	0.946
H19c17	97.55(96.37,97.92)	97.87(97.35,98.55)	97.55(97.10,97.92)	97.70(97.29,98.10)	1.051	0.708-1.562	0.805
H19c18	94.70(93.92,95.64)	94.85(93.70,95.25)	94.74(94.07,95.72)	95.13(94.10,95.75)	1.106	0.854-1.432	0.447
H19c19	97.51(96.90,97.93)	97.03(95.99,97.13)	97.01(96.60,97.73)	97.27(96.72,97.56)	1.233	0.825-1.842	0.306
H19d1	50.55(45.66,56.79)	52.33(48.26,59.16)	54.12(47.39,56.68)	52.67(46.86,57.56)	0.998	0.958-1.041	0.943
H19d2	52.50(47.51,57.38)	53.32(51.45,58.44)	51.85(47.76,55.31)	52.50(48.16,57.63)	0.987	0.945-1.031	0.554
H19d3	55.05(50.29,57.07)	53.84(49.50,57.53)	51.72(49.79,56.32)	53.00(48.77,57.35)	0.981	0.935-1.029	0.438
H19d4	52.88(50.62,56.01)	53.89(52.09,57.07)	52.11(47.82,54.90)	52.28(48.84,57.04)	0.993	0.948-1.039	0.751
H19d5	53.45(48.95,58.20)	55.41(52.07,57.78)	53.45(50.23,55.84)	53.94(49.17,58.49)	1.002	0.957-1.049	0.932
H19d6	79.09(75.93,89.46)	83.48(78.91,88.57)	82.48(79.04,87.03)	82.71(78.09,86.61)	0.972	0.920-1.028	0.319
H19d7	73.08(69.17,81.51)	74.96(66.31,82.36)	74.07(70.22,80.82)	72.62(69.12,78.54)	0.958	0.915-1.002	0.06
H19d8	70.89(64.80,80.7)	70.98(63.45,81.85)	70.66(64.77,76.32)	70.31(65.62,75.80)	0.973	0.932-1.015	0.2
H19d9	75.29(70.66,81.77)	78.19(70.40,86.53)	77.78(70.28,85.11)	76.19(71.68,80.94)	0.968	0.925-1.013	0.166
H19d10	60.40(55.85,68.84)	64.26(55.59,71.07)	61.88(55.77,65.06)	62.26(56.87,66.94)	1.005	0.964-1.047	0.813
MALAT1a1	32.99(32.39,35.51)	33.38(31.95,35.00)	32.96(31.52,34.36)	33.17(31.81,34.49)	1.019	0.859-1.208	0.832
MALAT1a2	26.23(23.78,27.38)	25.50(24.99,27.46)	25.96(24.95,27.11)	26.15(24.83,28.07)	1.079	0.908-1.283	0.388
MALAT1a3	20.77(19.18,22.83)	19.64(17.83,20.48)	20.00(18.19,20.98)	20.28(19.22,21.34)	1.165	0.968-1.404	0.106

MALAT1a4	11.01(10.02,12.30)	11.70(11.18,13.18)	12.25(11.60,13.08)	12.47(11.62,13.79)	1.347	1.057-1.716	**0.016**
MALAT1a5	4.90(4.64,5.56)	5.16(4.47,5.88)	4.94(4.39,5.21)	5.00(4.43,5.64)	1.012	0.696-1.473	0.948
MALAT1a6	18.93(17.84,22.85)	18.59(17.57,20.31)	20.08(18.50,21.26)	19.81(19.05,21.06)	1.106	0.914-1.340	0.3
MALAT1a7	25.36(24.24,27.99)	24.9(24.34,27.06)	25.34(23.93,26.47)	25.94(24.80,27.14)	1.147	0.945-1.391	0.165
MALAT1a8	21.84(20.12,22.88)	21.98(20.2,22.94)	21.36(20.06,22.86)	21.57(20.53,22.43)	0.977	0.810-1.179	0.81
MALAT1a9	20.14(19.07,20.98)	19.01(17.64,20.44)	20.05(18.75,20.90)	19.82(18.69,20.95)	0.989	0.818-1.196	0.91
MALAT1a10	26.28(23.57,26.85)	26.62(25.71,28.02)	25.95(24.62,27.33)	26.67(25.19,27.99)	1.158	0.977-1.372	0.091
MALAT1b1	0.53(0.31,0.68)	0.70(0.63,0.85)	0.53(0.44,0.91)	0.64(0.48,0.87)	1.052	0.338-3.281	0.93
MALAT1b2	0.64(0.45,0.80)	0.45(0.33,0.60)	0.49(0.37,0.75)	0.56(0.41,0.73)	2.144	0.611-7.527	0.234
MALAT1b3	0.69(0.45,1.27)	0.76(0.62,1.05)	0.64(0.46,0.88)	0.73(0.57,0.89)	0.774	0.284-2.104	0.615
MALAT1b4	0.63(0.4,0.87)	0.68(0.38,0.98)	0.81(0.48,0.97)	0.66(0.49,0.91)	1.046	0.559-1.957	0.888
MALAT1b5	0.95(0.77,1.10)	0.70(0.56,0.92)	0.67(0.50,0.79)	0.69(0.53,0.88)	1.271	0.364-4.441	0.707
MALAT1b6	0.90(0.40,1.04)	0.64(0.39,0.91)	0.69(0.54,0.92)	0.71(0.52,0.89)	1.06	0.418-2.688	0.902
MALAT1b7	0.77(0.72,0.82)	0.81(0.56,1.02)	0.73(0.60,0.92)	0.70(0.54,0.91)	1.023	0.403-2.597	0.962
MALAT1b8	1.01(0.72,1.20)	0.90(0.66,1.49)	0.81(0.60,1.08)	0.75(0.58,0.95)	0.331	0.107-1.025	0.055
MALAT1b9	0.87(0.66,1.12)	0.71(0.45,0.90)	0.72(0.56,0.85)	0.77(0.52,0.94)	1.728	0.605-4.935	0.307
MALAT1b10	0.79(0.67,0.86)	0.67(0.60,0.98)	0.75(0.48,0.97)	0.73(0.51,0.95)	1.096	0.424-2.834	0.85
MALAT1b11	0.52(0.37,0.78)	0.60(0.41,0.92)	0.52(0.35,0.77)	0.49(0.35,0.75)	0.966	0.375-2.490	0.943
MALAT1b12	1.44(1.12,1.66)	1.30(1.10,1.50)	1.40(1.04,1.69)	1.41(1.13,1.65)	1.671	0.746-3.743	0.212
MALAT1b13	0.71(0.39,0.86)	0.57(0.42,0.77)	0.46(0.29,0.70)	0.55(0.37,0.71)	0.699	0.217-2.249	0.548
MALAT1b14	0.72(0.47,0.84)	0.62(0.47,0.76)	0.71(0.49,0.82)	0.70(0.52,0.85)	2.509	0.643-9.786	0.185
MALAT1b15	0.64(0.38,0.75)	0.75(0.55,1.10)	0.62(0.46,0.77)	0.73(0.56,0.86)	3.175	0.887-11.368	0.076
MALAT1c1	70.33(67.31,72.97)	69.94(65.93,72.81)	69.85(65.80,71.63)	69.06(65.56,71.16)	0.941	0.864-1.025	0.165

MALAT1c2	77.01(73.29,80.66)	74.01(70.47,77.21)	73.61(70.62,75.93)	73.94(71.11,76.16)	0.962	0.890-1.040	0.334
MALAT1c3	69.34(63.71,76.13)	66.30(61.89,70.99)	67.41(62.34,69.71)	67.12(62.37,70.73)	0.979	0.928-1.033	0.437
MALAT1c4	72.03(69.06,78.13)	70.52(63.16,73.62)	68.81(66.10,71.50)	69.57(66.46,72.08)	0.973	0.910-1.039	0.409
MALAT1c5	77.61(74.63,81.65)	75.27(71.30,79.28)	74.76(71.68,76.62)	75.25(71.67,78.38)	0.97	0.905-1.039	0.386
MALAT1c6	82.41(77.14,87.08)	79.23(76.92,82.25)	79.55(77.50,82.31)	79.77(77.01,82.35)	0.962	0.887-1.043	0.348

*Adjusted for age, gender, smoking and drinking. a: Methylation level is expressed as a percentage. Data was expressed as median (P_{25}, P_{75}).

Table S8. Differences of methylation levels of H19, MALAT1 promoters in tumors from GC patients with and without metastasis*

	Name	Methylation level[a]			Logistic regression analysis	Odds Ratio	95%CI	*P*-value
		NA	L or V	L and V				
Genes	H19	76.72(75.75,77.6)	76.72(75.75,77.6)	76.55(75.73,77.17)	#1 and 2	0.855	0.660-1.108	0.237
					#1 and 3	0.929	0.672-1.284	0.655
	MALAT1	8.79(8.62,8.98)	8.79(8.62,8.98)	8.97(8.69,9.10)	#1 and 2	5.330	1.373-20.687	**0.016**
					#1 and 3	3.341	0.661-16.897	0.145
Regions	H19A	46.89(45.54,48.55)	46.89(45.54,48.55)	46.25(45.51,48.21)	#1 and 2	0.915	0.785-1.066	0.252
					#1 and 3	0.969	0.806-1.164	0.733
	H19B	93.72(91.45,94.62)	93.72(91.45,94.62)	92.50(91.96,94.75)	#1 and 2	1.008	0.833-1.220	0.933
					#1 and 3	1.051	0.817-1.352	0.697
	H19C	95.65(95.20,95.92)	95.65(95.20,95.92)	95.91(95.53,96.40)	#1 and 2	1.231	0.661-2.291	0.512
					#1 and 3	2.029	0.883-4.660	0.095
	H19D	63.45(59.33,66.49)	63.45(59.33,66.49)	61.47(57.81,65.94)	#1 and 2	0.972	0.913-1.035	0.379
					#1 and 3	0.981	0.909-1.058	0.613
	MALAT1A	20.81(20.47,21.31)	20.81(20.47,21.31)	21.28(20.55,21.66)	#1 and 2	1.781	1.048-3.026	0.033

	MALAT1B	0.74(0.70,0.78)	0.74(0.70,0.78)	0.76(0.68,0.84)	[#]1 and 3	1.571	0.827-2.984	0.168
					[#]1 and 2	12.265	0.247-609.827	0.208
					[#]1 and 3	2.274	0.014-366.329	0.751
	MALAT1C	72.60(68.16,74.68)	72.6(68.16,74.68)	72.98(68.80,75.43)	[#]1 and 2	0.949	0.876-1.028	0.202
					[#]1 and 3	1.013	0.908-1.131	0.810
Sites	H19a1	43.11(41.45,44.95)	43.11(41.45,44.95)	43.11(41.60,45.22)	[#]1 and 2	0.981	0.853-1.128	0.789
					[#]1 and 3	1.024	0.867-1.209	0.778
	H19a2	44.63(42.70,46.50)	44.63(42.70,46.50)	43.97(43.00,46.23)	[#]1 and 2	1.005	0.931-1.085	0.891
					[#]1 and 3	0.991	0.925-1.061	0.786
	H19a3	45.49(44.15,47.59)	45.49(44.15,47.59)	45.49(44.29,47.34)	[#]1 and 2	0.931	0.803-1.079	0.340
					[#]1 and 3	0.998	0.843-1.182	0.980
	H19a4	45.48(43.51,47.11)	45.48(43.51,47.11)	44.92(43.88,46.55)	[#]1 and 2	0.936	0.811-1.081	0.371
					[#]1 and 3	0.926	0.774-1.108	0.402
	H19a5	45.29(43.90,47.22)	45.29(43.90,47.22)	45.33(43.83,47.27)	[#]1 and 2	0.956	0.831-1.100	0.528
					[#]1 and 3	0.988	0.832-1.173	0.889
	H19a6	45.71(44.38,47.49)	45.71(44.38,47.49)	45.41(44.48,47.60)	[#]1 and 2	0.930	0.803-1.076	0.330
					[#]1 and 3	0.985	0.829-1.169	0.860
	H19a7	45.83(44.37,47.63)	45.83(44.37,47.63)	45.42(44.39,47.76)	[#]1 and 2	0.936	0.823-1.065	0.316
					[#]1 and 3	0.912	0.796-1.045	0.186
	H19a8	46.71(45.15,48.26)	46.71(45.15,48.26)	46.39(45.15,48.22)	[#]1 and 2	0.887	0.763-1.033	0.123
					[#]1 and 3	0.952	0.799-1.135	0.583
	H19a9	47.46(45.92,49.45)	47.46(45.92,49.45)	47.62(46.00,49.17)	[#]1 and 2	0.900	0.768-1.055	0.193
					[#]1 and 3	0.983	0.816-1.184	0.855
	H19a10	47.68(46.31,49.15)	47.68(46.31,49.15)	47.40(46.48,48.92)	[#]1 and 2	0.892	0.760-1.048	0.164
					[#]1 and 3	0.983	0.815-1.185	0.856
	H19a11	47.79(46.23,49.26)	47.79(46.23,49.26)	47.84(46.59,48.95)	[#]1 and 2	0.888	0.758-1.040	0.141

				[#]1 and 3	1.010	0.838-1.219	0.914
H19a12	47.77(45.70,49.15)	47.77(45.70,49.15)	47.17(46.03,48.88)	[#]1 and 2	0.979	0.858-1.116	0.746
				[#]1 and 3	1.020	0.858-1.213	0.819
H19a13	49.32(47.47,50.75)	49.32(47.47,50.75)	48.71(47.49,50.49)	[#]1 and 2	0.863	0.740-1.008	0.062
				[#]1 and 3	0.985	0.825-1.176	0.866
H19a14	49.70(48.06,51.27)	49.70(48.06,51.27)	49.85(48.25,50.97)	[#]1 and 2	0.919	0.797-1.059	0.243
				[#]1 and 3	0.983	0.826-1.171	0.851
H19a15	49.70(47.92,51.26)	49.70(47.92,51.26)	49.31(48.06,51.17)	[#]1 and 2	0.841	0.715-0.989	**0.036**
				[#]1 and 3	0.972	0.804-1.174	0.766
H19a16	49.80(47.95,51.41)	49.80(47.95,51.41)	49.76(48.64,51.42)	[#]1 and 2	0.871	0.746-1.017	0.082
				[#]1 and 3	1.023	0.842-1.242	0.820
H19b1	86.62(43.89,89.63)	86.62(43.89,89.63)	51.74(47.99,86.13)	[#]1 and 2	1.000	0.987-1.014	0.997
				[#]1 and 3	0.997	0.980-1.014	0.716
H19b2	97.35(96.94,97.66)	97.35(96.94,97.66)	97.66(97.07,97.90)	[#]1 and 2	0.991	0.545-1.804	0.977
				[#]1 and 3	1.694	0.793-3.619	0.174
H19b3	96.18(95.78,96.59)	96.18(95.78,96.59)	96.33(95.8,97.08)	[#]1 and 2	1.441	0.851-2.440	0.174
				[#]1 and 3	1.626	0.840-3.150	0.149
H19b4	88.93(87.32,90.47)	88.93(87.32,90.47)	89.5(88.41,90.52)	[#]1 and 2	0.965	0.894-1.041	0.358
				[#]1 and 3	1.097	0.891-1.352	0.383
H19b5	93.70(92.86,94.34)	93.70(92.86,94.34)	93.70(92.9,94.21)	[#]1 and 2	1.013	0.725-1.415	0.942
				[#]1 and 3	0.997	0.636-1.561	0.988
H19b6	97.92(97.66,98.20)	97.92(97.66,98.20)	98.15(97.50,98.40)	[#]1 and 2	1.263	0.618-2.580	0.522
				[#]1 and 3	1.680	0.657-4.294	0.279
H19b7	92.12(90.77,93.13)	92.12(90.77,93.13)	93.23(92.14,93.62)	[#]1 and 2	1.089	0.831-1.427	0.536
				[#]1 and 3	1.360	0.966-1.917	0.078
H19b8	96.18(95.54,96.64)	96.18(95.54,96.64)	96.21(96.00,96.66)	[#]1 and 2	0.983	0.679-1.424	0.929

				[#]1 and 3	1.394	0.736-2.639	0.308
H19b9	94.44(93.22,95.30)	94.44(93.22,95.30)	94.89(94.41,95.96)	[#]1 and 2	1.363	1.037-1.791	**0.026**
				[#]1 and 3	1.312	0.927-1.857	0.125
H19b10	97.6(96.95,97.92)	97.6(96.95,97.92)	97.41(96.72,97.78)	[#]1 and 2	0.583	0.327-1.039	0.067
				[#]1 and 3	0.903	0.444-1.837	0.777
H19b11	90.49(89.33,91.11)	90.49(89.33,91.11)	90.95(90.39,91.97)	[#]1 and 2	1.174	0.923-1.493	0.191
				[#]1 and 3	1.554	1.067-2.263	**0.021**
H19b12	96.96(96.35,97.41)	96.96(96.35,97.41)	97.30(96.87,97.64)	[#]1 and 2	1.546	0.899-2.657	0.115
				[#]1 and 3	1.701	0.869-3.332	0.121
H19b13	96.69(96.26,97.35)	96.69(96.26,97.35)	96.74(96.25,97.27)	[#]1 and 2	0.791	0.470-1.333	0.379
				[#]1 and 3	0.950	0.495-1.826	0.878
H19b14	95.18(94.45,95.72)	95.18(94.45,95.72)	95.69(95.28,96.35)	[#]1 and 2	1.150	0.837-1.580	0.387
				[#]1 and 3	2.131	1.243-3.655	**0.006**
H19b15	97.50(97.01,97.98)	97.50(97.01,97.98)	97.80(97.44,98.07)	[#]1 and 2	1.428	0.747-2.733	0.281
				[#]1 and 3	1.601	0.702-3.654	0.263
H19c1	93.72(92.73,94.67)	93.72(92.73,94.67)	93.97(92.51,94.75)	[#]1 and 2	1.138	0.898-1.442	0.286
				[#]1 and 3	1.177	0.861-1.610	0.306
H19c2	86.19(84.42,87.87)	86.19(84.42,87.87)	87.38(85.76,89.91)	[#]1 and 2	1.045	0.914-1.194	0.519
				[#]1 and 3	1.249	1.037-1.504	**0.019**
H19c3	95.55(94.62,96.17)	95.55(94.62,96.17)	96.44(95.11,96.94)	[#]1 and 2	1.293	0.973-1.718	0.077
				[#]1 and 3	1.373	0.955-1.974	0.087
H19c4	95.30(94.51,96.04)	95.30(94.51,96.04)	95.74(95.04,96.68)	[#]1 and 2	1.241	0.943-1.634	0.124
				[#]1 and 3	1.433	0.976-2.103	0.066
H19c5	96.37(95.68,96.93)	96.37(95.68,96.93)	96.65(95.79,97.22)	[#]1 and 2	0.927	0.660-1.303	0.663
				[#]1 and 3	1.225	0.793-1.892	0.361
H19c6	96.98(96.09,97.77)	96.98(96.09,97.77)	97.29(96.62,97.69)	[#]1 and 2	1.019	0.747-1.388	0.907

				[#]1 and 3	1.063	0.695-1.624	0.779
H19c7	97.98(97.12,98.39)	97.98(97.12,98.39)	98.04(97.56,98.33)	[#]1 and 2	1.268	0.842-1.909	0.256
				[#]1 and 3	1.316	0.792-2.187	0.289
H19c8	97.17(96.44,97.84)	97.17(96.44,97.84)	97.34(96.76,97.85)	[#]1 and 2	0.764	0.562-1.040	0.087
				[#]1 and 3	1.110	0.732-1.684	0.623
H19c9	93.41(92.16,94.29)	93.41(92.16,94.29)	93.87(93.54,94.54)	[#]1 and 2	0.978	0.902-1.061	0.591
				[#]1 and 3	0.976	0.899-1.060	0.565
H19c10	96.75(96.05,97.35)	96.75(96.05,97.35)	96.77(96.26,97.64)	[#]1 and 2	1.137	0.820-1.575	0.442
				[#]1 and 3	1.259	0.802-1.976	0.317
H19c11	89.43(87.62,91.15)	89.43(87.62,91.15)	90.32(89.04,91.58)	[#]1 and 2	0.953	0.811-1.119	0.555
				[#]1 and 3	1.117	0.909-1.373	0.291
H19c12	97.44(96.85,98.07)	97.44(96.85,98.07)	97.51(97.1,98.09)	[#]1 and 2	1.355	0.900-2.040	0.146
				[#]1 and 3	1.191	0.711-1.994	0.507
H19c13	97.91(97.37,98.36)	97.91(97.37,98.36)	98.19(97.56,98.60)	[#]1 and 2	1.542	0.957-2.486	0.075
				[#]1 and 3	1.471	0.807-2.682	0.208
H19c14	98.29(97.89,98.67)	98.29(97.89,98.67)	98.67(98.32,98.78)	[#]1 and 2	0.971	0.651-1.449	0.887
				[#]1 and 3	1.995	0.932-4.267	0.075
H19c15	98.01(97.66,98.45)	98.01(97.66,98.45)	98.06(97.72,98.56)	[#]1 and 2	1.221	0.714-2.087	0.466
				[#]1 and 3	1.119	0.555-2.255	0.753
H19c16	97.75(97.08,97.96)	97.75(97.08,97.96)	97.24(97.11,98.02)	[#]1 and 2	1.085	0.727-1.619	0.691
				[#]1 and 3	0.863	0.515-1.445	0.575
H19c17	97.61(97.18,98.02)	97.61(97.18,98.02)	97.73(97.29,98.38)	[#]1 and 2	0.967	0.631-1.480	0.876
				[#]1 and 3	1.261	0.717-2.219	0.420
H19c18	94.72(94.07,95.64)	94.72(94.07,95.64)	95.33(94.35,95.69)	[#]1 and 2	1.075	0.811-1.424	0.616
				[#]1 and 3	1.173	0.821-1.675	0.380
H19c19	97.04(96.59,97.73)	97.04(96.59,97.73)	96.80(96.53,97.47)	[#]1 and 2	1.339	0.859-2.088	0.198

				[#]1 and 3	1.029	0.603-1.758	0.916
H19d1	52.67(47.59,56.89)	52.67(47.59,56.89)	51.19(46.42,57.56)	[#]1 and 2	0.994	0.948-1.041	0.785
				[#]1 and 3	1.006	0.954-1.060	0.826
H19d2	52.33(48.09,56.71)	52.33(48.09,56.71)	52.03(45.53,58.24)	[#]1 and 2	0.984	0.939-1.031	0.500
				[#]1 and 3	0.996	0.938-1.058	0.904
H19d3	53.00(50.18,56.27)	53.00(50.18,56.27)	50.75(45.79,57.16)	[#]1 and 2	0.980	0.931-1.033	0.456
				[#]1 and 3	0.987	0.925-1.053	0.689
H19d4	52.69(49.65,55.29)	52.69(49.65,55.29)	51.39(47.39,56.35)	[#]1 and 2	0.996	0.948-1.046	0.868
				[#]1 and 3	0.991	0.932-1.054	0.786
H19d5	53.72(50.79,57.04)	53.72(50.79,57.04)	52.38(47.71,58.14)	[#]1 and 2	1.001	0.953-1.053	0.956
				[#]1 and 3	1.006	0.945-1.071	0.850
H19d6	82.48(78.72,87.73)	82.48(78.72,87.73)	82.71(78.93,85.02)	[#]1 and 2	0.969	0.912-1.029	0.300
				[#]1 and 3	0.975	0.903-1.053	0.527
H19d7	74.65(69.69,81.48)	74.65(69.69,81.48)	71.30(68.89,74.00)	[#]1 and 2	0.957	0.911-1.005	0.077
				[#]1 and 3	0.960	0.906-1.017	0.160
H19d8	70.95(64.77,79.63)	70.95(64.77,79.63)	69.36(65.33,71.61)	[#]1 and 2	0.971	0.927-1.017	0.214
				[#]1 and 3	0.978	0.924-1.035	0.438
H19d9	77.59(70.52,85.11)	77.59(70.52,85.11)	75.78(71.6,79.01)	[#]1 and 2	0.967	0.920-1.016	0.184
				[#]1 and 3	0.973	0.916-1.035	0.387
H19d10	61.88(55.95,66.03)	61.88(55.95,66.03)	59.59(56.29,64.93)	[#]1 and 2	1.007	0.963-1.053	0.757
				[#]1 and 3	1.001	0.946-1.060	0.960
MALAT1a1	33.17(31.89,34.58)	33.17(31.89,34.58)	33.33(31.25,34.94)	[#]1 and 2	1.036	0.858-1.250	0.714
				[#]1 and 3	0.996	0.796-1.247	0.975
MALAT1a2	25.95(24.95,27.20)	25.95(24.95,27.20)	25.88(24.9,26.58)	[#]1 and 2	1.120	0.928-1.353	0.238
				[#]1 and 3	0.99	0.782-1.254	0.934
MALAT1a3	20.00(18.05,20.98)	20.00(18.05,20.98)	20.38(19.09,21.84)	[#]1 and 2	1.154	0.943-1.412	0.165

				[#]1 and 3	1.185	0.926-1.517	0.178
				[#]1 and 2	1.232	0.950-1.598	0.116
MALAT1a4	11.97(11.21,13.11)	11.97(11.21,13.11)	13.18(12.14,14.37)	[#]1 and 3	1.781	1.247-2.545	**0.002**
				[#]1 and 2	1.10	0.734-1.648	0.644
MALAT1a5	4.94(4.49,5.37)	4.94(4.49,5.37)	4.79(4.27,5.31)	[#]1 and 3	0.833	0.490-1.417	0.501
				[#]1 and 2	1.087	0.885-1.336	0.427
MALAT1a6	19.57(18.24,21.25)	19.57(18.24,21.25)	19.90(19.13,20.78)	[#]1 and 3	1.122	0.859-1.466	0.397
				[#]1 and 2	1.136	0.920-1.403	0.235
MALAT1a7	25.17(24.22,26.59)	25.17(24.22,26.59)	26.20(24.85,26.91)	[#]1 and 3	1.165	0.902-1.504	0.242
				[#]1 and 2	0.973	0.795-1.192	0.794
MALAT1a8	21.43(20.24,22.86)	21.43(20.24,22.86)	21.37(20.43,22.93)	[#]1 and 3	0.984	0.759-1.276	0.902
				[#]1 and 2	0.991	0.806-1.218	0.928
MALAT1a9	19.71(18.85,20.85)	19.71(18.85,20.85)	19.82(18.80,21.01)	[#]1 and 3	0.981	0.761-1.266	0.884
				[#]1 and 2	1.223	1.015-1.473	**0.035**
MALAT1a10	26.40(25.09,27.41)	26.40(25.09,27.41)	26.47(24.86,27.71)	[#]1 and 3	1.019	0.811-1.279	0.873
				[#]1 and 2	1.006	0.292-3.470	0.992
MALAT1b1	0.62(0.45,0.82)	0.62(0.45,0.82)	0.60(0.46,0.85)	[#]1 and 3	1.062	0.228-4.943	0.939
				[#]1 and 2	3.548	0.886-14.206	0.074
MALAT1b2	0.49(0.37,0.70)	0.49(0.37,0.70)	0.49(0.37,0.60)	[#]1 and 3	0.432	0.057-3.283	0.417
				[#]1 and 2	0.530	0.174-1.616	0.265
MALAT1b3	0.69(0.51,0.91)	0.69(0.51,0.91)	0.77(0.68,0.96)	[#]1 and 3	2.072	0.504-8.509	0.312
				[#]1 and 2	1.128	0.578-2.202	0.725
MALAT1b4	0.75(0.47,0.95)	0.75(0.47,0.95)	0.70(0.51,0.90)	[#]1 and 3	0.686	0.178-2.649	0.585
				[#]1 and 2	1.446	0.378-5.536	0.590
MALAT1b5	0.69(0.56,0.87)	0.69(0.56,0.87)	0.67(0.51,0.93)	[#]1 and 3	0.987	0.177-5.493	0.988
MALAT1b6	0.69(0.48,0.92)	0.69(0.48,0.92)	0.71(0.55,0.92)	[#]1 and 2	0.956	0.347-2.637	0.931

				[#]1 and 3	1.375	0.402-4.706	0.612
MALAT1b7	0.75(0.63,0.92)	0.75(0.63,0.92)	0.80(0.59,1.11)	[#]1 and 2	0.543	0.164-1.793	0.316
				[#]1 and 3	2.312	0.616-8.674	0.214
MALAT1b8	0.84(0.63,1.14)	0.84(0.63,1.14)	0.80(0.65,1.04)	[#]1 and 2	0.205	0.058-0.730	**0.014**
				[#]1 and 3	0.780	0.175-3.477	0.744
MALAT1b9	0.74(0.56,0.89)	0.74(0.56,0.89)	0.79(0.57,0.92)	[#]1 and 2	1.755	0.561-5.491	0.334
				[#]1 and 3	1.557	0.391-6.202	0.530
MALAT1b10	0.75(0.55,0.93)	0.75(0.55,0.93)	0.69(0.46,0.85)	[#]1 and 2	1.427	0.508-4.007	0.500
				[#]1 and 3	0.604	0.152-2.398	0.473
MALAT1b11	0.54(0.37,0.80)	0.54(0.37,0.80)	0.49(0.40,0.76)	[#]1 and 2	0.991	0.362-2.714	0.986
				[#]1 and 3	0.855	0.214-3.413	0.824
MALAT1b12	1.39(1.11,1.64)	1.39(1.11,1.64)	1.37(1.13,1.66)	[#]1 and 2	1.933	0.806-4.638	0.140
				[#]1 and 3	1.255	0.430-3.657	0.678
MALAT1b13	0.55(0.34,0.74)	0.55(0.34,0.74)	0.52(0.39,0.72)	[#]1 and 2	0.710	0.203-2.480	0.592
				[#]1 and 3	0.678	0.119-3.870	0.662
MALAT1b14	0.67(0.49,0.79)	0.67(0.49,0.79)	0.65(0.47,0.81)	[#]1 and 2	4.132	0.927-18.429	0.063
				[#]1 and 3	0.748	0.113-4.948	0.763
MALAT1b15	0.65(0.48,0.82)	0.65(0.48,0.82)	0.69(0.55,0.84)	[#]1 and 2	4.366	1.095-17.416	**0.037**
				[#]1 and 3	1.206	0.199-7.314	0.839
MALAT1c1	69.99(65.89,71.91)	69.99(65.89,71.91)	69.53(66.69,72.05)	[#]1 and 2	0.923	0.842-1.012	0.088
				[#]1 and 3	0.990	0.875-1.121	0.879
MALAT1c2	74.35(70.70,76.79)	74.35(70.70,76.79)	74.77(71.68,76.96)	[#]1 and 2	0.945	0.868-1.029	0.191
				[#]1 and 3	1.016	0.908-1.138	0.780
MALAT1c3	67.41(62.76,70.25)	67.41(62.76,70.25)	68.49(61.54,72.01)	[#]1 and 2	0.971	0.917-1.028	0.312
				[#]1 and 3	1.008	0.931-1.091	0.847
MALAT1c4	70.01(66.10,71.83)	70.01(66.10,71.83)	70.32(66.67,73.72)	[#]1 and 2	0.961	0.895-1.033	0.280

				[#]1 and 3	1.009	0.916-1.110	0.862
MALAT1c5	75.7(72.15,78.07)	75.7(72.15,78.07)	76.72(72.14,79.34)	[#]1 and 2	0.955	0.886-1.029	0.225
				[#]1 and 3	1.020	0.919-1.132	0.708
MALAT1c6	79.69(77.32,82.44)	79.69(77.32,82.44)	81.44(77.58,82.63)	[#]1 and 2	0.944	0.865-1.030	0.197
				[#]1 and 3	1.022	0.905-1.153	0.729

[*]Adjusted for age, gender, smoking and drinking. a: Methylation level is expressed as a percentage. Data was expressed as median (P25, P75). NA: Negative; L OR V: Lymph node or Visceral metastasis; L AND V: Lymph node and Visceral metastasis.1 = NA; 2 = L or V; 3 = L and V. [#]1: 1 as reference.

Table S9. Differences of methylation levels of H19, MALAT1 promoters in tumors from GC patients with different BMI[*]

	Name	Methylation level[a]		Logistic regression analysis		
		Underweight to Normal	Overweight/Obese	Odds Ratio	95%CI	*P*-value
Genes	H19	76.60(75.65,77.43)	76.72(75.74,77.49)	1.034	0.795-1.343	0.804
	MALAT1	8.87(8.68,9.04)	8.86(8.67,9.08)	0.562	0.153-2.059	0.384
Regions	H19A	46.74(45.78,47.93)	46.80(45.04,48.44)	0.999	0.858-1.162	0.986
	H19B	92.79(91.60,94.65)	94.29(92.09,94.66)	1.091	0.889-1.338	0.405
	H19C	95.67(95.32,96.02)	95.83(95.58,96.08)	1.764	0.871-3.573	0.115
	H19D	63.01(59.21,66.91)	63.20(57.88,66.35)	1.008	0.948-1.071	0.800
	MALAT1A	21.04(20.51,21.47)	20.94(20.50,21.61)	0.774	0.461-1.298	0.331
	MALAT1B	0.75(0.70,0.79)	0.74(0.69,0.82)	2.524	0.075-84.431	0.605
	MALAT1C	72.60(69.29,75.01)	71.31(67.27,73.61)	0.922	0.851-0.999	**0.047**
Sites	H19a1	43.15(41.85,44.72)	43.52(41.08,45.26)	1.010	0.877-1.162	0.895
	H19a2	44.22(43.12,46.03)	44.24(42.67,45.95)	0.950	0.877-1.029	0.210
	H19a3	45.65(44.54,46.96)	45.49(44.53,47.19)	1.037	0.899-1.196	0.616
	H19a4	45.22(43.95,46.74)	45.07(43.37,46.67)	0.951	0.821-1.101	0.499
	H19a5	45.28(44.07,46.97)	45.40(43.43,47.37)	1.011	0.878-1.164	0.880
	H19a6	45.64(44.56,47.17)	45.69(44.40,47.34)	1.017	0.881-1.175	0.818
	H19a7	45.71(44.46,47.18)	45.60(44.06,47.54)	0.960	0.888-1.038	0.302
	H19a8	46.39(45.18,47.89)	46.65(44.93,48.08)	1.025	0.886-1.186	0.736
	H19a9	47.19(46.15,48.58)	47.46(46.08,49.16)	1.040	0.889-1.216	0.626
	H19a10	47.3(46.32,48.54)	47.41(46.01,48.95)	1.053	0.900-1.232	0.521
	H19a11	47.49(46.29,48.63)	47.59(46.34,49.28)	1.038	0.888-1.213	0.64
	H19a12	47.22(45.93,48.67)	47.38(45.94,48.96)	1.064	0.923-1.227	0.395
	H19a13	48.79(47.50,50.14)	48.61(47.11,50.78)	1.043	0.902-1.206	0.572
	H19a14	49.10(47.92,50.59)	49.12(48.15,50.90)	1.061	0.919-1.225	0.419
	H19a15	49.07(48.13,50.55)	49.10(47.79,51.16)	1.043	0.895-1.216	0.590
	H19a16	48.93(48.09,50.78)	49.29(47.45,51.11)	1.000	0.860-1.162	0.998
	H19b1	52.27(47.09,88.95)	86.77(46.32,88.91)	1.010	0.995-1.025	0.188
	H19b2	97.40(97.02,97.87)	97.45(96.92,97.74)	0.704	0.385-1.287	0.254
	H19b3	96.41(95.88,96.89)	96.12(95.78,96.58)	0.654	0.381-1.121	0.122
	H19b4	89.24(88.32,90.62)	88.90(87.35,89.59)	0.959	0.899-1.022	0.200
	H19b5	93.75(92.85,94.47)	93.46(92.72,93.97)	0.696	0.485-0.999	0.049
	H19b6	98.04(97.62,98.32)	97.90(97.62,98.21)	0.752	0.360-1.571	0.448
	H19b7	92.45(91.30,93.23)	92.64(90.87,93.47)	0.966	0.738-1.263	0.798
	H19b8	96.28(95.87,96.74)	96.03(95.68,96.42)	0.872	0.599-1.269	0.474
	H19b9	94.58(93.75,95.53)	94.83(93.99,95.65)	1.054	0.810-1.370	0.697
	H19b10	97.34(96.95,97.76)	97.50(96.95,97.80)	1.128	0.650-1.955	0.669
	H19b11	90.67(89.87,91.46)	90.58(89.48,91.73)	0.954	0.750-1.214	0.703
	H19b12	97.04(96.59,97.44)	97.22(96.85,97.69)	1.533	0.866-2.715	0.143
	H19b13	96.76(96.27,97.22)	96.60(96.19,97.15)	0.699	0.408-1.197	0.192
	H19b14	95.31(94.56,95.90)	95.29(94.85,96.16)	1.069	0.756-1.512	0.706

H19b15	97.71(97.19,98.00)	97.71(97.34,98.13)	1.011	0.521-1.962	0.973
H19c1	93.72(92.99,94.71)	93.99(92.40,94.63)	0.980	0.765-1.254	0.871
H19c2	86.48(84.53,88.48)	87.22(86.00,89.00)	1.164	1.003-1.349	**0.045**
H19c3	95.78(94.74,96.54)	95.93(95.38,96.58)	1.048	0.790-1.392	0.743
H19c4	95.51(94.62,96.29)	95.98(95.10,96.64)	1.457	1.056-2.010	**0.022**
H19c5	96.35(95.55,96.94)	96.31(95.42,96.83)	0.893	0.628-1.270	0.529
H19c6	97.02(96.44,97.60)	97.04(96.12,97.74)	1.144	0.814-1.609	0.438
H19c7	97.92(97.38,98.33)	98.12(97.34,98.66)	1.219	0.797-1.864	0.362
H19c8	96.96(96.46,97.51)	97.04(96.53,98.13)	1.320	0.937-1.858	0.112
H19c9	93.59(92.58,94.47)	93.71(92.71,94.23)	1.130	0.901-1.418	0.290
H19c10	96.81(96.23,97.44)	96.79(96.04,97.65)	0.993	0.707-1.394	0.968
H19c11	89.57(87.58,91.21)	89.48(88.22,91.18)	1.087	0.922-1.281	0.320
H19c12	97.49(97.16,98.09)	97.54(96.87,97.82)	0.768	0.515-1.148	0.198
H19c13	98.01(97.53,98.55)	97.97(97.55,98.62)	0.996	0.621-1.598	0.986
H19c14	98.43(98.03,98.78)	98.36(97.82,98.93)	0.905	0.580-1.413	0.660
H19c15	98.18(97.78,98.53)	98.08(97.72,98.44)	0.882	0.509-1.529	0.655
H19c16	97.61(97.12,97.94)	97.75(97.06,98.41)	1.022	0.678-1.542	0.917
H19c17	97.65(97.20,98.09)	97.73(97.36,98.07)	1.157	0.749-1.787	0.512
H19c18	95.08(94.20,95.70)	94.79(94.01,95.67)	0.932	0.703-1.236	0.626
H19c19	97.23(96.68,97.61)	97.12(96.56,97.56)	0.765	0.494-1.185	0.230
H19d1	52.67(47.46,56.69)	54.69(46.02,59.34)	1.031	0.984-1.080	0.197
H19d2	52.50(47.95,57.14)	52.33(48.56,56.90)	1.021	0.973-1.071	0.405
H19d3	53.00(49.15,56.99)	51.22(48.61,57.45)	1.001	0.950-1.054	0.977
H19d4	52.69(49.18,56.65)	52.23(48.78,55.62)	1.004	0.955-1.055	0.881
H19d5	53.72(49.15,57.90)	54.72(50.89,58.14)	1.021	0.969-1.075	0.441
H19d6	82.48(79.17,86.42)	84.44(76.00,88.89)	1.015	0.955-1.078	0.636
H19d7	73.55(70.00,80.00)	72.22(65.35,79.17)	0.987	0.945-1.030	0.538
H19d8	70.66(65.98,77.42)	69.54(62.98,74.29)	0.984	0.940-1.029	0.477
H19d9	76.85(72.29,82.09)	74.93(69.23,85.04)	1.006	0.957-1.056	0.820
H19d10	61.88(57.58,66.67)	62.64(54.55,66.29)	0.992	0.949-1.038	0.738
MALAT1a1	33.17(32.00,34.47)	33.17(31.51,35.39)	0.991	0.825-1.190	0.922
MALAT1a2	26.28(24.91,27.46)	25.69(24.48,27.17)	0.874	0.722-1.059	0.168
MALAT1a3	20.05(18.89,20.99)	20.36(19.23,21.50)	0.984	0.807-1.201	0.877
MALAT1a4	12.35(11.58,13.55)	12.37(11.28,13.10)	0.913	0.713-1.170	0.473
MALAT1a5	4.94(4.48,5.51)	4.97(4.43,5.77)	1.144	0.753-1.737	0.528
MALAT1a6	19.77(18.74,21.08)	19.78(18.71,21.26)	1.028	0.831-1.272	0.799
MALAT1a7	25.77(24.63,27.12)	25.50(24.63,26.40)	0.832	0.668-1.035	0.098
MALAT1a8	21.37(20.23,22.74)	21.88(20.76,22.33)	1.037	0.839-1.282	0.738
MALAT1a9	19.88(18.91,20.90)	19.48(17.84,20.51)	0.912	0.737-1.128	0.396
MALAT1a10	26.56(25.03,27.82)	26.40(25.51,27.39)	1.005	0.840-1.203	0.958
MALAT1b1	0.63(0.43,0.85)	0.64(0.51,0.91)	2.217	0.628-7.820	0.216
MALAT1b2	0.55(0.41,0.71)	0.49(0.39,0.75)	0.941	0.281-3.147	0.921
MALAT1b3	0.75(0.54,0.90)	0.65(0.52,0.89)	0.766	0.240-2.445	0.653
MALAT1b4	0.71(0.48,0.92)	0.63(0.47,0.95)	0.882	0.415-1.876	0.745

MALAT1b5	0.69(0.55,0.88)	0.67(0.52,0.95)	1.337	0.358-4.984	0.666
MALAT1b6	0.74(0.51,0.92)	0.65(0.50,0.92)	1.140	0.424-3.064	0.796
MALAT1b7	0.72(0.55,0.88)	0.75(0.59,1.07)	3.683	1.16-11.691	**0.027**
MALAT1b8	0.81(0.59,1.03)	0.75(0.64,0.95)	0.791	0.236-2.654	0.704
MALAT1b9	0.76(0.56,0.92)	0.72(0.44,0.92)	0.749	0.246-2.285	0.612
MALAT1b10	0.73(0.52,0.93)	0.73(0.51,1.00)	1.299	0.462-3.651	0.620
MALAT1b11	0.52(0.35,0.75)	0.52(0.39,0.81)	1.274	0.472-3.438	0.633
MALAT1b12	1.40(1.13,1.63)	1.38(1.12,1.69)	1.064	0.455-2.492	0.886
MALAT1b13	0.55(0.35,0.75)	0.52(0.35,0.70)	0.398	0.095-1.675	0.209
MALAT1b14	0.72(0.55,0.85)	0.66(0.46,0.83)	0.833	0.198-3.503	0.803
MALAT1b15	0.70(0.54,0.86)	0.69(0.53,0.87)	0.977	0.417-2.290	0.958
MALAT1c1	69.55(66.44,71.42)	68.03(63.98,71.17)	0.929	0.847-1.019	0.120
MALAT1c2	74.33(71.16,76.87)	72.93(69.81,75.77)	0.926	0.850-1.009	0.079
MALAT1c3	67.47(62.84,71.45)	66.60(59.95,68.75)	0.932	0.878-0.990	**0.022**
MALAT1c4	69.99(66.77,72.27)	68.77(65.73,71.60)	0.948	0.884-1.017	0.135
MALAT1c5	75.64(72.24,78.86)	74.86(70.76,76.74)	0.937	0.872-1.008	0.080
MALAT1c6	79.81(77.31,82.57)	79.33(76.92,81.25)	0.907	0.830-0.991	**0.031**

*Adjusted for age, gender, smoking and drinking. a: Methylation level is expressed as a percentage. Data was expressed as median (P_{25}, P_{75}).

Table S10. Differences of methylation levels of H19, MALAT1 promoters in GC tumors arising in the upper third, middle third, and diffused type[*]

	Name	Methylation level[a]				Logistic regression analysis	Odds Ratio	95%CI	*P*-value
		Upper third	Middle third	Lower third	Diffused type				
Genes									
	H19	76.69(76.14,77.58)	76.54(75.26,77.48)	76.72(75.70,77.44)	76.45(75.14,77.30)	[#]1 and 2	0.798	0.584-1.090	0.156
						[#]1 and 3	0.907	0.673-1.222	0.522
						[#]1 and 4	0.835	0.566-1.233	0.364
						[#]2 and 3	1.137	0.830-1.557	0.424
						[#]2 and 4	1.047	0.699-1.566	0.825
						[#]3 and 4	0.921	0.621-1.366	0.681
	MALAT1	8.89(8.70,9.12)	8.81(8.65,9.01)	8.80(8.66,8.96)	9.04(8.92,9.23)	[#]1 and 2	0.253	0.051-1.243	0.091
						[#]1 band 3	0.246	0.053-1.148	0.074
						[#]1 and 4	5.161	0.676-39.371	0.113
						[#]2 and 3	0.972	0.193-4.884	0.972
						[#]2 and 4	20.430	2.282-182.374	**0.007**
						[#]3 and 4	21.001	2.444-180.446	**0.006**
Regions									
	H19A	46.88(45.82,48.49)	46.67(45.58,47.87)	46.92(45.57,48.36)	45.92(45.40,46.51)	[#]1 and 2	0.919	0.767-1.100	0.354
						[#]1 and 3	0.976	0.824-1.156	0.780
						[#]1 and 4	0.872	0.695-1.095	0.238
						[#]2 and 3	1.063	0.877-1.288	0.534
						[#]2 and 4	0.949	0.746-1.208	0.672
						[#]3 and 4	0.893	0.705-1.131	0.349
	H19B	93.90(91.90,94.65)	93.79(91.79,94.69)	92.37(91.45,94.71)	92.43(91.38,94.39)	[#]1 and 2	1.017	0.802-1.289	0.890
						[#]1 and 3	0.893	0.713-1.118	0.323
						[#]1 and 4	0.838	0.631-1.113	0.223
						[#]2 and 3	0.878	0.693-1.112	0.281

					[#]2 and 4	0.824	0.613-1.108	0.200
					[#]3 and 4	0.939	0.708-1.244	0.659
					[#]1 and 2	0.730	0.345-1.548	0.412
					[#]1 and 3	0.857	0.413-1.778	0.679
					[#]1 and 4	0.720	0.294-1.766	0.473
H19C	95.72(95.40,96.02)	95.64(95.33,95.96)	95.88(95.26,96.15)	95.65(95.59,95.96)	[#]2 and 3	1.173	0.555-2.479	0.675
					[#]2 and 4	0.986	0.395-2.463	0.976
					[#]3 and 4	0.840	0.343-2.056	0.703
					[#]1 and 2	0.973	0.905-1.046	0.463
					[#]1 and 3	0.993	0.924-1.067	0.850
					[#]1 and 4	1.004	0.913-1.105	0.929
H19D	63.32(59.14,67.56)	62.84(57.85,66.10)	63.01(58.76,67.33)	64.69(59.10,67.03)	[#]2 and 3	1.020	0.950-1.096	0.581
					[#]2 and 4	1.032	0.936-1.137	0.527
					[#]3 and 4	1.011	0.919-1.113	0.818
					[#]1 and 2	0.596	0.318-1.118	0.107
					[#]1 and 3	0.574	0.311-1.059	0.075
					[#]1 and 4	2.042	0.907-4.596	0.085
MALAT1A	21.13(20.58,21.76)	20.84(20.46,21.47)	20.78(20.5,21.34)	21.42(21.21,22.01)	[#]2 and 3	0.963	0.507-1.831	0.909
					[#]2 and 4	3.426	1.431-8.199	**0.006**
					[#]3 and 4	3.556	1.505-8.403	**0.004**
					[#]1 and 2	0.552	0.009-32.691	0.775
					[#]1 and 3	1.085	0.022-53.677	0.967
MALAT1B	0.76(0.69,0.81)	0.76(0.72,0.81)	0.74(0.69,0.79)	0.74(0.70,0.77)	[#]1 and 4	0.119	0.000-49.579	0.489
					[#]2 and 3	1.965	0.027-143.618	0.758
					[#]2 and 4	0.215	0.000-115.020	0.632

						[#]3 and 4	0.110	0.000-51.511	0.481
						[#]1 and 2	1.046	0.955-1.145	0.337
						[#]1 and 3	1.004	0.919-1.097	0.924
	MALAT1C	72.62(68.16,74.66)	72.08(69.89,74.45)	72.87(67.81,74.88)	72.00(67.80,73.04)	[#]1 and 4	0.985	0.875-1.109	0.804
						[#]2 and 3	0.961	0.872-1.058	0.414
						[#]2 and 4	0.942	0.830-1.069	0.356
						[#]3 and 4	0.981	0.866-1.111	0.760
Sites						[#]1 and 2	0.886	0.746-1.053	0.170
						[#]1 and 3	0.941	0.805-1.101	0.450
	H19a1	43.47(41.67,45.10)	43.00(41.62,44.61)	43.50(41.77,45.50)	42.74(41.90,43.32)	[#]1 and 4	0.890	0.718-1.102	0.284
						[#]2 and 3	1.062	0.885-1.275	0.515
						[#]2 and 4	1.004	0.797-1.265	0.974
						[#]3 and 4	0.945	0.757-1.180	0.616
						[#]1 and 2	0.994	0.920-1.075	0.883
						[#]1 and 3	1.035	0.941-1.139	0.475
	H19a2	44.65(43.35,46.63)	43.99(42.94,45.44)	44.78(42.83,46.35)	43.99(42.86,44.82)	[#]1 and 4	1.012	0.902-1.135	0.839
						[#]2 and 3	1.041	0.957-1.133	0.347
						[#]2 and 4	1.018	0.916-1.131	0.740
						[#]3 and 4	0.977	0.868-1.101	0.707
						[#]1 and 2	0.896	0.749-1.071	0.226
						[#]1 and 3	0.929	0.790-1.094	0.377
	H19a3	45.65(44.68,47.38)	45.73(44.42,47.11)	45.78(44.55,47.17)	45.27(44.02,45.92)	[#]1 and 4	0.858	0.680-1.083	0.197
						[#]2 and 3	1.037	0.856-1.257	0.707
						[#]2 and 4	0.958	0.746-1.230	0.736
						[#]3 and 4	0.923	0.726-1.175	0.517

H19a4	45.40(43.94,47.12)	45.25(44.12,46.42)	45.48(43.81,47.00)	44.65(43.69,45.40)	[#]1 and 2	0.968	0.817-1.146	0.703
					[#]1 and 3	1.011	0.860-1.188	0.898
					[#]1 and 4	0.910	0.730-1.133	0.399
					[#]2 and 3	1.044	0.873-1.249	0.634
					[#]2 and 4	0.940	0.746-1.184	0.600
					[#]3 and 4	0.900	0.717-1.129	0.363
H19a5	45.40(43.96,47.46)	45.41(44.20,46.55)	45.54(44.07,47.04)	44.72(43.89,45.17)	[#]1 and 2	0.888	0.750-1.053	0.171
					[#]1 and 3	0.920	0.783-1.082	0.314
					[#]1 and 4	0.871	0.700-1.083	0.213
					[#]2 and 3	1.036	0.864-1.242	0.702
					[#]2 and 4	0.980	0.778-1.234	0.864
					[#]3 and 4	0.946	0.755-1.185	0.629
H19a6	45.77(44.57,47.62)	46.02(44.52,47.09)	45.68(44.78,47.29)	45.12(44.10,45.63)	[#]1 and 2	0.911	0.765-1.086	0.299
					[#]1 and 3	0.925	0.784-1.091	0.355
					[#]1 and 4	0.853	0.682-1.068	0.165
					[#]2 and 3	1.015	0.842-1.224	0.877
					[#]2 and 4	0.936	0.739-1.186	0.585
					[#]3 and 4	0.922	0.733-1.160	0.490
H19a7	45.84(44.43,47.43)	45.80(44.81,47.20)	45.83(44.46,47.57)	45.02(43.92,45.42)	[#]1 and 2	0.890	0.771-1.028	0.113
					[#]1 and 3	0.944	0.816-1.094	0.445
					[#]1 and 4	0.906	0.775-1.058	0.212
					[#]2 and 3	1.061	0.937-1.202	0.351
					[#]2 and 4	1.017	0.921-1.123	0.734
					[#]3 and 4	0.959	0.834-1.102	0.554
H19a8	46.53(45.10,48.40)	46.43(45.40,47.78)	46.63(44.99,48.34)	45.85(44.72,46.63)	[#]1 and 2	0.891	0.743-1.068	0.210
					[#]1 and 3	0.929	0.786-1.097	0.385

					[#]1 and 4	0.830	0.654-1.053	0.126
					[#]2 and 3	1.043	0.858-1.267	0.672
					[#]2 and 4	0.932	0.723-1.201	0.587
					[#]3 and 4	0.894	0.699-1.143	0.370
					[#]1 and 2	0.968	0.805-1.165	0.732
					[#]1 and 3	0.964	0.808-1.149	0.679
H19a9	47.36(46.06,48.84)	47.65(46.12,49.04)	47.51(46.22,49.33)	46.61(46.02,46.92)	[#]1 and 4	0.836	0.660-1.057	0.135
					[#]2 and 3	0.995	0.818-1.210	0.961
					[#]2 and 4	0.863	0.673-1.107	0.246
					[#]3 and 4	0.867	0.682-1.103	0.247
					[#]1 and 2	0.958	0.797-1.153	0.652
					[#]1 and 3	0.976	0.820-1.162	0.784
H19a10	47.28(46.03,48.82)	47.54(46.50,48.60)	47.68(46.47,49.21)	46.48(46.07,46.96)	[#]1 and 4	0.849	0.671-1.075	0.174
					[#]2 and 3	1.018	0.837-1.239	0.857
					[#]2 and 4	0.886	0.690-1.137	0.342
					[#]3 and 4	0.870	0.682-1.110	0.262
					[#]1 and 2	0.982	0.820-1.176	0.840
					[#]1 and 3	1.002	0.844-1.190	0.982
H19a11	47.49(46.49,49.00)	47.80(46.15,48.74)	48.02(46.54,49.15)	46.52(45.95,47.53)	[#]1 and 4	0.895	0.716-1.118	0.329
					[#]2 and 3	1.021	0.844-1.234	0.832
					[#]2 and 4	0.912	0.720-1.155	0.445
					[#]3 and 4	0.893	0.709-1.125	0.337
					[#]1 and 2	0.898	0.776-1.041	0.153
					[#]1 and 3	0.983	0.841-1.148	0.825
H19a12	47.24(46.09,48.77)	47.36(45.71,48.40)	47.75(45.80,49.38)	46.49(45.86,47.26)	[#]1 and 4	0.883	0.735-1.061	0.185
					[#]2 and 3	1.094	0.927-1.291	0.289

					[#]2 and 4	0.983	0.822-1.174	0.848
					[#]3 and 4	0.899	0.737-1.095	0.289
					[#]1 and 2	0.899	0.737-1.095	0.289
					[#]1 and 3	0.976	0.831-1.148	0.773
H19a13	48.77(47.47,50.54)	48.90(47.84,49.91)	49.22(47.09,50.69)	47.87(47.43,48.51)	[#]1 and 4	0.874	0.705-1.084	0.220
					[#]2 and 3	1.006	0.840-1.204	0.948
					[#]2 and 4	0.901	0.718-1.130	0.367
					[#]3 and 4	0.895	0.717-1.117	0.328
					[#]1 and 2	0.973	0.833-1.138	0.735
					[#]1 and 3	1.015	0.869-1.186	0.848
H19a14	49.03(47.76,50.32)	49.66(47.93,50.71)	49.67(48.19,51.33)	48.44(48.04,48.87)	[#]1 and 4	0.914	0.751-1.113	0.373
					[#]2 and 3	1.043	0.878-1.239	0.632
					[#]2 and 4	0.939	0.761-1.159	0.560
					[#]3 and 4	0.901	0.731-1.110	0.327
					[#]1 and 2	0.993	0.832-1.186	0.938
					[#]1 and 3	1.032	0.871-1.224	0.712
H19a15	49.10(48.01,50.58)	49.28(48.22,50.61)	49.68(47.9,51.2)	48.30(48.02,48.72)	[#]1 and 4	0.899	0.722-1.121	0.345
					[#]2 and 3	1.040	0.861-1.256	0.686
					[#]2 and 4	0.906	0.716-1.146	0.410
					[#]3 and 4	0.871	0.691-1.097	0.242
					[#]1 and 2	1.033	0.868-1.229	0.715
					[#]1 and 3	1.022	0.863-1.211	0.798
H19a16	48.78(48.00,51.03)	49.39(48.21,51.13)	50.06(47.65,51.26)	48.34(47.97,48.93)	[#]1 and 4	0.911	0.737-1.126	0.387
					[#]2 and 3	0.990	0.820-1.194	0.914
					[#]2 and 4	0.882	0.701-1.109	0.282
					[#]3 and 4	0.891	0.712-1.114	0.311

H19b1	85.59(49.37,88.87)	85.78(49.36,89.16)	50.53(45.08,89.56)	49.51(46.09,87.77)	[#]1 and 2	1.001	0.984-1.018	0.948
					[#]1 and 3	0.989	0.974-1.005	0.191
					[#]1 and 4	0.986	0.966-1.005	0.152
					[#]2 and 3	0.989	0.973-1.005	0.186
					[#]2 and 4	0.985	0.965-1.005	0.150
					[#]3 and 4	0.996	0.977-1.016	0.690
H19b2	97.44(96.88,97.67)	97.34(97.02,97.92)	97.54(96.99,97.87)	97.32(96.97,97.88)	[#]1 and 2	0.933	0.467-1.866	0.845
					[#]1 and 3	1.421	0.713-2.832	0.318
					[#]1 and 4	0.882	0.356-2.189	0.787
					[#]2 and 3	1.523	0.734-3.160	0.259
					[#]2 and 4	0.945	0.366-2.439	0.907
					[#]3 and 4	0.621	0.242-1.591	0.321
H19b3	96.35(95.82,96.89)	96.07(95.77,96.51)	96.29(95.83,96.84)	96.64(95.99,97.23)	[#]1 and 2	0.589	0.314-1.106	0.099
					[#]1 and 3	0.819	0.449-1.492	0.514
					[#]1 and 4	1.497	0.664-3.373	0.330
					[#]2 and 3	1.390	0.722-2.679	0.325
					[#]2 and 4	2.542	1.061-6.089	0.036
					[#]3 and 4	1.828	0.788-4.242	0.160
H19b4	88.95(87.28,90.37)	89.06(88.41,90.68)	89.21(88.26,90.08)	89.32(87.89,91.09)	[#]1 and 2	1.085	0.919-1.282	0.334
					[#]1 and 3	1.054	0.936-1.187	0.386
					[#]1 and 4	0.989	0.920-1.064	0.773
					[#]2 and 3	0.971	0.810-1.164	0.751
					[#]2 and 4	0.911	0.767-1.084	0.294
					[#]3 and 4	0.939	0.827-1.065	0.326
H19b5	93.62(92.94,94.39)	93.72(92.84,94.29)	93.75(92.53,94.31)	93.83(92.77,94.20)	[#]1 and 2	0.945	0.639-1.397	0.775
					[#]1 and 3	0.874	0.594-1.285	0.493

					[#]1 and 4	0.916	0.550-1.525	0.736
					[#]2 and 3	0.925	0.610-1.403	0.714
					[#]2 and 4	0.970	0.566-1.661	0.910
					[#]3 and 4	1.048	0.616-1.782	0.862
					[#]1 and 2	1.224	0.515-2.911	0.647
					[#]1 and 3	0.858	0.378-1.952	0.716
H19b6	97.97(97.64,98.36)	98.02(97.73,98.30)	97.95(97.58,98.22)	97.9(97.55,98.33)	[#]1 and 4	0.792	0.272-2.303	0.668
					[#]2 and 3	0.701	0.285-1.726	0.440
					[#]2 and 4	0.647	0.206-2.030	0.455
					[#]3 and 4	0.922	0.306-2.782	0.886
					[#]1 and 2	0.813	0.591-1.119	0.204
					[#]1 and 3	1.110	0.819-1.506	0.502
H19b7	92.37(91.28,93.19)	92.19(90.77,92.75)	92.65(91.68,93.39)	93.16(91.42,93.86)	[#]1 and 4	1.146	0.770-1.705	0.503
					[#]2 and 3	1.365	0.973-1.914	0.071
					[#]2 and 4	1.409	0.918-2.162	0.117
					[#]3 and 4	1.032	0.688-1.549	0.879
					[#]1 and 2	0.778	0.481-1.257	0.305
					[#]1 and 3	0.787	0.484-1.278	0.333
H19b8	96.29(95.74,96.82)	96.19(95.67,96.69)	96.11(95.67,96.62)	96.43(96.08,96.63)	[#]1 and 4	1.237	0.575-2.661	0.586
					[#]2 and 3	1.012	0.664-1.542	0.956
					[#]2 and 4	1.591	0.735-3.442	0.238
					[#]3 and 4	1.572	0.728-3.397	0.250
					[#]1 and 2	0.999	0.732-1.364	0.996
					[#]1 and 3	1.298	0.942-1.788	0.110
H19b9	94.47(93.55,95.18)	94.59(93.42,95.67)	94.83(94.14,95.86)	94.84(94.40,95.62)	[#]1 and 4	1.540	1.009-2.350	**0.045**
					[#]2 and 3	1.299	0.929-1.817	0.126

					[#]2 and 4	1.541	0.995-2.387	0.053
					[#]3 and 4	1.186	0.783-1.797	0.421
					[#]1 and 2	1.032	0.528-2.019	0.926
					[#]1 and 3	0.776	0.408-1.474	0.438
H19b10	97.42(96.99,97.75)	97.45(97.13,97.85)	97.34(96.94,97.75)	97.17(96.52,97.79)	[#]1 and 4	0.386	0.169-0.884	**0.024**
					[#]2 and 3	0.751	0.379-1.490	0.413
					[#]2 and 4	0.374	0.157-0.892	**0.027**
					[#]3 and 4	0.498	0.218-1.138	0.098
					[#]1 and 2	1.047	0.808-1.357	0.729
					[#]1 and 3	1.210	0.913-1.604	0.184
H19b11	90.55(89.62,91.32)	90.81(89.42,91.50)	90.82(89.77,91.75)	90.64(90.21,91.41)	[#]1 and 4	1.219	0.839-1.770	0.298
					[#]2 and 3	1.156	0.866-1.543	0.324
					[#]2 and 4	1.164	0.794-1.707	0.436
					[#]3 and 4	1.007	0.681-1.490	0.972
					[#]1 and 2	1.225	0.658-2.281	0.523
					[#]1 and 3	1.310	0.717-2.391	0.380
H19b12	96.99(96.50,97.40)	97.15(96.77,97.44)	97.14(96.71,97.61)	97.15(96.7,97.48)	[#]1 and 4	1.611	0.713-3.638	0.252
					[#]2 and 3	1.069	0.558-2.049	0.840
					[#]2 and 4	1.315	0.560-3.090	0.530
					[#]3 and 4	1.230	0.534-2.831	0.627
					[#]1 and 2	1.093	0.591-2.021	0.776
					[#]1 and 3	0.933	0.514-1.695	0.820
H19b13	96.89(96.25,97.24)	96.69(96.32,96.97)	96.53(96.05,97.22)	96.91(96.29,97.19)	[#]1 and 4	1.125	0.515-2.454	0.768
					[#]2 and 3	0.854	0.458-1.591	0.618
					[#]2 and 4	1.029	0.460-2.303	0.945
					[#]3 and 4	1.205	0.546-2.659	0.644

H19b14	95.21(94.73,95.92)	95.11(94.04,95.92)	95.71(94.93,96.19)	95.56(95.00,95.78)	[#]1 and 2	0.821	0.566-1.192	0.300
					[#]1 and 3	1.052	0.718-1.541	0.796
					[#]1 and 4	1.047	0.637-1.723	0.855
					[#]2 and 3	1.281	0.856-1.916	0.229
					[#]2 and 4	1.275	0.761-2.138	0.356
					[#]3 and 4	0.996	0.592-1.675	0.988
H19b15	97.76(97.17,98.19)	97.75(97.37,98.10)	97.40(96.99,97.75)	97.90(97.78,98.01)	[#]1 and 2	1.124	0.492-2.566	0.782
					[#]1 and 3	0.353	0.158-0.788	**0.011**
					[#]1 and 4	2.138	0.702-6.515	0.181
					[#]2 and 3	0.314	0.131-0.750	**0.009**
					[#]2 and 4	1.903	0.592-6.122	0.280
					[#]3 and 4	6.060	1.855-19.799	**0.003**
H19c1	93.96(92.48,95.12)	93.46(92.88,94.03)	93.84(92.85,94.66)	93.86(92.92,94.40)	[#]1 and 2	0.787	0.589-1.052	0.106
					[#]1 and 3	0.909	0.686-1.204	0.505
					[#]1 and 4	0.880	0.613-1.263	0.487
					[#]2 and 3	1.155	0.862-1.547	0.334
					[#]2 and 4	1.118	0.770-1.624	0.559
					[#]3 and 4	0.968	0.670-1.399	0.862
H19c2	86.82(84.3,88.46)	86.63(85.22,88.78)	86.90(84.75,88.91)	86.48(85.56,89.02)	[#]1 and 2	1.028	0.878-1.203	0.735
					[#]1 and 3	1.040	0.893-1.212	0.615
					[#]1 and 4	1.081	0.886-1.320	0.443
					[#]2 and 3	1.012	0.860-1.191	0.885
					[#]2 and 4	1.052	0.854-1.297	0.633
					[#]3 and 4	1.040	0.847-1.276	0.710
H19c3	96.03(95.27,96.70)	95.52(94.74,96.30)	95.92(94.61,96.56)	95.76(94.73,96.88)	[#]1 and 2	0.737	0.528-1.029	0.073
					[#]1 and 3	0.853	0.619-1.176	0.332

					[#]1 and 4	0.862	0.568-1.306	0.483
					[#]2 and 3	1.157	0.827-1.619	0.396
					[#]2 and 4	1.168	0.758-1.801	0.480
					[#]3 and 4	1.010	0.661-1.543	0.963
					[#]1 and 2	0.824	0.595-1.141	0.243
					[#]1 and 3	0.800	0.580-1.103	0.173
H19c4	95.93(94.65,96.62)	95.50(94.91,96.15)	95.41(94.28,95.96)	95.19(94.89,96.41)	[#]1 and 4	0.875	0.581-1.319	0.525
					[#]2 and 3	0.971	0.703-1.341	0.858
					[#]2 and 4	1.063	0.702-1.609	0.774
					[#]3 and 4	1.094	0.728-1.645	0.664
					[#]1 and 2	1.091	0.733-1.625	0.667
					[#]1 and 3	1.130	0.762-1.676	0.542
H19c5	96.13(95.31,96.76)	96.42(95.73,96.97)	96.39(95.8,97.02)	96.39(95.29,97.03)	[#]1 and 4	1.086	0.642-1.838	0.758
					[#]2 and 3	1.036	0.691-1.553	0.865
					[#]2 and 4	0.995	0.579-1.710	0.987
					[#]3 and 4	0.961	0.563-1.642	0.884
					[#]1 and 2	0.798	0.547-1.165	0.243
					[#]1 and 3	0.880	0.602-1.285	0.507
H19c6	97.32(96.56,97.75)	96.76(96.42,97.50)	96.98(96.09,97.69)	96.87(95.93,97.54)	[#]1 and 4	0.884	0.541-1.445	0.623
					[#]2 and 3	1.102	0.759-1.599	0.609
					[#]2 and 4	1.108	0.681-1.802	0.681
					[#]3 and 4	1.005	0.616-1.640	0.984
					[#]1 and 2	0.957	0.591-1.550	0.858
					[#]1 and 3	0.874	0.551-1.387	0.568
H19c7	98.06(97.37,98.37)	97.89(97.43,98.35)	97.81(97.32,98.41)	98.04(97.31,98.41)	[#]1 and 4	1.114	0.586-2.118	0.741
					[#]2 and 3	0.914	0.565-1.477	0.713

					#2 and 4	1.164	0.600-2.259	0.653
					#3 and 4	1.274	0.667-2.435	0.463
					#1 and 2	1.010	0.745-1.371	0.947
					#1 and 3	1.157	0.832-1.608	0.386
H19c8	97.14(96.47,97.69)	96.93(96.5,97.61)	97.02(96.46,97.94)	96.90(96.46,97.50)	#1 and 4	1.075	0.717-1.613	0.725
					#2 and 3	1.145	0.807-1.625	0.449
					#2 and 4	1.064	0.693-1.634	0.776
					#3 and 4	0.930	0.599-1.443	0.745
					#1 and 2	0.980	0.873-1.101	0.738
					#1 and 3	0.963	0.874-1.061	0.443
H19c9	93.50(92.43,94.00)	93.57(92.19,94.2)	93.96(92.71,94.88)	93.70(92.86,94.28)	#1 and 4	0.942	0.856-1.038	0.230
					#2 and 3	0.982	0.892-1.081	0.713
					#2 and 4	0.961	0.873-1.058	0.421
					#3 and 4	0.979	0.917-1.045	0.521
					#1 and 2	0.874	0.596-1.282	0.490
					#1 and 3	1.091	0.735-1.621	0.665
H19c10	96.88(96.13,97.62)	96.76(96.06,97.22)	96.81(96.35,97.48)	96.67(96.17,97.29)	#1 and 4	0.921	0.555-1.529	0.749
					#2 and 3	1.249	0.830-1.879	0.286
					#2 and 4	1.054	0.628-1.767	0.843
					#3 and 4	0.844	0.498-1.430	0.528
					#1 and 2	1.037	0.856-1.256	0.713
					#1 and 3	0.950	0.790-1.143	0.588
H19c11	89.84(87.88,91.28)	89.64(88.07,91.46)	89.31(87.43,91.01)	89.21(87.43,91.20)	#1 and 4	0.986	0.773-1.259	0.912
					#2 and 3	0.917	0.757-1.110	0.374
					#2 and 4	0.951	0.739-1.225	0.699
					#3 and 4	1.038	0.812-1.327	0.767

H19c12	97.48(97.13,97.98)	97.49(96.84,98.04)	97.39(97.02,98.05)	97.70(97.44,98.16)	[#]1 and 2	0.870	0.555-1.364	0.545
					[#]1 and 3	1.097	0.678-1.773	0.706
					[#]1 and 4	1.466	0.727-2.957	0.286
					[#]2 and 3	1.260	0.766-2.075	0.363
					[#]2 and 4	1.684	0.818-3.469	0.157
					[#]3 and 4	1.336	0.649-2.750	0.431
H19c13	98.15(97.60,98.63)	97.94(97.66,98.34)	97.84(97.03,98.62)	98.01(97.72,98.77)	[#]1 and 2	0.804	0.454-1.426	0.456
					[#]1 and 3	0.548	0.313-0.959	**0.035**
					[#]1 and 4	1.015	0.482-2.137	0.970
					[#]2 and 3	0.681	0.387-1.198	0.183
					[#]2 and 4	1.261	0.586-2.716	0.553
					[#]3 and 4	1.851	0.871-3.937	0.110
H19c14	98.38(97.96,98.78)	98.42(98.01,98.82)	98.4(98.03,98.81)	98.57(98.12,98.85)	[#]1 and 2	1.127	0.691-1.839	0.632
					[#]1 and 3	1.204	0.737-1.967	0.459
					[#]1 and 4	1.671	0.741-3.768	0.216
					[#]2 and 3	1.068	0.623-1.830	0.811
					[#]2 and 4	1.483	0.643-3.419	0.355
					[#]3 and 4	1.388	0.606-3.181	0.438
H19c15	98.17(97.69,98.53)	98.07(97.70,98.41)	98.26(97.82,98.52)	98.14(97.81,98.81)	[#]1 and 2	0.797	0.430-1.478	0.472
					[#]1 and 3	1.393	0.744-2.608	0.301
					[#]1 and 4	1.302	0.568-2.986	0.533
					[#]2 and 3	1.747	0.889-3.431	0.105
					[#]2 and 4	1.633	0.684-3.896	0.269
					[#]3 and 4	0.935	0.395-2.210	0.878
H19c16	97.65(97.00,98.02)	97.8(97.29,98.05)	97.64(97.06,97.93)	97.43(97.10,98.26)	[#]1 and 2	1.226	0.764-1.966	0.399
					[#]1 and 3	0.988	0.629-1.551	0.957

					[#]1 and 4	1.174	0.623-2.211	0.620
					[#]2 and 3	0.806	0.491-1.322	0.393
					[#]2 and 4	0.958	0.493-1.860	0.898
					[#]3 and 4	1.188	0.620-2.279	0.603
					[#]1 and 2	0.767	0.447-1.316	0.335
					[#]1 and 3	1.152	0.671-1.977	0.607
H19c17	97.69(97.34,98.14)	97.51(96.9,97.98)	97.85(97.55,98.23)	97.55(96.92,97.87)	[#]1 and 4	0.491	0.255-0.946	**0.033**
					[#]2 and 3	1.503	0.857-2.635	0.155
					[#]2 and 4	0.641	0.347-1.183	0.155
					[#]3 and 4	0.426	0.216-0.841	**0.014**
					[#]1 and 2	1.046	0.753-1.452	0.790
					[#]1 and 3	1.291	0.920-1.810	0.139
H19c18	95.05(94.07,95.65)	94.78(93.77,95.67)	95.29(94.37,95.93)	94.99(94.08,95.63)	[#]1 and 4	1.130	0.729-1.749	0.585
					[#]2 and 3	1.234	0.868-1.755	0.241
					[#]2 and 4	1.080	0.685-1.703	0.740
					[#]3 and 4	0.875	0.555-1.380	0.566
					[#]1 and 2	1.050	0.637-1.730	0.848
					[#]1 and 3	1.102	0.674-1.803	0.698
H19c19	97.26(96.74,97.55)	97.16(96.67,97.83)	97.12(96.61,97.62)	97.09(96.29,97.53)	[#]1 and 4	0.850	0.441-1.637	0.627
					[#]2 and 3	1.050	0.631-1.745	0.851
					[#]2 and 4	0.809	0.411-1.596	0.542
					[#]3 and 4	0.771	0.395-1.505	0.446
					[#]1 and 2	0.955	0.901-1.011	0.112
H19d1	54.83(50.00,59.39)	52.6(46.04,56.86)	51.16(47.47,56.32)	52.67(47.89,56.81)	[#]1 and 3	0.957	0.907-1.011	0.119
					[#]1 and 4	0.986	0.919-1.058	0.701
					[#]2 and 3	1.003	0.950-1.059	0.914

					[#]2 and 4	1.033	0.961-1.111	0.379
					[#]3 and 4	1.030	0.960-1.105	0.409
					[#]1 and 2	0.986	0.934-1.041	0.610
					[#]1 and 3	0.974	0.924-1.027	0.324
H19d2	52.52(49.13,57.53)	52.31(47.06,57.19)	52.34(48.26,56.46)	52.59(47.76,57.62)	[#]1 and 4	1.000	0.928-1.078	0.996
					[#]2 and 3	0.988	0.938-1.039	0.631
					[#]2 and 4	1.014	0.940-1.095	0.714
					[#]3 and 4	1.027	0.953-1.108	0.484
					[#]1 and 2	0.965	0.907-1.027	0.261
					[#]1 and 3	0.996	0.937-1.059	0.901
H19d3	53.00(49.5,57.68)	52.08(48.45,56.06)	53.00(49.39,56.71)	53.00(48.64,58.08)	[#]1 and 4	1.004	0.927-1.089	0.916
					[#]2 and 3	1.032	0.970-1.098	0.317
					[#]2 and 4	1.041	0.958-1.131	0.348
					[#]3 and 4	1.008	0.929-1.094	0.845
					[#]1 and 2	0.976	0.921-1.035	0.418
					[#]1 and 3	0.980	0.925-1.038	0.495
H19d4	52.44(49.76,57.54)	52.2(48.78,55.05)	52.69(49.1,55.82)	52.38(48.02,57.84)	[#]1 and 4	0.988	0.915-1.068	0.768
					[#]2 and 3	1.004	0.947-1.064	0.889
					[#]2 and 4	1.013	0.936-1.096	0.755
					[#]3 and 4	1.008	0.933-1.090	0.832
					[#]1 and 2	0.966	0.909-1.027	0.272
					[#]1 and 3	0.964	0.908-1.024	0.231
H19d5	53.92(50.56,58.73)	53.51(49.71,56.54)	53.72(47.81,57.50)	54.55(49.75,59.67)	[#]1 and 4	1.008	0.929-1.094	0.843
					[#]2 and 3	0.998	0.941-1.057	0.934
					[#]2 and 4	1.043	0.959-1.135	0.324
					[#]3 and 4	1.046	0.962-1.137	0.290

H19d6	82.59(77.83,86.17)	82.76(77.31,88.09)	84.62(80.22,88.56)	81.11(77.03,85.47)	[#]1 and 2	1.036	0.966-1.111	0.327
					[#]1 and 3	1.080	1.004-1.162	**0.038**
					[#]1 and 4	1.013	0.925-1.109	0.786
					[#]2 and 3	1.043	0.968-1.124	0.270
					[#]2 and 4	0.978	0.890-1.075	0.643
					[#]3 and 4	0.937	0.852-1.031	0.183
H19d7	73.55(69.16,80.03)	71.52(68.24,75.28)	76.74(69.26,80.2)	73.47(69.76,75.53)	[#]1 and 2	0.982	0.934-1.033	0.475
					[#]1 and 3	1.019	0.967-1.074	0.480
					[#]1 and 4	0.999	0.933-1.071	0.985
					[#]2 and 3	1.038	0.983-1.096	0.179
					[#]2 and 4	1.018	0.949-1.092	0.622
					[#]3 and 4	0.981	0.914-1.053	0.588
H19d8	70.66(66.2,78.25)	68.82(64.88,75.95)	70.66(64.38,76.40)	70.66(68.73,73.48)	[#]1 and 2	0.990	0.939-1.044	0.720
					[#]1 and 3	0.986	0.936-1.039	0.590
					[#]1 and 4	0.992	0.926-1.064	0.829
					[#]2 and 3	0.995	0.944-1.050	0.865
					[#]2 and 4	1.002	0.933-1.076	0.955
					[#]3 and 4	1.007	0.938-1.080	0.853
H19d9	75.43(70.72,81.98)	76.19(73.1,80.60)	77.78(70.78,85.62)	77.27(71.29,82.18)	[#]1 and 2	1.014	0.956-1.076	0.644
					[#]1 and 3	1.049	0.990-1.112	0.106
					[#]1 and 4	1.036	0.961-1.116	0.362
					[#]2 and 3	1.035	0.976-1.098	0.256
					[#]2 and 4	1.021	0.946-1.102	0.590
					[#]3 and 4	0.987	0.916-1.063	0.729
H19d10	62.05(56.89,66.38)	61.66(54.70,66.26)	62.2(55.75,67.68)	62.78(60.70,66.98)	[#]1 and 2	0.979	0.929-1.032	0.433
					[#]1 and 3	0.994	0.943-1.048	0.820

					[#]1 and 4	1.011	0.941-1.086	0.763
					[#]2 and 3	1.015	0.962-1.071	0.581
					[#]2 and 4	1.033	0.960-1.111	0.390
					[#]3 and 4	1.017	0.946-1.094	0.643
					[#]1 and 2	0.924	0.739-1.154	0.485
					[#]1 and 3	0.912	0.733-1.133	0.405
MALAT1a1	33.33(32.34,34.49)	32.89(31.55,35.02)	33.25(31.71,34.71)	32.64(31.40,33.40)	[#]1 and 4	0.808	0.605-1.080	0.149
					[#]2 and 3	0.987	0.792-1.230	0.908
					[#]2 and 4	0.875	0.652-1.173	0.372
					[#]3 and 4	0.886	0.664-1.183	0.413
					[#]1 and 2	0.867	0.693-1.086	0.215
					[#]1 and 3	0.974	0.784-1.211	0.813
MALAT1a2	25.97(25,27.40)	25.89(24.59,27.30)	26.13(24.92,27.54)	26.91(25.58,28.17)	[#]1 and 4	1.183	0.884-1.584	0.259
					[#]2 and 3	1.123	0.893-1.412	0.322
					[#]2 and 4	1.364	1.001-1.858	0.049
					[#]3 and 4	1.214	0.900-1.639	0.204
					[#]1 and 2	0.918	0.724-1.164	0.481
					[#]1 and 3	0.888	0.705-1.118	0.311
MALAT1a3	20.11(18.6,21.66)	19.82(18.88,20.92)	20.21(18.34,21.19)	20.4(19.66,21.88)	[#]1 and 4	1.156	0.865-1.546	0.327
					[#]2 and 3	0.967	0.759-1.231	0.784
					[#]2 and 4	1.260	0.924-1.718	0.145
					[#]3 and 4	1.303	0.961-1.767	0.089
					[#]1 and 2	0.832	0.618-1.120	0.225
					[#]1 and 3	0.789	0.588-1.057	0.113
MALAT1a4	12.58(11.67,13.76)	12.28(11.26,13.24)	12.08(11.32,13.24)	12.35(11.61,13.49)	[#]1 and 4	0.980	0.668-1.437	0.916
					[#]2 and 3	0.948	0.701-1.282	0.728

					[#]2 and 4	1.177	0.790-1.754	0.422
					[#]3 and 4	1.242	0.837-1.843	0.281
					[#]1 and 2	1.254	0.773-2.034	0.360
					[#]1 and 3	0.715	0.435-1.176	0.186
					[#]1 and 4	1.151	0.626-2.115	0.651
MALAT1a5	4.94(4.48,5.54)	5.11(4.62,5.71)	4.67(4.14,5.37)	5.00(4.56,5.58)	[#]2 and 3	0.571	0.335-0.972	**0.039**
					[#]2 and 4	0.918	0.486-1.734	0.792
					[#]3 and 4	1.609	0.840-3.081	0.151
					[#]1 and 2	0.978	0.759-1.259	0.862
					[#]1 and 3	0.748	0.579-0.967	**0.026**
					[#]1 and 4	1.228	0.898-1.680	0.198
MALAT1a6	20.18(18.89,21.30)	19.86(18.69,21.21)	19.19(18.56,19.95)	20.71(19.78,21.87)	[#]2 and 3	0.765	0.578-1.013	0.062
					[#]2 and 4	1.256	0.899-1.757	0.182
					[#]3 and 4	1.642	1.158-2.330	**0.005**
					[#]1 and 2	0.932	0.726-1.196	0.579
					[#]1 and 3	0.878	0.692-1.115	0.285
					[#]1 and 4	1.159	0.846-1.590	0.358
MALAT1a7	26.01(24.73,26.86)	25.68(24.63,26.76)	25.43(24.45,26.46)	26.31(24.88,27.38)	[#]2 and 3	0.942	0.726-1.222	0.653
					[#]2 and 4	1.244	0.887-1.745	0.205
					[#]3 and 4	1.321	0.949-1.838	0.099
					[#]1 and 2	0.999	0.778-1.282	0.991
					[#]1 and 3	1.035	0.813-1.317	0.783
					[#]1 and 4	1.358	0.994-1.856	0.055
MALAT1a8	21.39(20.36,22.34)	21.34(20.08,22.60)	21.37(20.06,22.74)	22.2(21.55,22.93)	[#]2 and 3	1.036	0.798-1.344	0.790
					[#]2 and 4	1.360	0.984-1.880	0.063
					[#]3 and 4	1.313	0.959-1.798	0.090

MALAT1a9	20.17(18.86,21.02)	19.55(18.43,20.61)	19.90(18.58,20.84)	19.82(18.71,20.70)	[#]1 and 2	0.840	0.655-1.077	0.170
					[#]1 and 3	0.983	0.774-1.247	0.887
					[#]1 and 4	1.044	0.763-1.428	0.788
					[#]2 and 3	1.170	0.903-1.516	0.235
					[#]2 and 4	1.243	0.889-1.737	0.204
					[#]3 and 4	1.062	0.767-1.470	0.716
MALAT1a10	26.49(24.92,27.70)	26.45(25.06,27.30)	26.33(25.39,27.74)	27.72(26.17,29.23)	[#]1 and 2	0.916	0.733-1.145	0.440
					[#]1 and 3	1.006	0.815-1.241	0.958
					[#]1 and 4	1.239	0.952-1.612	0.111
					[#]2 and 3	1.239	0.952-1.612	0.111
					[#]2 and 4	1.353	1.023-1.788	**0.034**
					[#]3 and 4	1.232	0.947-1.602	0.120
MALAT1b1	0.62(0.47,0.89)	0.62(0.41,0.77)	0.64(0.43,0.93)	0.71(0.58,0.84)	[#]1 and 2	1.040	0.231-4.678	0.959
					[#]1 and 3	1.896	0.455-7.897	0.379
					[#]1 and 4	2.70	0.444-16.426	0.281
					[#]2 and 3	1.823	0.392-8.487	0.444
					[#]2 and 4	2.597	0.383-17.601	0.328
					[#]3 and 4	1.424	0.232-8.735	0.703
MALAT1b2	0.52(0.38,0.74)	0.57(0.46,0.72)	0.48(0.37,0.65)	0.59(0.48,0.81)	[#]1 and 2	1.116	0.276-4.518	0.878
					[#]1 and 3	0.363	0.070-1.868	0.225
					[#]1 and 4	2.444	0.530-11.277	0.252
					[#]2 and 3	0.325	0.059-1.798	0.198
					[#]2 and 4	2.190	0.419-11.438	0.353
					[#]3 and 4	6.736	0.999-45.428	0.050
MALAT1b3	0.72(0.53,0.93)	0.8(0.70,0.92)	0.6(0.44,0.88)	0.73(0.47,0.82)	[#]1 and 2	1.509	0.443-5.145	0.511
					[#]1 and 3	0.412	0.106-1.605	0.201

					[#]1 and 4	0.495	0.082-2.997	0.444
					[#]2 and 3	0.273	0.067-1.107	0.069
					[#]2 and 4	0.328	0.052-2.073	0.236
					[#]3 and 4	1.202	0.183-7.899	0.848
					[#]1 and 2	0.948	0.274-3.279	0.933
					[#]1 and 3	2.154	0.756-6.132	0.151
					[#]1 and 4	0.928	0.163-5.292	0.933
MALAT1b4	0.65(0.46,0.92)	0.67(0.49,0.89)	0.76(0.50,0.97)	0.69(0.45,0.81)	[#]2 and 3	2.272	0.721-7.163	0.161
					[#]2 and 4	0.979	0.161-5.959	0.982
					[#]3 and 4	0.431	0.079-2.364	0.332
					[#]1 and 2	1.071	0.210-5.471	0.935
					[#]1 and 3	1.888	0.394-9.049	0.427
					[#]1 and 4	3.166	0.427-23.493	0.260
MALAT1b5	0.67(0.53,0.86)	0.68(0.56,0.83)	0.69(0.53,0.92)	0.75(0.58,0.93)	[#]2 and 3	1.763	0.366-8.485	0.479
					[#]2 and 4	2.957	0.391-22.370	0.294
					[#]3 and 4	1.677	0.239-11.762	0.603
					[#]1 and 2	0.820	0.241-2.795	0.751
					[#]1 and 3	1.481	0.477-4.598	0.496
					[#]1 and 4	1.728	0.396-7.55)	0.467
MALAT1b6	0.69(0.49,0.92)	0.70(0.54,0.87)	0.77(0.48,0.93)	0.59(0.51,0.98)	[#]2 and 3	1.806	0.537-6.076	0.340
					[#]2 and 4	2.107	0.446-9.957	0.347
					[#]3 and 4	1.167	0.272-5.000	0.836
					[#]1 and 2	0.573	0.162-2.033	0.389
MALAT1b7	0.74(0.55,0.94)	0.72(0.55,0.88)	0.75(0.55,0.94)	0.69(0.62,0.77)	[#]1 and 3	0.775	0.259-2.318	0.649
					[#]1 and 4	0.458	0.080-2.610	0.379

					[#]2 and 3	1.352	0.352-5.184	0.66
					[#]2 and 4	0.799	0.122-5.244	0.815
					[#]3 and 4	0.591	0.098-3.572	0.567
					[#]1 and 2	0.886	0.222-3.540	0.864
					[#]1 and 3	1.033	0.269-3.962	0.962
					[#]1 and 4	0.863	0.142-5.239	0.872
MALAT1b8	0.79(0.57,1.03)	0.75(0.61,0.93)	0.82(0.61,1.06)	0.86(0.60,1.02)	[#]2 and 3	1.166	0.273-4.981	0.836
					[#]2 and 4	0.974	0.146-6.509	0.978
					[#]3 and 4	0.835	0.130-5.371	0.850
					[#]1 and 2	0.829	0.225-3.054	0.778
					[#]1 and 3	0.883	0.244-3.193	0.850
					[#]1 and 4	1.071	0.195-5.894	0.937
MALAT1b9	0.77(0.51,0.97)	0.76(0.54,0.90)	0.69(0.52,0.92)	0.75(0.54,0.90)	[#]2 and 3	1.065	0.298-3.803	0.923
					[#]2 and 4	1.291	0.233-7.172	0.770
					[#]3 and 4	1.212	0.223-6.581	0.823
					[#]1 and 2	0.409	0.118-1.421	0.159
					[#]1 and 3	0.421	0.124-1.432	0.166
					[#]1 and 4	0.737	0.159-3.413	0.696
MALAT1b10	0.75(0.52,1.01)	0.74(0.55,0.84)	0.67(0.45,0.97)	0.72(0.55,1.03)	[#]2 and 3	1.031	0.288-3.690	0.963
					[#]2 and 4	1.803	0.357-9.110	0.476
					[#]3 and 4	1.749	0.356-8.594	0.491
					[#]1 and 2	1.177	0.338-4.094	0.798
					[#]1 and 3	1.677	0.519-5.421	0.388
MALAT1b11	0.53(0.34,0.81)	0.50(0.41,0.79)	0.57(0.39,0.78)	0.36(0.24,0.53)	[#]1 and 4	0.130	0.013-1.275	0.080
					[#]2 and 3	1.425	0.452-4.490	0.545
					[#]2 and 4	0.11	0.011-1.118	0.062

					[#]3 and 4	0.078	0.008-0.768	**0.029**
					[#]1 and 2	1.155	0.431-3.092	0.774
					[#]1 and 3	0.634	0.235-1.716	0.370
MALAT1b12	1.42(1.07,1.83)	1.46(1.19,1.63)	1.39(1.13,1.62)	1.26(1.08,1.55)	[#]1 and 4	0.371	0.097-1.428	0.149
					[#]2 and 3	0.549	0.189-1.592	0.270
					[#]2 and 4	0.321	0.078-1.321	0.116
					[#]3 and 4	0.585	0.149-2.302	0.443
					[#]1 and 2	1.568	0.352-6.983	0.555
					[#]1 and 3	0.705	0.151-3.281	0.656
MALAT1b13	0.52(0.35,0.69)	0.58(0.39,0.80)	0.57(0.32,0.72)	0.49(0.39,0.69)	[#]1 and 4	0.505	0.065-3.902	0.513
					[#]2 and 3	0.450	0.095-2.120	0.312
					[#]2 and 4	0.322	0.040-2.593	0.287
					[#]3 and 4	0.717	0.089-5.757	0.754
					[#]1 and 2	1.607	0.306-8.426	0.575
					[#]1 and 3	0.136	0.023-0.807	**0.028**
MALAT1b14	0.71(0.51,0.85)	0.78(0.57,0.91)	0.60(0.49,0.78)	0.67(0.51,0.78)	[#]1 and 4	0.420	0.042-4.230	0.461
					[#]2 and 3	0.085	0.013-0.552	**0.010**
					[#]2 and 4	0.261	0.024-2.873	0.273
					[#]3 and 4	3.089	0.274-34.819	0.361
					[#]1 and 2	0.865	0.290-2.585	0.796
					[#]1 and 3	1.415	0.577-3.469	0.448
MALAT1b15	0.68(0.53,0.86)	0.69(0.55,0.79)	0.73(0.50,0.89)	0.70(0.59,0.87)	[#]1 and 4	0.766	0.140-4.180	0.758
					[#]2 and 3	1.635	0.594-4.503	0.341
					[#]2 and 4	0.885	0.154-5.085	0.891
					[#]3 and 4	0.541	0.102-2.861	0.470
MALAT1c1	69.31(65.35,71.5)	69.35(66.88,71.21)	69.19(64.80,71.64)	68.54(66.39,71)	[#]1 and 2	1.078	0.970-1.197	0.163

					[#]1 and 3	1.023	0.924-1.134	0.657
					[#]1 and 4	1.006	0.876-1.154	0.936
					[#]2 and 3	0.950	0.850-1.061	0.359
					[#]2 and 4	0.933	0.807-1.079	0.350
					[#]3 and 4	0.983	0.852-1.133	0.809
					[#]1 and 2	1.037	0.942-1.141	0.462
					[#]1 and 3	1.013	0.920-1.115	0.800
MALAT1c2	74.23(70.68,76.71)	73.95(71.7,76.42)	74.59(70.75,76.7)	73.23(69.29,74.94)	[#]1 and 4	0.955	0.840-1.086	0.483
					[#]2 and 3	0.977	0.883-1.080	0.645
					[#]2 and 4	0.921	0.805-1.054	0.231
					[#]3 and 4	0.943	0.825-1.078	0.390
					[#]1 and 2	1.023	0.958-1.093	0.493
					[#]1 and 3	0.996	0.934-1.063	0.909
					[#]1 and 4	0.982	0.901-1.071	0.687
MALAT1c3	67.32(62.75,70.93)	67.18(63.85,70.49)	68.18(61.24,70.96)	66.28(60.63,69.5)	[#]2 and 3	0.973	0.907-1.044	0.454
					[#]2 and 4	0.960	0.876-1.052	0.384
					[#]3 and 4	0.986	0.901-1.080	0.762
					[#]1 and 2	1.044	0.961-1.134	0.304
					[#]1 and 3	1.001	0.926-1.082	0.983
					[#]1 and 4	1.017	0.913-1.132	0.764
MALAT1c4	70.04(66.34,72.44)	69.49(66.88,72.33)	70.22(65.59,71.63)	69.16(65.45,70.87)	[#]2 and 3	0.958	0.878-1.046	0.343
					[#]2 and 4	0.973	0.867-1.093	0.649
					[#]3 and 4	1.016	0.908-1.137	0.785
MALAT1c5	75.68(72.07,78.37)	75.16(72.64,78.27)	76.06(70.84,78.63)	74.23(70.49,77.35)	[#]1 and 2	1.032	0.950-1.122	0.452

					[#]1 and 3	1.009	0.929-1.095	0.834
					[#]1 and 4	0.987	0.884-1.101	0.813
					[#]2 and 3	0.977	0.893-1.069	0.612
					[#]2 and 4	0.956	0.850-1.074	0.448
					[#]3 and 4	0.978	0.871-1.098	0.709
					[#]1 and 2	1.064	0.961-1.179	0.234
					[#]1 and 3	0.985	0.895-1.083	0.749
MALAT1c6	80.07(77.33,82.4)	79.63(77.83,83.33)	80.23(75.62,82.32)	79.09(76.65,82.19)	[#]1 and 4	1.002	0.879-1.142	0.977
					[#]2 and 3	0.925	0.830-1.031	0.159
					[#]2 and 4	0.941	0.817-1.084	0.401
					[#]3 and 4	1.018	0.888-1.166	0.801

[*]Adjusted for age, gender, smoking and drinking. a: Methylation level is expressed as a percentage. Data was expressed as median (P_{25}, P_{75}). 1 = Upper third; 2 = Middle third; 3 = Lower third; 4 = Mixed type.

[#]1: 1 as reference; [#]2: 2 as reference; [#]3: 3 as reference.

Table S11. Differences of methylation levels of H19, MALAT1 promoters in GC tumors from patients in different age groups[*]

	Name	Methylation level[a]		Logistic regression analysis		
		≤Mean[b]	>Mean	Odds Ratio	95%CI	*P*-value
Genes	H19	76.52(75.20,77.39)	76.69(75.98,77.48)	1.170	0.931-1.472	0.179
	MALAT1	8.85(8.65,9.05)	8.87(8.70,9.04)	1.105	0.363-3.365	0.86
Regions	H19A	46.61(45.60,47.93)	46.77(45.71,48.44)	1.054	0.923-1.204	0.434
	H19B	93.72(91.74,94.85)	92.81(91.59,94.52)	0.956	0.806-1.135	0.609
	H19C	95.78(95.47,96.12)	95.65(95.33,95.97)	0.894	0.516-1.549	0.689
	H19D	62.33(57.88,66.47)	63.97(61.08,67.15)	1.046	0.989-1.106	0.117
	MALAT1A	20.99(20.47,21.51)	21.04(20.60,21.53)	1.007	0.648-1.567	0.974
	MALAT1B	0.76(0.70,0.81)	0.74(0.69,0.79)	2.905	0.127-66.471	0.504
	MALAT1C	71.90(67.70,73.68)	72.73(69.59,75.05)	1.033	0.964-1.106	0.355
Sites	H19a1	43.11(41.81,44.59)	43.22(41.63,45.12)	1.041	0.921-1.177	0.522
	H19a2	44.63(42.98,45.58)	44.05(43.01,46.25)	1.059	0.969-1.156	0.205
	H19a3	45.66(44.67,46.96)	45.50(44.41,47.27)	1.033	0.910-1.174	0.612
	H19a4	45.19(43.86,46.23)	45.22(43.80,47.20)	1.114	0.977-1.271	0.108
	H19a5	45.33(44.24,46.69)	45.28(43.94,47.36)	1.035	0.916-1.170	0.58
	H19a6	45.71(44.75,47.04)	45.56(44.40,47.31)	1.052	0.926-1.195	0.437
	H19a7	45.83(44.58,47.18)	45.65(44.36,47.40)	0.989	0.918-1.067	0.781
	H19a8	46.45(45.23,47.87)	46.38(44.92,48.08)	1.025	0.901-1.165	0.71
	H19a9	47.29(46.07,48.66)	47.21(46.15,48.64)	1.050	0.915-1.204	0.487
	H19a10	47.28(46.43,48.59)	47.34(46.04,48.82)	1.044	0.910-1.197	0.538
	H19a11	47.49(46.50,48.59)	47.49(46.05,48.91)	1.040	0.909-1.190	0.566
	H19a12	47.11(45.99,48.39)	47.36(45.69,48.96)	1.005	0.902-1.120	0.924
	H19a13	48.42(47.43,49.88)	48.84(47.44,50.28)	1.058	0.931-1.201	0.389
	H19a14	49.09(48.17,50.32)	49.12(47.83,51.09)	1.024	0.909-1.154	0.693
	H19a15	49.01(47.86,50.48)	49.19(48.19,50.94)	1.061	0.928-1.212	0.386
	H19a16	48.85(48.11,50.55)	49.25(47.78,51.27)	1.059	0.929-1.207	0.39
	H19b1	86.09(45.86,89.57)	52.35(47.89,88.55)	0.999	0.987-1.011	0.889
	H19b2	97.54(97.10,97.95)	97.30(96.88,97.71)	0.496	0.284-0.865	**0.013**
	H19b3	96.26(95.84,96.80)	96.26(95.79,96.82)	0.903	0.573-1.423	0.659
	H19b4	89.09(88.32,90.23)	89.24(87.47,90.62)	0.996	0.937-1.058	0.892
	H19b5	93.70(93.12,94.31)	93.62(92.56,94.30)	0.818	0.607-1.103	0.187
	H19b6	97.96(97.62,98.27)	97.98(97.61,98.32)	1.000	0.530-1.889	0.999
	H19b7	92.63(91.70,93.41)	92.29(90.95,93.23)	0.757	0.593-0.966	**0.025**
	H19b8	96.18(95.78,96.60)	96.25(95.73,96.79)	0.979	0.697-1.377	0.904
	H19b9	94.67(93.93,95.47)	94.46(93.53,95.59)	0.856	0.679-1.079	0.187
	H19b10	97.38(96.98,97.75)	97.39(96.93,97.80)	0.881	0.544-1.427	0.605
	H19b11	90.71(90.03,91.46)	90.64(89.38,91.57)	1.016	0.829-1.246	0.879
	H19b12	97.17(96.63,97.57)	97.03(96.55,97.38)	0.814	0.511-1.298	0.388
	H19b13	96.68(96.27,97.15)	96.79(96.24,97.21)	1.085	0.688-1.712	0.726
	H19b14	95.35(94.85,95.92)	95.25(94.4,95.89)	0.830	0.622-1.108	0.205

H19b15	97.71(97.29,98.00)	97.72(97.11,98.11)	1.288	0.728-2.279	0.385
H19c1	93.65(92.71,94.50)	93.78(92.84,94.83)	1.054	0.854-1.301	0.625
H19c2	86.98(84.78,88.81)	86.51(84.97,88.66)	1.000	0.89-1.124)	0.999
H19c3	95.96(95.23,96.69)	95.73(94.58,96.51)	0.837	0.653-1.072	0.159
H19c4	95.74(95.08,96.42)	95.51(94.45,96.45)	0.842	0.657-1.079	0.174
H19c5	96.37(95.56,97.00)	96.34(95.55,96.83)	0.925	0.686-1.247	0.608
H19c6	96.98(96.12,97.73)	97.02(96.49,97.64)	1.090	0.825-1.441	0.543
H19c7	98.06(97.31,98.40)	97.91(97.41,98.37)	1.000	0.699-1.430	0.998
H19c8	97.10(96.55,97.83)	96.89(96.40,97.63)	0.891	0.693-1.146	0.37
H19c9	93.70(92.80,94.47)	93.43(92.40,94.24)	0.999	0.944-1.056	0.965
H19c10	96.79(96.23,97.57)	96.81(96.09,97.38)	0.999	0.944-1.056	0.965
H19c11	89.76(88.11,91.34)	89.42(87.59,91.13)	0.944	0.820-1.087	0.424
H19c12	97.51(97.10,98.19)	97.49(97.08,97.96)	0.803	0.556-1.160	0.242
H19c13	97.99(97.53,98.60)	98.01(97.54,98.55)	0.803	0.556-1.160	0.242
H19c14	98.44(97.98,98.89)	98.36(98.01,98.77)	1.039	0.716-1.508	0.839
H19c15	98.03(97.72,98.44)	98.31(97.78,98.70)	1.934	1.163-3.216	**0.011**
H19c16	97.75(97.13,98.07)	97.55(97.08,97.98)	0.818	0.571-1.171	0.272
H19c17	97.63(97.16,98.11)	97.70(97.40,98.08)	1.162	0.791-1.708	0.444
H19c18	94.72(94.00,95.68)	95.15(94.29,95.77)	1.221	0.948-1.572	0.122
H19c19	97.18(96.59,97.61)	97.26(96.76,97.56)	1.173	0.804-1.710	0.408
H19d1	51.85(45.95,56.34)	54.63(49.69,57.84)	1.046	1.002-1.091	**0.038**
H19d2	51.77(47.78,56.81)	52.59(49.55,58.33)	1.017	0.977-1.060	0.41
H19d3	51.75(48.18,56.12)	53.00(49.57,57.45)	1.037	0.989-1.086	0.135
H19d4	52.11(47.42,55.62)	52.69(50.60,56.67)	1.035	0.989-1.082	0.137
H19d5	52.53(48.28,57.83)	54.69(50.89,58.33)	1.036	0.990-1.085	0.13
H19d6	82.35(76.79,87.30)	82.98(79.52,86.44)	1.024	0.972-1.078	0.375
H19d7	72.62(67.74,79.25)	73.63(71.16,79.66)	1.007	0.969-1.047	0.71
H19d8	69.63(63.16,77.42)	70.66(66.67,76.84)	1.025	0.985-1.066	0.226
H19d9	75.92(70.69,82.42)	76.85(72.26,82.63)	1.015	0.972-1.059	0.509
H19d10	60.78(54.84,65.88)	63.16(56.82,68.29)	1.041	0.997-1.086	0.067
MALAT1a1	32.96(31.55,34.26)	33.29(32.00,34.53)	0.983	0.835-1.157	0.838
MALAT1a2	25.96(24.87,27.49)	26.13(24.91,27.37)	1.020	0.867-1.200	0.812
MALAT1a3	20.31(18.95,21.81)	20.13(18.77,20.6)	0.851	0.713-1.016	0.074
MALAT1a4	12.37(11.58,13.17)	12.23(11.47,13.76)	1.012	0.816-1.255	0.916
MALAT1a5	4.97(4.48,5.40)	4.94(4.33,5.61)	0.949	0.663-1.359	0.776
MALAT1a6	19.36(18.62,20.71)	20.11(18.98,21.30)	1.182	0.981-1.424	0.079
MALAT1a7	25.61(24.51,26.48)	25.81(24.76,27.12)	1.125	0.937-1.351	0.206
MALAT1a8	21.69(20.35,22.74)	21.43(20.33,22.37)	0.915	0.762-1.100	0.344
MALAT1a9	19.80(18.82,20.51)	20.03(18.74,21.07)	1.056	0.880-1.267	0.559
MALAT1a10	26.56(25.00,27.68)	26.43(25.19,27.79)	0.958	0.821-1.118	0.583
MALAT1b1	0.60(0.44,0.80)	0.66(0.50,0.90)	1.412	0.471-4.230	0.538
MALAT1b2	0.52(0.40,0.65)	0.56(0.41,0.78)	2.912	0.860-9.858	0.086
MALAT1b3	0.73(0.55,0.89)	0.73(0.52,0.92)	0.800	0.305-2.098	0.65
MALAT1b4	0.67(0.50,0.90)	0.71(0.48,0.96)	1.647	0.776-3.496	0.194

MALAT1b5	0.67(0.52,0.86)	0.71(0.55,0.88)	1.346	0.414-4.373	0.621
MALAT1b6	0.71(0.49,0.90)	0.73(0.52,0.93)	1.978	0.781-5.005	0.15
MALAT1b7	0.73(0.62,0.92)	0.70(0.55,0.91)	0.804	0.329-1.967	0.633
MALAT1b8	0.77(0.63,0.99)	0.82(0.58,1.03)	1.112	0.392-3.151	0.842
MALAT1b9	0.77(0.48,0.93)	0.75(0.55,0.90)	1.018	0.386-2.680	0.972
MALAT1b10	0.73(0.47,1.04)	0.73(0.53,0.89)	0.874	0.353-2.163	0.771
MALAT1b11	0.54(0.39,0.77)	0.50(0.35,0.75)	0.924	0.374-2.283	0.864
MALAT1b12	1.40(1.21,1.65)	1.41(1.05,1.65)	0.940	0.448-1.970	0.869
MALAT1b13	0.63(0.40,0.78)	0.49(0.30,0.67)	0.261	0.079-0.866	**0.028**
MALAT1b14	0.72(0.57,0.87)	0.67(0.46,0.81)	0.418	0.117-1.488	0.178
MALAT1b15	0.71(0.55,0.91)	0.69(0.53,0.82)	1.255	0.604-2.605	0.542
MALAT1c1	68.63(66.16,70.68)	69.90(65.39,71.73)	1.255	0.604-2.605	0.542
MALAT1c2	73.16(70.00,75.76)	74.77(71.24,77.24)	1.052	0.977-1.133	0.181
MALAT1c3	66.45(60.57,69.54)	68.00(62.84,72.03)	1.027	0.976-1.080	0.304
MALAT1c4	69.05(65.10,71.43)	70.10(67.20,72.73)	1.040	0.977-1.107	0.219
MALAT1c5	75.06(71.88,77.39)	75.99(72.14,79.03)	1.022	0.959-1.088	0.507
MALAT1c6	79.41(76.92,82.14)	80.16(77.31,83.07)	1.024	0.950-1.103	0.541

*Adjusted for gender, smoking and drinking. a: Methylation level is expressed as a percentage.

Table S12. Differences of methylation levels of H19, MALAT1 promoters in GC tumors with different HER-2 status*

	Name	Methylation level[a]		Logistic regression analysis		
		Negative	Positive	Odds Ratio	95%CI	*P*-value
Genes	H19	76.75(75.01,78.02)	77.59(76.88,78.06)	1.039	0.643-1.679	0.875
	MALAT1	8.84(8.65,8.99)	8.78(8.54,8.96)	0.378	0.008-17.454	0.619
Regions	H19A	47.07(45.00,48.39)	46.85(46.61,48.09)	1.520	0.863-2.676	0.147
	H19B	92.87(91.16,94.63)	92.94(91.84,94.73)	0.653	0.362-1.175	0.155
	H19C	95.66(95.18,96.16)	95.72(95.22,96.03)	0.305	0.045-2.072	0.225
	H19D	62.69(60.33,66.87)	68.64(63.01,69.66)	1.020	0.910-1.143	0.735
	MALAT1A	20.94(20.45,21.38)	20.75(20.33,21.08)	0.691	0.154-3.111	0.630
	MALAT1B	0.76(0.70,0.82)	0.75(0.66,0.80)	0.926	0.001-1337.82	0.983
	MALAT1C	72.32(68.06,74.09)	69.29(63.52,71.99)	0.946	0.765-1.170	0.609
Sites	H19a1	43.83(41.26,45.32)	43.71(43.02,44.85)	1.329	0.833-2.120	0.232
	H19a2	44.81(42.67,46.53)	44.71(43.90,45.62)	1.251	0.809-1.935	0.314
	H19a3	46.79(43.76,47.63)	45.95(45.53,47.52)	1.374	0.858-2.200	0.186
	H19a4	45.54(43.38,47.44)	46.16(45.48,47.45)	1.559	0.920-2.643	0.099
	H19a5	45.84(43.19,47.38)	45.43(45.00,46.94)	1.367	0.821-2.277	0.230
	H19a6	46.27(43.89,47.66)	45.86(45.63,48.03)	1.487	0.903-2.450	0.119
	H19a7	45.97(43.99,47.89)	46.20(45.68,47.39)	1.510	0.882-2.584	0.133
	H19a8	46.95(44.36,48.21)	46.54(45.37,48.00)	1.403	0.842-2.339	0.193
	H19a9	47.64(45.94,49.44)	47.42(46.58,48.55)	1.357	0.811-2.272	0.245
	H19a10	47.27(45.85,49.17)	47.60(47.41,48.81)	1.634	0.880-3.032	0.120
	H19a11	47.60(45.87,49.14)	47.49(47.36,48.43)	1.512	0.857-2.668	0.153
	H19a12	47.79(45.38,48.83)	47.75(47.14,48.75)	1.917	0.870-4.221	0.106
	H19a13	49.35(47.22,50.68)	49.03(48.34,50.23)	1.432	0.862-2.381	0.166
	H19a14	49.78(47.21,50.96)	49.50(48.78,49.86)	1.311	0.834-2.060	0.241
	H19a15	49.53(47.67,51.31)	49.33(48.91,50.12)	1.457	0.847-2.507	0.174
	H19a16	49.62(47.81,51.48)	49.08(48.42,50.29)	1.451	0.842-2.500	0.181
	H19b1	52.48(44.55,89.76)	52.35(47.56,88.73)	0.972	0.935-1.010	0.141
	H19b2	97.50(97.09,97.97)	98.00(97.36,98.33)	6.069	0.657-56.101	0.112
	H19b3	96.37(96.02,96.74)	96.31(95.97,96.73)	0.591	0.085-4.086	0.594
	H19b4	89.22(88.20,91.19)	89.29(88.69,90.85)	1.300	0.742-2.277	0.358
	H19b5	93.81(93.11,94.48)	93.62(92.73,94.13)	1.109	0.418-2.938	0.836
	H19b6	98.03(97.69,98.35)	97.95(97.78,98.16)	0.985	0.044-22.111	0.992
	H19b7	92.88(91.13,93.46)	91.70(90.93,92.96)	1.239	0.543-2.827	0.610
	H19b8	96.15(95.74,96.54)	96.34(96.18,96.76)	2.260	0.329-15.508	0.407
	H19b9	94.58(94.05,95.48)	94.60(93.52,95.76)	1.783	0.836-3.799	0.134
	H19b10	97.53(96.85,98.04)	97.15(96.33,97.63)	0.009	0.000-1.106	0.055
	H19b11	90.57(90.39,91.11)	90.64(89.82,91.67)	0.911	0.480-1.732	0.777
	H19b12	97.09(96.56,97.44)	97.03(96.65,97.66)	0.874	0.177-4.302	0.868
	H19b13	96.77(95.92,97.20)	96.39(96.20,96.87)	0.772	0.187-3.178	0.719
	H19b14	95.38(94.84,95.99)	95.22(94.68,96.31)	1.116	0.403-3.091	0.833

H19b15	97.64(97.32,98000)	97.65(97.06,97.92)	1.841	0.199-17.075	0.591
H19c1	94.25(91.85,94.96)	93.81(91.19,94.59)	0.631	0.316-1.258	0.190
H19c2	87.34(84.46,88.95)	85.78(84.88,88.96)	0.881	0.619-1.255	0.484
H19c3	96.03(94.37,96.78)	95.72(95.04,96.13)	0.834	0.446-1.562	0.571
H19c4	95.43(94.89,96.31)	95.08(94.05,95.54)	0.847	0.521-1.377	0.502
H19c5	96.32(95.53,97.14)	96.28(95.73,97.06)	0.735	0.339-1.593	0.436
H19c6	97.32(95.91,97.73)	96.63(96.03,98.37)	1.329	0.716-2.468	0.368
H19c7	98.05(96.98,98.50)	97.86(97.42,98.04)	0.420	0.107-1.652	0.214
H19c8	97.46(96.58,97.92)	97.34(96.85,98.23)	0.757	0.284-2.017	0.577
H19c9	93.52(92.50,94.38)	92.84(91.37,94.58)	0.922	0.594-1.431	0.718
H19c10	96.82(96.23,97.24)	96.81(96.10,97.41)	1.107	0.541-2.265	0.781
H19c11	89.31(87.36,91.63)	89.47(85.82,90.76)	0.699	0.430-1.135	0.147
H19c12	97.41(96.87,97.91)	98.20(97.26,98.73)	3.947	0.707-22.031	0.118
H19c13	97.83(97.34,98.63)	97.99(97.47,98.43)	0.463	0.139-1.537	0.208
H19c14	98.55(97.88,98.93)	98.40(98.07,99.25)	1.550	0.358-6.717	0.558
H19c15	97.99(97.71,98.45)	98.16(97.74,98.65)	0.641	0.179-2.298	0.495
H19c16	97.78(97.10,98.28)	97.60(97.11,97.81)	0.310	0.066-1.446	0.136
H19c17	97.93(97.45,98.43)	97.62(97.00,98.18)	0.730	0.272-1.959	0.532
H19c18	94.43(93.56,95.63)	94.87(94.20,95.51)	1.352	0.670-2.729	0.399
H19c19	97.05(96.60,97.43)	97.14(96.48,97.74)	1.482	0.431-5.099	0.533
H19d1	53.75(49.55,58.23)	57.14(53.00,58.85)	1.070	0.886-1.294	0.481
H19d2	52.28(48.27,56.94)	55.07(50.09,57.84)	0.963	0.878-1.057	0.430
H19d3	51.17(49.42,57.69)	53.66(53.00,59.47)	1.001	0.909-1.103	0.978
H19d4	52.34(49.26,56.77)	52.28(50.30,55.17)	0.967	0.861-1.086	0.570
H19d5	53.64(49.38,58.36)	53.72(50.68,59.50)	0.991	0.899-1.092	0.850
H19d6	82.08(77.20,85.42)	85.71(80.67,91.23)	1.102	0.966-1.258	0.148
H19d7	73.51(69.32,79.75)	78.13(73.55,83.81)	1.021	0.948-1.099	0.588
H19d8	70.71(63.12,74.69)	80.28(70.66,82.15)	1.086	0.958-1.232	0.197
H19d9	76.38(72.12,83.58)	80.00(73.43,87.86)	1.060	0.946-1.188	0.317
H19d10	61.00(55.97,64.31)	65.88(61.88,75.00)	1.010	0.940-1.085	0.789
MALAT1a1	32.68(31.59,33.97)	33.12(30.49,33.96)	1.034	0.579-1.846	0.911
MALAT1a2	26.02(25.17,27.11)	26.91(25.40,28.95)	1.256	0.642-2.458	0.506
MALAT1a3	19.09(17.87,21.10)	18.32(17.08,20.02)	1.039	0.531-2.033	0.912
MALAT1a4	12.31(11.67,12.99)	12.42(10.24,13.71)	0.878	0.479-1.608	0.673
MALAT1a5	4.87(4.38,5.28)	4.85(4.48,5.18)	1.270	0.366-4.411	0.706
MALAT1a6	19.66(18.66,21.24)	18.84(18.04,21.03)	0.815	0.422-1.577	0.544
MALAT1a7	25.37(23.88,26.46)	25.34(24.56,26.11)	0.613	0.255-1.477	0.276
MALAT1a8	21.33(20.31,22.85)	21.57(21.23,23.56)	0.987	0.631-1.543	0.954
MALAT1a9	20.26(19.30,20.98)	19.90(17.75,21.52)	0.750	0.413-1.359	0.342
MALAT1a10	26.05(24.18,27.67)	25.95(25.32,27.29)	0.985	0.661-1.466	0.939
MALAT1b1	0.62(0.42,0.92)	0.66(0.27,0.99)	1.036	0.048-22.493	0.982
MALAT1b2	0.51(0.37,0.66)	0.52(0.35,0.78)	0.846	0.024-30.371	0.927
MALAT1b3	0.72(0.57,0.93)	0.54(0.29,0.82)	0.023	0.000-2.406	0.112
MALAT1b4	0.66(0.43,0.90)	0.61(0.43,1.18)	2.739	0.142-52.960	0.505

MALAT1b5	0.67(0.48,0.82)	0.55(0.31,0.75)	0.002	0.000-2.486	0.086
MALAT1b6	0.72(0.51,0.98)	0.75(0.71,0.88)	1.361	0.172-10.759	0.770
MALAT1b7	0.75(0.66,0.98)	0.77(0.46,0.87)	1.037	0.056-19.060	0.980
MALAT1b8	0.72(0.63,1.04)	0.87(0.62,1.31)	1.693	0.109-26.300	0.707
MALAT1b9	0.82(0.60,0.94)	0.87(0.66,1.21)	4.388	0.177-109.022	0.367
MALAT1b10	0.74(0.52,1.03)	0.73(0.32,0.82)	0.289	0.017-4.814	0.387
MALAT1b11	0.50(0.35,0.69)	0.58(0.30,0.83)	3.272	0.209-51.305	0.399
MALAT1b12	1.39(0.90,1.59)	1.40(1.17,1.61)	0.201	0.007-5.454	0.341
MALAT1b13	0.51(0.30,0.81)	0.40(0.17,0.57)	0.113	0.005-2.448	0.165
MALAT1b14	0.72(0.59,0.85)	0.58(0.43,0.78)	0.182	0.003-13.261	0.436
MALAT1b15	0.76(0.58,0.87)	0.76(0.48,1.03)	1.444	0.400-5.203	0.575
MALAT1c1	69.01(65.90,70.99)	66.16(64.46,69.65)	1.018	0.788-1.316	0.89
MALAT1c2	74.07(70.92,75.87)	70.24(69.25,73.25)	1.021	0.802-1.300	0.867
MALAT1c3	67.44(62.29,70.42)	63.04(55.79,66.10)	0.976	0.850-1.122	0.734
MALAT1c4	70.17(66.31,72.23)	68.11(62.19,69.78)	0.863	0.691-1.079	0.197
MALAT1c5	75.81(71.99,78.12)	72.14(67.00,74.43)	0.906	0.744-1.104	0.329
MALAT1c6	79.98(76.83,82.50)	77.09(73.97,80.79)	0.967	0.777-1.203	0.762

*Adjusted for age, gender, smoking and drinking. a: Methylation level is expressed as a percentage. Data was expressed as median (P_{25}, P_{75}).

Table S13. Sensitivity, Specificity, and area under the curve of the the diagnosis model of H19 and MALAT1 promoters in peripheral blood between GC patients and controls in Female and Male groups

	Model	AUC(*95%CI*)	Sensitivity(%)	Specificity(%)	*P*-value
Female	Nomogram	0.821(0.716-0.926)	69.4	92.6	1.50×10^{-5}
	MALAT1b12	0.722(0.593-0.851)	61.1	81.5	0.003
	H19c3	0.686(0.552-0.821)	75.0	59.3	0.012
	H19c4	0.677(0.544-0.810)	52.8	77.8	0.017
Male	Nomogram	0.741(0.669-0.813)	65.8	75.3	2.90×10^{-8}
	H19b7	0.664(0.585-0.742)	65.8	75.3	1.63×10^{-4}
	H19c1	0.688(0.612-0.764)	48.2	82.2	1.50×10^{-6}
	H19c5	0.665(0.587-0.743)	50.9	82.2	1.40×10^{-5}

AUC, area under curve.