

Association between interleukin gene polymorphisms and multiple myeloma susceptibility

References

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Figure S1. Associations between G:A gene variations positivity with the ethnicity, detection methods, IL type, and source of the detection.

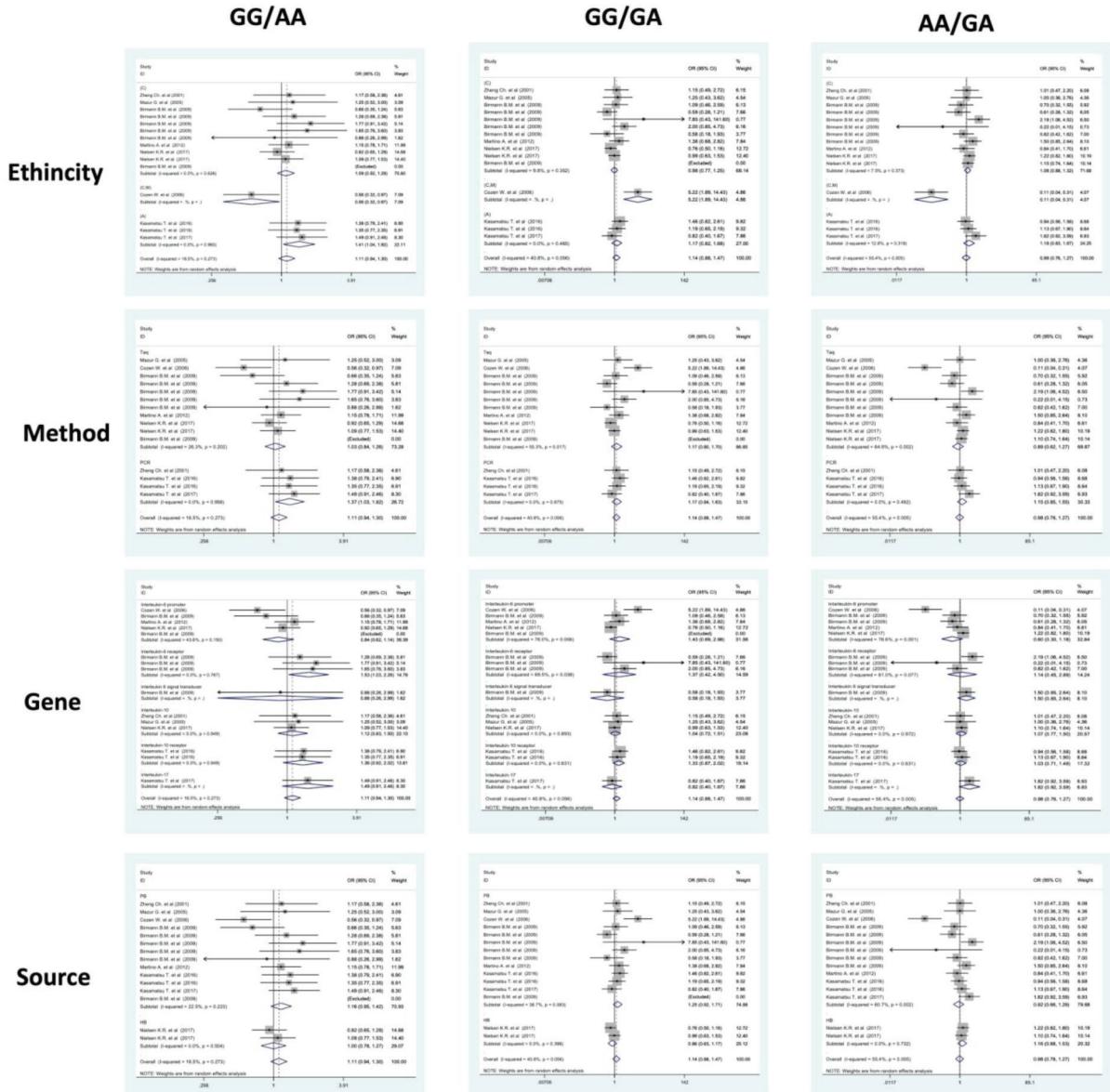


Figure S2. Genotype distribution of G:C in ethnicity, detection methods, IL type, and source of the detection.

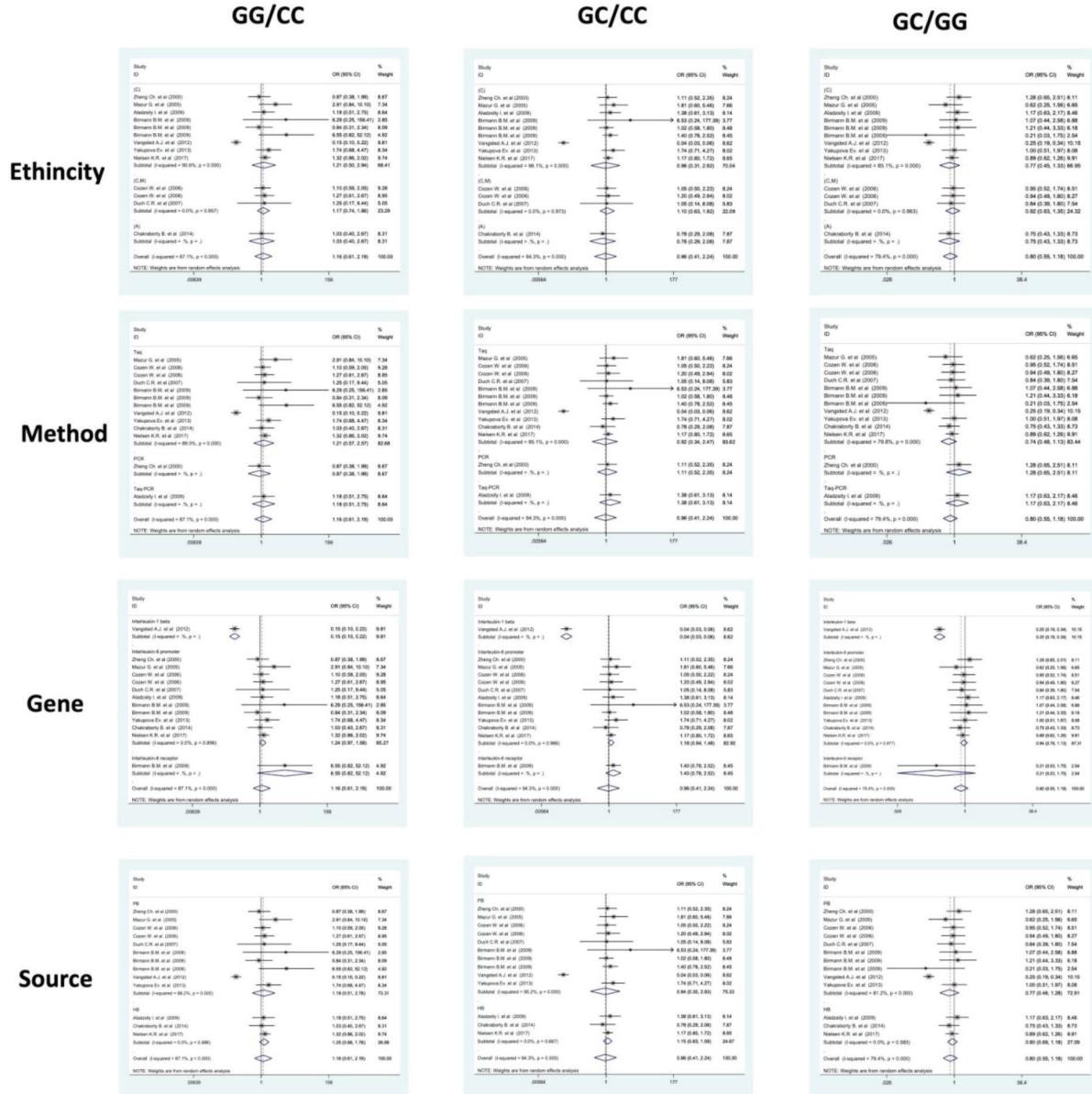


Figure S3. Associations between T:C gene polymorphisms positivity with the IL type, and source of the detection.

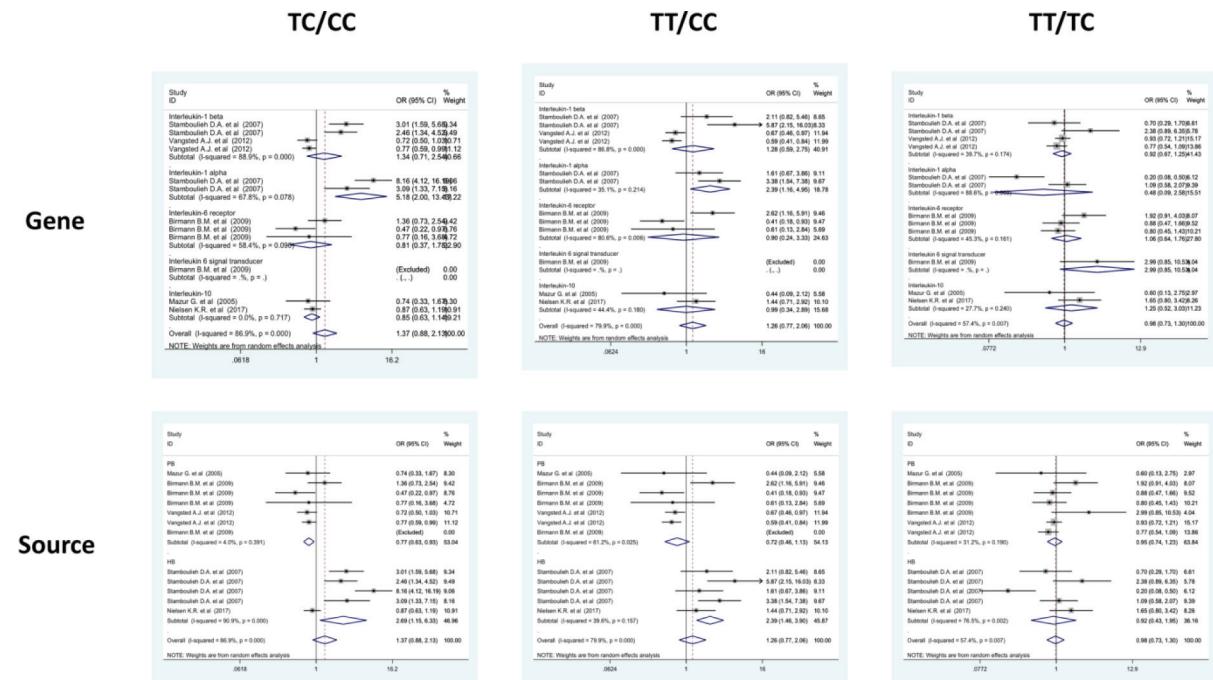


Figure S4. C:A gene polymorphisms and ethnicity, detection methods, IL type, and source of the detection in MM patients.



Table SI. Summary of interleukin polymorphisms and their association with MM.

Gene	SNP	Genotype-case ^a			Genotype-control			P (HWE) ^b	(Refs.)
		wt	ht	mt	wt	ht	mt		
Interleukin-1 beta	IL-1 β rs1143627(31 T>C)	126	134	48	750	744	191	Yes	(1)
	IL-1 β rs1143623 (1464G>C)	167	131	34	883	661	131	Yes	(1)
	IL-1 β rs4848306 (3737 C>T)	134	154	48	541	810	329	Yes	(1)
	IL-1 β (511 C>T)	18	47	9	76	66	18	No	(2)
	IL-1 β (+3954 C>T)	23	39	12	90	62	8	No	(2)
Interleukin-1 alpha	IL-1 α (889 C>T)	27	38	9	116	20	24	No	(2)
	IL-1RN Mspa1 (+11100 C>T)	10	24	40	54	42	64	Yes	(2)
Interleukin-4	IL-4 rs2243248(1098T>G)	292	47	2	308	44	3	Yes	(3)
Interleukin-6 promoter	IL-6 promoter rs1800795 (174G>C)	22	36	15	33	69	26	Yes	(4)
	IL-6 promoter rs1800795 (174G>C)	37	43	17	36	49	14	Yes	(5)
	IL-6 promoter rs1800795 (174G>C)	28	22	2	35	23	2	Yes	(6)
	IL-6 promoter rs1800795 (174G>C)	11	31	12	16	28	6	Yes	(7)
	IL-6 promoter rs1800795 (174G>C)	23	33	13	37	53	12	No	(8)
	IL-6 promoter rs1800795 (174G>C)	54	40	9	68	38	11	Yes	(9)
	IL-6 promoter rs1800795 (174G>C)	85	31	30	75	26	24	No	(10)
	IL-6 promoter rs1800795 (174G>C)	90	167	80	107	176	72	Yes	(3)
	IL-6 promoter rs1800796 (572G>C)	67	8	1	141	18	0	Yes	(11)
	IL-6 promoter rs1800796 (572G>C)	101	25	20	90	21	14	Yes	(10)
	IL-6 promoter rs1800797 (597G>A)	97	89	15	103	109	22	Yes	(12)
	IL-6 promoter rs1800797 (597G>A)	84	57	5	74	28	23	No	(10)
	IL-6 promoter rs1800797 (597G>A)	102	163	76	117	172	66	Yes	(3)
	IL-6 promoter rs2069840 (C>G)	34	38	7	69	79	12	No	(11)
	IL-6 promoter rs2069837 (A>G)	70	12	0	141	17	0	No	(11)
	IL-6 promoter rs2069832 (G>A)	20	49	11	50	81	30	No	(11)
Interleukin-6 receptor	IL-6R rs8192284 (48865A>C)	24	37	18	54	87	17	No	(11)
	IL-6R rs8192284 (48865A>C)	34	46	12	43	44	10	Yes	(5)
	IL-6 R rs8192284 (48865A>C)	24	37	18	54	87	17	No	(13)
	IL-6R rs6684439 (C>T)	21	42	18	58	85	19	No	(11)
	IL-6R rs7529229 (T>C)	21	41	19	51	88	19	No	(11)
	IL-6R rs4845617 (G>A)	30	28	21	61	73	25	No	(11)
	IL-6R rs12083537 (T>C)	50	27	3	109	47	4	No	(11)
	IL-6R rs4075015 (T>A)	32	35	13	63	71	24	No	(11)
	IL-6R rs4845374 (T>A)	53	25	1	108	45	6	No	(11)
	IL-6R rs10752641 (C>G)	56	23	1	94	54	11	No	(11)
	IL-6R rs2229238 (G>A)	65	15	0	108	44	6	No	(11)
	IL-6R rs4845623 (A>G)	18	35	15	48	77	20	No	(11)
Interleukin 6 signal transducer	IL-6 ST rs11744523 (T>A)	51	26	0	129	30	0	No	(11)
	IL-6 ST rs1900173 (A>T)	64	14	1	133	26	2	No	(11)
	IL-6 ST rs11574780 (T>C)	76	3	0	144	17	0	No	(11)
	IL-6 ST rs10940495 (A>G)	51	27	4	82	65	11	No	(11)
Interleukin-10	IL-10 rs1800871 (819C>T)	23	28	3	17	28	5	Yes	(7)
	IL-10 rs1800871 (819C>T)	207	115	20	208	133	14	Yes	(3)
	IL-10 rs1800872 (592A>C)	15	35	4	21	22	7	No	(7)
	IL-10 rs1800872 (592A>C)	206	114	20	208	113	14	Yes	(3)
	IL-10 rs1800872 (592A>C)	51	66	11	91	95	16	Yes	(14)
	IL-10 rs1800896 (1082G>A)	20	23	11	16	23	11	No	(7)
	IL-10 rs1800896 (1082G>A)	21	36	15	28	56	23	No	(15)
	IL-10 rs1800890 (3575T>A)	100	180	58	103	187	65	Yes	(3)
Interleukin-10 receptor	IL-10R <i>ars</i> 2228055 (670 A>G)	41	50	37	73	84	45	Yes	(14)
	IL-10R β rs2834167 (A>G)	38	57	33	59	100	43	Yes	(14)
	IL-17A rs2275913 (197 G>A)	45	55	20	63	115	23	Yes	(16)
Interleukin-23	IL-23R rs1884444 (T>G)	38	57	25	75	93	33	No	(16)

^aAA, AB, BC, homozygotes for the common allele, heterozygotes, and homozygotes for the rare allele, respectively. ^bNo refers to P-value Hardy-Weinberg equilibrium (HWE) ≤ 0.05 and Yes refers to $P(HWE) > 0.05$.

Table SII. Quality assessment of the included studies according to the Newcastle-Ottawa Scale (NOS).

Author	Year	Case			Control			Comparability			Exposure			NOS score (Refs.)	
		Definition	Representativeness		Selection	Definition	Important factors	Other factors	Secure record	Blind	Method	Non-response rate			
Zheng Ch.	2000	★	★	★	★	★	★	★	☆	★	★	☆	7	(4)	
Zheng C.	2001	★	★	★	★	★	★	★	☆	★	★	☆	7	(15)	
Iakupova Ev.	2003	★	★	★	★	★	★	★	☆	★	★	★	9	(8)	
Mazur G.	2005	★	★	★	★	★	★	★	★	★	★	★	8	(7)	
Cozen W.	2006	★	★	★	★	★	★	★	★	★	★	★	8	(10)	
Duch C.R.	2007	★	★	★	★	★	★	★	★	★	★	★	9	(6)	
Stamboulieh A.D.	2007	★	★	★	★	★	★	★	★	★	★	★	8	(2)	
Aladzity I.	2009	★	★	★	★	★	★	★	★	★	★	★	8	(5)	
Birmann B.M.	2009	☆	★	★	★	★	★	★	★	★	★	★	8	(11)	
Martino A.	2012	★	★	★	★	★	★	★	★	★	★	★	9	(12)	
Vangsted A.J.	2012	★	★	★	★	★	★	★	★	★	★	★	8	(1)	
Stephens O.W.	2012	☆	★	★	★	★	★	★	★	★	★	★	8	(13)	
Chakraborty B.	2014	★	☆	★	★	★	★	★	★	★	★	★	8	(9)	
Kasamatsu T.	2017	★	★	★	★	★	★	★	★	★	★	★	9	(14)	
Nielsen K.R.	2017	★	☆	★	★	★	★	★	★	★	★	★	7	(3)	
Kasamatsu T.	2018	★	★	★	★	★	★	★	★	★	★	★	8	(16)	

*: score value=1; ☆: score value=0; The specific item information is available from http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp.

Table SIII. The publication bias results.

Allies	Models	Begg's test		Egger's test	
		z	P-value	t	P-value
G:A	GG vs. GA	0.66	0.511	0.92	0.375
	GG vs. AA	1.53	0.125	2.37	0.035
	GA vs. AA	2.38	0.018	1.9	0.08
G:C	CC vs. GG	1.53	0.127	3.42	0.006
	CC vs. GC	1.16	0.246	2.33	0.04
	GG vs. GC	0.06	0.951	2.02	0.069
T:C	TT vs. AA	0.34	0.734	0.96	0.438
	TT vs. TA	1.22	0.221	-0.56	0.613
	AA vs. TA	0.34	0.734	-0.8	0.507
C:A	CC vs. AA	0.94	0.348	-0.81	0.463
	CC vs. AC	1.31	0.189	-1.59	0.187
	AA vs. AC	0.94	0.348	-1.23	0.286