

Supplementary Information

P27-V109G Polymorphism Is Not Associated with the Risk of Prostate Cancer: A Case-Control Study of Han Chinese Men in Central China

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Online Supplementary Material

Table S1-S3, and Figure S1-S2

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Supplementary table 1. Main characteristics of all studies included in the meta-Analysis

Author	Year	Ethnicity	Cancer Type	No. of subjects cases/controls	Genotype Frequency TT/TG/GG, control-case	Genotyping method
Kibel <i>et al.</i>	2003	Caucasian	Prostate cancer	96/105	67/24/5-57/38/10	PCR
Huang <i>et al.</i>	2007	Asian	Prostate cancer	190/292	183/7/0-280/12/0	PCR-RFLP
Han <i>et al.</i>	2015	Asian	Prostate cancer	70/70	66/2/2-60/1/9	PCR-RFLP
Ma <i>et al.</i>	2006	Asian	Ovarian cancer	164/248	153/6/5-217/29/2	PCR-RFLP
Gayther <i>et al.</i>	2007	Caucasian	Ovarian cancer	1495/2584	895/524/76-1375/934/175	TaqMan
Yu <i>et al.</i>	2008	Asian	Ovarian cancer	100/95	92/5/3-95/0/0	PCR-RFLP
Jin <i>et al.</i>	2008	Asian	Ovarian cancer	234/284	219/12/3-251/31/2	PCR-RFLP
Mohamed <i>et al.</i>	2012	African	Ovarian cancer	100/100	16/33/51-25/40/35	PCR-RFLP
Li <i>et al.</i>	2004	Caucasian	Oral squamous cell cancer	713/1224	422/241/50-718/440/66	PCR-RFLP
Li <i>et al.</i>	2007	Asian	Non-small cell lung cancer	202/265	190/12/0-249/15/1	PCR-RFLP
Li <i>et al.</i>	2010	Asian	Non-small cell lung cancer	110/124	102/7/1-120/4/0	PCR-RFLP
Francisco <i>et al.</i>	2013	Mixed	Melanoma	184/173	99/75/10-66/86/21	PCR-RFLP
Daniela <i>et al.</i>	2011	Caucasian	Medullary thyroid cancer	84/90	45/38/1-56/28/6	PCR-RFLP
Liu <i>et al.</i>	2013	Asian	Hepatocellular cancer	476/547	438/38/0-490/36/21	PCR-RFLP
Guo <i>et al.</i>	2006	Asian	Esophageal cancer	299/438	281/17/1-380/53/5	PCR-RFLP
Ma <i>et al.</i>	2008	Asian	Esophageal cancer	202/265	190/12/0-249/15/1	PCR-RFLP
Sekiya <i>et al.</i>	2014	Caucasian	Endocrine tumors	517/885	223/235/59-363/406/116	Sequencing
Guo <i>et al.</i>	2006	Asian	Esophageal cancer	256/438	238/16/2-380/53/5	PCR-RFLP
Ferrand <i>et al.</i>	1996	Caucasian	Breast cancer	30/80	22/7/1-49/21/10	PCR-RFLP

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MaH <i>et al.</i>	2006	Asian	Breast cancer	368/467	345/23/0-442/25/0	PCR-RFLP
Onay <i>et al.</i>	2006	Asian	Breast cancer	398/372	256/125/17-235/122/15	TaqMan
Naidu <i>et al.</i>	2007	Asian	Breast cancer	230/200	171/46/13-159/34/7	PCR-RFLP
Figueiredo <i>et al.</i>	2007	Asian	Breast cancer	1087/677	668/366/53-405/243/29	TaqMan
Driver <i>et al.</i>	2008	Caucasian	Breast cancer	2022/2179	1187/732/103-1267/796/116	TaqMan

PCR-RFLP: polymerase chain reaction–restriction fragment length polymorphism; mixed: more than two ethnicities.

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Supplementary table 2. The overall analyses of *p27-V109G* polymorphism and cancer risk.

Parameters		G vs. T			GG vs. TT			GT vs. TT		
Variables	N	OR(95%CI)	<i>P</i>	<i>P_h</i>	OR(95%CI)	<i>P</i>	<i>P_h</i>	OR(95%CI)	<i>P</i>	<i>P_h</i>
All cancer	24	0.859 (0.764-0.967)	0.012	0.000	0.862 (0.659-1.128)	0.279	0.002	0.881 (0.783-0.991)	0.290	0.031
PCa	3	0.537 (0.365-0.789)	0.002	0.238	0.554 (0.351-0.876)	0.012	0.474	0.659 (0.397-1.092)	0.106	0.478
Breast cancer	6	0.985 (0.911-1.066)	0.709	0.344	0.998 (0.803-1.239)	0.984	0.468	0.973 (0.882-1.073)	0.583	0.824
Ovarian cancer	5	0.876 (0.793-0.967)	0.943	0.001	1.696 (0.678-4.243)	0.259	0.005	0.721 (0.409-1.271)	0.258	0.012
Esophageal cancer	2	0.596 (0.279-1.274)	0.182	0.094	0.309 (0.052-1.835)	0.197	0.808	0.646 (0.273-1.530)	0.321	0.073
Non-small cell lung cancer	2	1.262 (0.681-2.339)	0.459	0.149	1.242 (0.171-8.993)	0.830	0.367	1.273 (0.661-2.453)	0.470	0.371
Others	6	0.776 (0.614-0.980)	0.033	0.001	0.579 (0.303-1.106)	0.098	0.002	0.887 (0.692-1.137)	0.344	0.018
Ethnicity										
Asian	14	0.816 (0.643-1.034)	0.092	0.000	0.852 (0.493-1.473)	0.566	0.078	0.891 (0.719-1.104)	0.290	0.031
Caucasian	7	0.911 (0.818-1.015)	0.090	0.043	0.824 (0.629-1.080)	0.161	0.051	0.926 (0.857-1.001)	0.053	0.199
Mixed	3	0.901 (0.443-1.833)	0.774	0.000	1.263 (0.272-5.861)	0.765	0.001	0.617 (0.306-1.244)	0.177	0.047
(GT+GG) vs. TT										
Variables	N	OR(95%CI)	<i>P</i>	<i>P_h</i>	GG vs. (GT+TT)					
All cancer	24	0.829 (0.729-0.942)	0.004	0.000	0.908 (0.707-1.168)	0.454	0.003			
PCa	3	0.554 (0.351-0.876)	0.012	0.474	0.363 (0.149-0.886)	0.026	0.325			
Breast cancer	6	0.919 (0.743-1.137)	0.435	0.011	1.010 (0.815-1.251)	0.928	0.508			
Ovarian cancer	5	0.859 (0.523-1.412)	0.549	0.013	1.611 (0.717-3.620)	0.249	0.004			
Esophageal cancer	2	0.614 (0.268-1.409)	0.250	0.078	0.326 (0.055-1.934)	0.217	0.837			
Non-small cell lung cancer	2	1.272 (0.671-2.414)	0.461	0.238	1.220 (0.168-8.868)	0.844	0.374			

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Others	6	0.810 (0.638-1.029)	0.084	0.015	0.637 (0.347-1.166)	0.144	0.004
Ethnicity							
Asian	14	0.803 (0.640-1.007)	0.057	0.005	0.867 (0.504-1.491)	0.606	0.081
Caucasian	7	0.913 (0.847-0.983)	0.016	0.104	0.859 (0.667-1.107)	0.240	0.066
Mixed	3	0.757 (0.360-1.594)	0.464	0.011	1.307 (0.377-4.529)	0.673	0.003

N= number of studies involved; OR= Odd ratio, 95%CI= 95%confidence interval; P = P -Value; P_h = P -value of Q-test for heterogeneity test.

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Supplementary table 3. Details of the sensitivity analyses for the *p27-VI09G* polymorphism and cancer risk

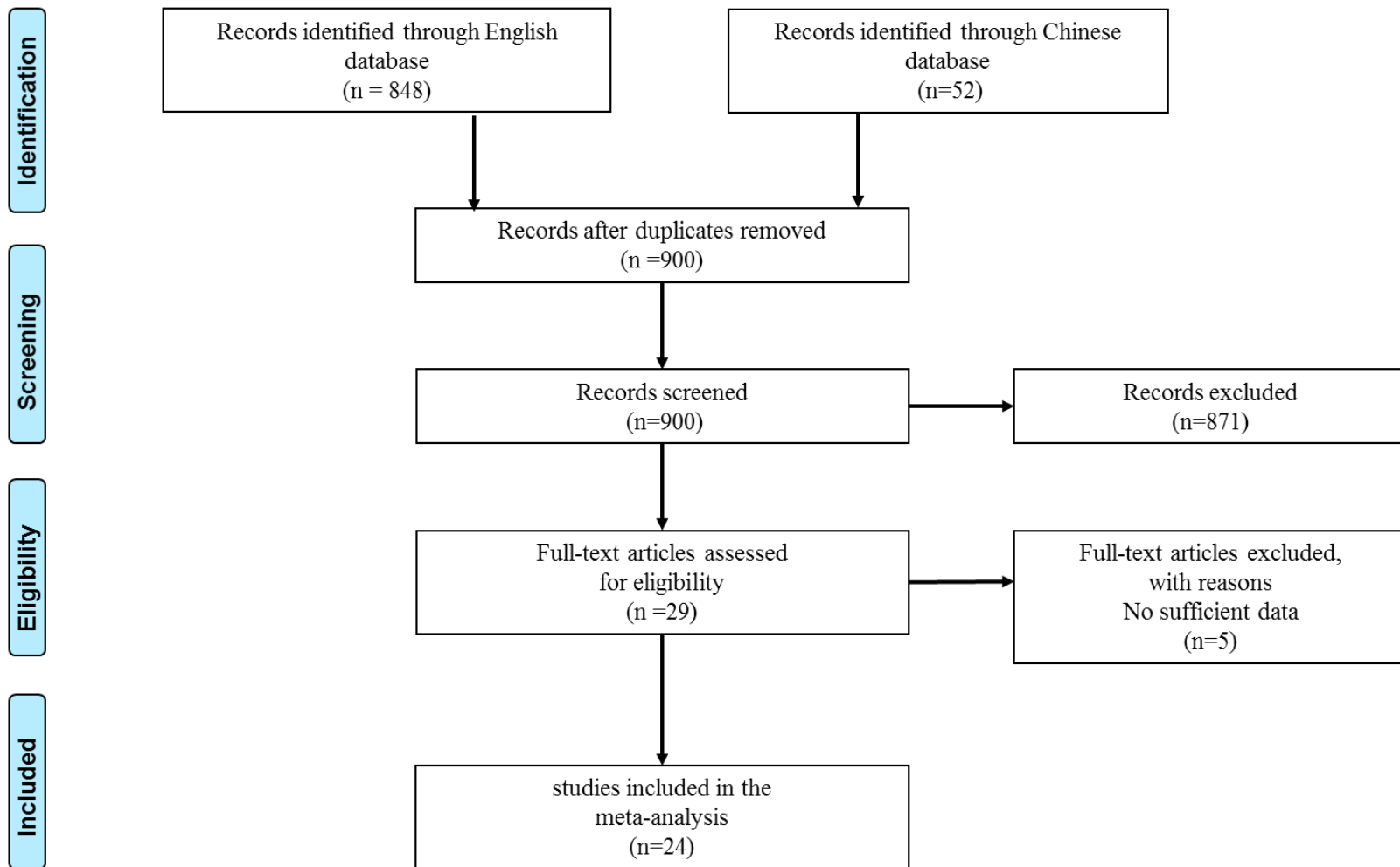
Study Omitted	G vs. T		GG vs. TT		GT vs. TT		(GT+GG) vs. TT		GG vs. (GT+TT)	
	Estimate	95%CI	Estimate	95%CI	Estimate	95%CI	Estimate	95%CI	Estimate	95%CI
Kibel <i>et al.</i>	0.874	0.776-0.984	0.888	0.676-1.167	0.894	0.795-1.001	0.843	0.741-0.958	0.928	0.717-1.200
Huang <i>et al.</i>	0.858	0.761-0.967	0.862	0.659-1.128	0.880	0.780-0.993	0.827	0.726-0.943	0.908	0.707-1.168
Han <i>et al.</i>	0.873	0.778-0.980	0.896	0.688-1.166	0.879	0.780-0.990	0.836	0.735-0.950	0.942	0.737-1.204
Ma <i>et al.</i>	0.863	0.765-0.973	0.838	0.642-1.094	0.898	0.803-1.003	0.839	0.738-0.955	0.886	0.691-1.345
Gayther <i>et al.</i>	0.856	0.750-0.978	0.887	0.660-1.191	0.879	0.768-1.007	0.826	0.714-0.956	0.935	0.710-1.232
Yu <i>et al.</i>	0.856	0.763-0.961	0.850	0.651-1.109	0.878	0.783-0.986	0.825	0.728-0.935	0.897	0.699-1.152
Jin <i>et al.</i>	0.868	0.770-0.978	0.850	0.647-1.117	0.897	0.800-1.006	0.841	0.739-0.956	0.896	0.694-1.157
Mohamed <i>et al.</i>	0.836	0.746-0.938	0.813	0.626-1.057	0.874	0.775-0.985	0.814	0.717-0.924	0.857	0.671-1.095
Li <i>et al.</i>	0.843	0.743-0.958	0.822	0.618-1.093	0.873	0.766-0.995	0.815	0.710-0.936	0.868	0.665-1.133
Li <i>et al.</i>	0.857	0.760-0.967	0.865	0.659-1.136	0.877	0.777-0.990	0.825	0.724-0.940	0.911	0.706-1.176
Li <i>et al.</i>	0.852	0.758-0.957	0.854	0.652-1.119	0.875	0.778-0.984	0.821	0.723-0.932	0.901	0.699-1.160
Francisco <i>et al.</i>	0.880	0.783-0.990	0.924	0.712-1.200	0.900	0.801-1.012	0.849	0.747-0.964	0.958	0.745-1.230
Daniela <i>et al.</i>	0.851	0.754-0.961	0.881	0.674-1.151	0.867	0.772-0.973	0.815	0.716-0.927	0.930	0.726-1.192
Liu <i>et al.</i>	0.880	0.783-0.989	0.893	0.695-1.147	0.869	0.770-0.981	0.832	0.729-0.951	0.939	0.745-1.184
Guo <i>et al.</i>	0.882	0.787-0.989	0.877	0.669-1.148	0.904	0.809-1.010	0.851	0.751-0.963	0.922	0.716-1.187
Ma <i>et al.</i>	0.857	0.760-0.967	0.865	0.659-1.136	0.877	0.777-0.990	0.825	0.724-0.941	0.911	0.706-1.176
Sekiya <i>et al.</i>	0.851	0.748-0.968	0.857	0.633-1.162	0.873	0.768-0.993	0.820	0.714-0.942	0.905	0.680-1.204
Guo <i>et al.</i>	0.875	0.778-0.984	0.867	0.659-1.141	0.900	0.802-1.009	0.845	0.743-0.960	0.912	0.705-1.180
Ferrand <i>et al.</i>	0.868	0.771-0.977	0.880	0.673-1.151	0.882	0.782-0.995	0.834	0.732-0.949	0.925	0.720-1.189

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Ma H <i>et al.</i>	0.851	0.754-0.960	0.862	0.659-1.128	0.872	0.773-0.984	0.819	0.718-0.933	0.908	0.707-1.168
Onay <i>et al.</i>	0.850	0.750-0.963	0.847	0.637-1.127	0.875	0.771-0.993	0.820	0.716-0.939	0.895	0.685-1.169
Naidu <i>et al.</i>	0.841	0.747-0.948	0.831	0.632-1.094	0.868	0.770-0.979	0.811	0.712-0.922	0.882	0.681-1.141
Figueiredo <i>et al.</i>	0.848	0.746-0.964	0.836	0.624-1.119	0.875	0.768-0.997	0.844	0.739-0.964	0.882	0.671-1.159
Driver <i>et al.</i>	0.844	0.738-0.965	0.840	0.614-1.148	0.866	0.758-0.991	0.814	0.707-0.937	0.889	0.662-1.192

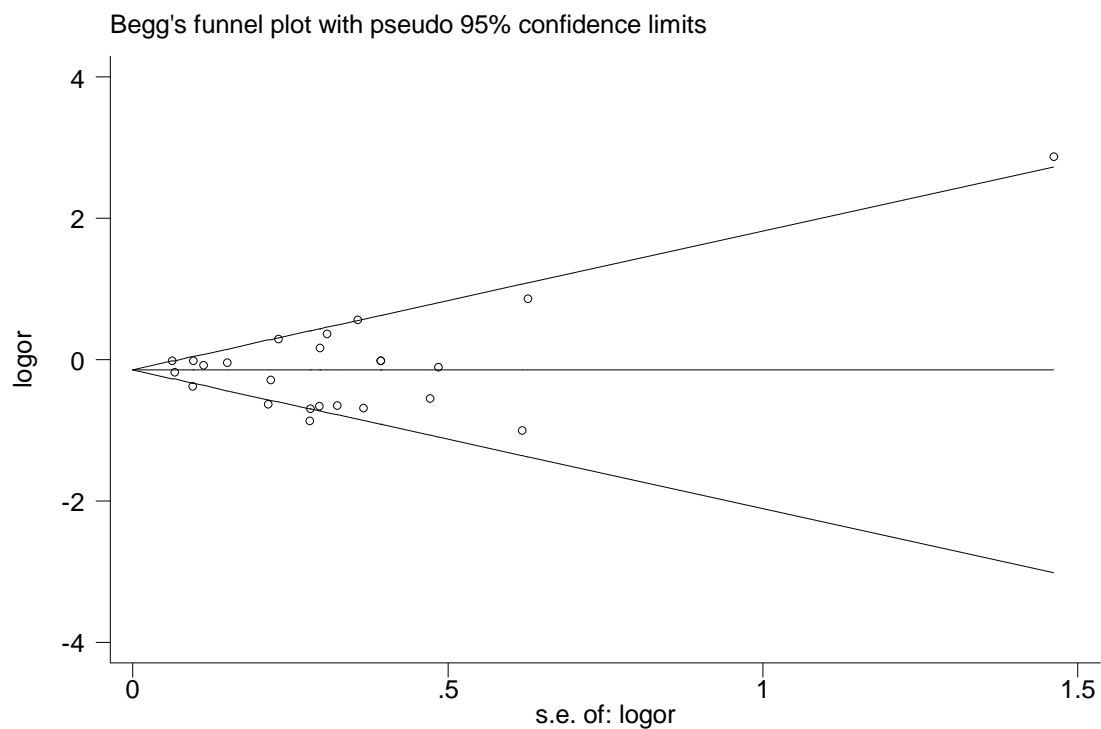
95%CI= 95% confidence interval

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Supplementary figure 1. Flow chart shows study selection process.

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Supplementary figure 2. Funnel plot of publication bias analysis for the associations between the *p27-V109G* polymorphism and cancer risk (GT+GG vs. TT).