Table S1. Methodological quality of the included studies according to the NOS.

Polymorphism	Author	Ethnicity	Year	Source of control	NOS score			Summary	Level
					Selection	Comparability	Exposure		
IL-6-rs1800795	Moore *et al.*	Caucasian	2009	P-B	3	2	3	8	A
	Pierce *et al.*	Caucasian	2009	P-B	3	2	3	8	A
	Pierce *et al.*	Mixed	2009	P-B	3	2	3	8	A
	Michaud *et al.*	Caucasian	2006	P-B	4	2	3	9	A
	BAO *et al.*	Asian	2008	P-B	4	2	3	9	A
	Dossus *et al.*	Caucasian	2010	P-B	3	2	3	8	A
	Kesarwani *et al.*	Asian	2008	P-B	3	2	2	7	A
	Zabaleta *et al.*	Caucasian	2009	H-B	3	1	3	7	A
	Zabaleta *et al.*	Mixed	2009	H-B	3	1	3	7	A
	Wang *et al.*	Caucasian	2009	P-B	3	2	3	8	A
	Mandal *et al.*	Mixed	2014	H-B	3	2	3	8	A
IL-6-rs1800796	Wang *et al.*	Caucasian	2009	P-B	3	2	3	8	A
	Pierce *et al.*	Caucasian	2009	P-B	3	2	3	8	A
	Pierce *et al.*	Mixed	2009	P-B	3	2	3	8	A
	sun *et al.*	Caucasian	2004	P-B	3	2	3	8	A
TLR4-rs11536889	Chen *et al.*	Caucasian	2005	P-B	3	2	3	8	A
	Zheng *et al.*	Caucasian	2004	P-B	3	2	3	8	A
	Shui *et al.*	Caucasian	2012	P-B	2	2	3	7	A
	Cheng *et al.*	Caucasian	2007	H-B	3	2	3	8	A
	Wang *et al.*	Caucasian	2009	P-B	3	2	3	8	A
	Zheng *et al.*	Caucasian	2004	P-B	3	2	3	8	A
TLR4-rs4986790	Chen *et al.*	Caucasian	2005	P-B	3	2	3	8	A
	Cheng *et al.*	Caucasian	2007	H-B	3	2	3	8	A
	Wang *et al.*	Caucasian	2009	P-B	3	2	3	8	A
	Balistreri *et al.*	Caucasian	2010	H-B	2	2	3	7	A

TLR4-rs2149356	Chen *et al.*	Caucasian	2005	P-B	3	2	3	8	A
	Zheng *et al.*	Caucasian	2004	P-B	3	2	3	8	A
	Shui *et al.*	Caucasian	2012	P-B	2	2	3	7	A
	Cheng *et al.*	Caucasian	2007	H-B	3	2	3	8	A
TLR4-rs10759932	Chen *et al.*	Caucasian	2005	P-B	3	2	3	8	A
	Zheng *et al.*	Caucasian	2004	P-B	3	2	3	8	A
	Shui *et al.*	Caucasian	2012	P-B	2	2	3	7	A
	Cheng *et al.*	Caucasian	2007	H-B	3	2	3	8	A
TLR4-rs1927914	Chen *et al.*	Caucasian	2005	P-B	3	2	3	8	A
	Zheng *et al.*	Caucasian	2004	P-B	3	2	3	8	A
	Song *et al.*	Asian	2009	H-B	3	2	3	8	A
TLR4-rs7873784	Chen *et al.*	Caucasian	2005	P-B	3	2	3	8	A
	Shui *et al.*	Caucasian	2012	P-B	2	2	3	7	A
	Cheng *et al.*	Caucasian	2007	H-B	3	2	3	8	A
IGF1-(CA)19	Chen *et al.*	Caucasian	2006	P-B	4	2	3	9	A
	Chen *et al.*	Mixed	2006	P-B	4	2	3	9	A
	Schildkraut *et al.*	Mixed	2005	P-B	4	2	2	8	A
	Neuhausen *et al.*	Caucasian	2005	P-B	4	2	3	9	A
	Tsuchiya *et al.*	Asian	2005	H-B	3	1	3	7	A
	Friedrichsen *et al.*	Mixed	2005	P-B	4	2	3	9	A
	Nam *et al.*	Mixed	2003	P-B	3	1	3	7	A
	Hernandez *et al.*	Mixed	2007	H-B	4	2	3	9	A
IRS1-rs1801278	Saracevic *et al.*	Caucasian	2011	H-B	3	2	3	8	A
	Fall *et al.*	Mixed	2008	H-B	4	2	2	8	A
	Li *et al.*	Mixed	2005	P-B	3	2	3	8	A
	Neuhausen *et al.*	Caucasian	2005	P-B	4	2	3	9	A
VEGF-rs833061	Fukuda *et al.*	Asian	2007	H-B	4	1	3	8	A
	Onen *et al.*	Mixed	2008	P-B	4	1	2	7	A
	Lin *et al.*	Asian	2003	P-B	4	2	3	9	A
VEGF-rs1570360	Sfar *et al.*	Caucasian	2006	H-B	4	2	3	9	A

	Jacobs *et al.*	Caucasian	2008	P-B	4	2	2	8	A
	McCarron *et al.*	Caucasian	2013	P-B	4	2	2	8	A
FGFR4-rs351855	FitzGerald *et al.*	Caucasian	2009	P-B	4	2	3	9	A
	Ho *et al.*	Caucasian	2010	P-B	4	2	3	9	A
	Ma *et al.*	Asian	2010	H-B	3	2	3	8	A

This table identifies 'high' quality choices with a 'star'. A study can be awarded a maximum of one star for each numbered item within the Selection and Exposure categories. A maximum of two stars can be given for Comparability; NOS: Newcastle-Ottawa Scale.

Table S2. Details of the association between polymorphisms in genes of PI3K/Akt signaling pathway and prostate cancer risk.

Gene	SNP	Comparison	Subgroup	N	P_H	P_Z	Random	Fixed
IL-6	rs1800796	M vs. W	Overall	4	0.565	0.077	0.819 (0.654-1.026)	0.815 (0.650-1.022)
		M vs. W	Caucasian	3	0.500	0.133	0.836 (0.664-1.053)	0.836 (0.662-1.056)
		M vs. W	Y	3	0.500	0.133	0.836 (0.664-1.053)	0.836 (0.662-1.056)
		WM vs. WW	Overall	4	0.399	0.117	0.837 (0.659-1.064)	0.825 (0.649-1.049)
		WM vs. WW	Caucasian	3	0.510	0.221	0.859 (0.674-1.095)	0.858 (0.672-1.096)
		WM vs. WW	Y	3	0.510	0.221	0.859 (0.674-1.095)	0.858 (0.672-1.096)
		MM + WM vs. WW	Overall	4	0.484	0.092	0.823 (0.651-1.041)	0.816 (0.644-1.033)
		MM + WM vs. WW	Caucasian	3	0.513	0.168	0.844 (0.664-1.072)	0.844 (0.662-1.074)
		MM + WM vs. WW	Y	3	0.513	0.168	0.844 (0.664-1.072)	0.844 (0.662-1.074)
		MM vs. WW	Overall	4	0.449	0.573	0.742 (0.237-2.320)	0.727 (0.240-2.205)
		MM vs. WW	Caucasian	3	0.295	0.473	0.727 (0.151-3.492)	0.627 (0.175-2.243)
		MM vs. WW	Y	3	0.295	0.473	0.727 (0.151-3.492)	0.627 (0.175-2.243)
		MM vs. WM + WW	Overall	4	0.441	0.613	0.771 (0.247-2.411)	0.751 (0.247-2.279)
		MM vs. WM + WW	Caucasian	3	0.298	0.487	0.734 (0.154-3.491)	0.637 (0.178-2.276)
		MM vs. WM + WW	Y	3	0.298	0.487	0.734 (0.154-3.491)	0.637 (0.178-2.276)
TLR4	rs10759932	M vs. W	Overall	4	0.000	0.389	1.203 (0.790-1.832)	1.187 (1.081-1.304)
		M vs. W	P-B	3	0.036	0.776	0.972 (0.799-1.182)	0.990 (0.890-1.100)
		M vs. W	N	2	0.000	0.258	1.574 (0.717-3.455)	1.460 (1.281-1.664)
		M vs. W	Y	2	0.017	0.642	0.924 (0.664-1.287)	0.949 (0.829-1.087)
		WM vs. WW	Overall	4	0.038	0.337	0.910 (0.751-1.103)	0.934 (0.835-1.045)
		WM vs. WW	P-B	3	0.032	0.620	0.944 (0.750-1.187)	0.964 (0.853-1.089)
		WM vs. WW	N	2	0.080	0.690	0.940 (0.696-1.271)	0.975 (0.829-1.146)
		WM vs. WW	Y	2	0.028	0.455	0.875 (0.616-1.242)	0.898 (0.769-1.049)
		MM + WM vs. WW	Overall	4	0.000	0.633	1.067 (0.818-1.392)	1.062 (0.954-1.182)
		MM + WM vs. WW	P-B	3	0.027	0.682	0.953 (0.759-1.198)	0.975 (0.866-1.097)
		MM + WM vs. WW	N	2	0.021	0.185	1.278 (0.889-1.837)	1.227 (1.055-1.428)
		MM + WM vs. WW	Y	2	0.017	0.540	0.891 (0.616-1.288)	0.917 (0.788-1.067)

		MM vs. WW	Overall	4	0.000	0.230	2.374 (0.579-9.741)	2.788 (2.061-3.769)
		MM vs. WW	P-B	3	0.501	0.542	1.113 (0.768-1.613)	1.121 (0.777-1.618)
		MM vs. WW	N	2	0.000	0.373	5.278 (0.136-205.281)	4.283 (2.891-6.346)
		MM vs. WW	Y	2	0.282	0.435	1.199 (0.690-2.085)	1.222 (0.739-2.018)
		MM vs. WM + WW	Overall	4	0.000	0.224	2.447 (0.578-10.36)	2.912 (2.158-3.929)
		MM vs. WM + WW	P-B	3	0.560	0.521	1.120 (0.773-1.621)	1.127 (0.782-1.625)
		MM vs. WM + WW	N	2	0.000	0.381	5.402 (0.124-234.883)	4.463 (3.023-6.589)
		MM vs. WM + WW	Y	2	0.366	0.381	1.242 (0.747-2.065)	1.252 (0.758-2.067)
TLR4	rs4986790	M vs. W	Overall	4	0.051	0.774	0.940 (0.618-1.432)	1.011 (0.810-1.263)
		M vs. W	H-B	2	0.040	0.608	0.581 (0.073-4.610)	1.155 (0.811-1.646)
		M vs. W	P-B	2	0.140	0.607	0.880 (0.556-1.392)	0.928 (0.698-1.234)
		M vs. W	Y	3	0.021	0.530	0.781 (0.361-1.689)	0.972 (0.725-1.304)
		WM vs. WW	Overall	4	0.037	0.894	0.969 (0.609-1.543)	1.063 (0.840-1.346)
		WM vs. WW	H-B	2	0.046	0.665	0.638 (0.084-4.874)	1.241 (0.853-1.806)
		WM vs. WW	P-B	2	0.086	0.697	0.894 (0.508-1.572)	0.960 (0.708-1.302)
		WM vs. WW	Y	3	0.016	0.578	0.790 (0.345-1.812)	1.006 (0.740-1.368)
		MM + WM vs. WW	Overall	4	0.040	0.824	0.950 (0.602-1.497)	1.038 (0.823-1.309)
		MM + WM vs. WW	H-B	2	0.041	0.635	0.603 (0.075-4.870)	1.204 (0.832-1.742)
		MM + WM vs. WW	P-B	2	0.105	0.695	0.882 (0.521-1.492)	0.942 (0.699-1.270)
		MM + WM vs. WW	Y	3	0.016	0.546	0.776 (0.341-1.767)	0.989 (0.729-1.341)
		MM vs. WW	Overall	3	0.983	0.398	0.608 (0.192-1.924)	0.608 (0.192-1.926)
		MM vs. WW	H-B	2	0.857	0.596	0.593 (0.086-4.067)	0.593 (0.086-4.095)
		MM vs. WW	P-B	1	1.000	0.510	0.617 (0.147-2.595)	0.617 (0.147-2.595)
		MM vs. WW	Y	2	0.857	0.596	0.593 (0.086-4.067)	0.593 (0.086-4.095)
		MM vs. WM + WW	Overall	3	0.971	0.392	0.605 (0.191-1.911)	0.604 (0.191-1.914)
		MM vs. WM + WW	H-B	2	0.808	0.600	0.597 (0.087-4.092)	0.596 (0.086-4.122)
		MM vs. WM + WW	P-B	1	1.000	0.499	0.609 (0.145-2.559)	0.609 (0.145-2.559)
		MM vs. WM + WW	Y	2	0.808	0.600	0.597 (0.087-4.092)	0.596 (0.086-4.122)
TLR4	rs1927914	M vs. W	Overall	3	0.306	0.104	0.917 (0.820-1.025)	0.922 (0.836-1.017)
		M vs. W	Caucasian	2	0.245	0.200	0.933 (0.827-1.051)	0.935 (0.845-1.036)

		M vs. W	P-B	2	0.245	0.200	0.933 (0.827-1.051)	0.935 (0.845-1.036)
		M vs. W	Y	2	0.245	0.200	0.933 (0.827-1.051)	0.935 (0.845-1.036)
		WM vs. WW	Overall	3	0.009	0.211	0.804 (0.571-1.132)	0.900 (0.784-1.034)
		WM vs. WW	Caucasian	2	0.484	0.560	0.958 (0.829-1.107)	0.958 (0.829-1.107)
		WM vs. WW	P-B	2	0.484	0.560	0.958 (0.829-1.107)	0.958 (0.829-1.107)
		WM vs. WW	Y	2	0.484	0.560	0.958 (0.829-1.107)	0.958 (0.829-1.107)
		MM + WM vs. WW	Overall	3	0.053	0.166	0.834 (0.645-1.078)	0.893 (0.783-1.019)
		MM + WM vs. WW	Caucasian	2	0.937	0.348	0.936 (0.816-1.074)	0.936 (0.816-1.074)
		MM + WM vs. WW	P-B	2	0.937	0.348	0.936 (0.816-1.074)	0.936 (0.816-1.074)
		MM + WM vs. WW	Y	2	0.937	0.348	0.936 (0.816-1.074)	0.936 (0.816-1.074)
		MM vs. WW	Overall	3	0.089	0.565	0.888 (0.592-1.332)	0.877 (0.702-1.096)
		MM vs. WW	Caucasian	2	0.047	0.425	0.827 (0.518-1.319)	0.854 (0.680-1.074)
		MM vs. WW	P-B	2	0.047	0.425	0.827 (0.518-1.319)	0.854 (0.680-1.074)
		MM vs. WW	Y	2	0.047	0.425	0.827 (0.518-1.319)	0.854 (0.680-1.074)
		MM vs. WM + WW	Overall	3	0.012	0.986	1.005 (0.592-1.706)	0.918 (0.744-1.133)
		MM vs. WM + WW	Caucasian	2	0.020	0.505	0.838 (0.499-1.408)	0.872 (0.703-1.084)
		MM vs. WM + WW	P-B	2	0.020	0.505	0.838 (0.499-1.408)	0.872 (0.703-1.084)
		MM vs. WM + WW	Y	2	0.020	0.505	0.838 (0.499-1.408)	0.872 (0.703-1.084)
TLR4	rs11536889	M vs. W	Overall	5	0.013	0.742	1.031 (0.861-1.234)	1.003 (0.910-1.105)
		M vs. W	P-B	4	0.014	0.980	0.997 (0.812-1.226)	0.975 (0.878-1.082)
		M vs. W	Y	4	0.014	0.980	0.997 (0.812-1.226)	0.975 (0.878-1.082)
		WM vs. WW	Overall	5	0.000	0.798	1.036 (0.789-1.362)	0.998 (0.892-1.116)
		WM vs. WW	P-B	4	0.000	0.966	1.007 (0.725-1.400)	0.974 (0.864-1.098)
		WM vs. WW	Y	4	0.000	0.966	1.007 (0.725-1.400)	0.974 (0.864-1.098)
		MM + WM vs. WW	Overall	5	0.001	0.763	1.038 (0.817-1.318)	1.000 (0.898-1.115)
		MM + WM vs. WW	P-B	4	0.001	0.977	1.004 (0.756-1.334)	0.973 (0.866-1.092)
		MM + WM vs. WW	Y	4	0.001	0.977	1.004 (0.756-1.334)	0.973 (0.866-1.092)
		MM vs. WW	Overall	5	0.616	0.931	1.014 (0.733-1.404)	1.014 (0.734-1.402)
		MM vs. WW	P-B	4	0.603	0.759	0.945 (0.660-1.354)	0.945 (0.661-1.352)
		MM vs. WW	Y	4	0.603	0.759	0.945 (0.660-1.354)	0.945 (0.661-1.352)

		MM vs. WM + WW	Overall	5	0.514	0.877	1.025 (0.741-1.417)	1.026 (0.743-1.416)
		MM vs. WM + WW	P-B	4	0.446	0.847	0.965 (0.674-1.380)	0.965 (0.676-1.379)
		MM vs. WM + WW	Y	4	0.446	0.847	0.965 (0.674-1.380)	0.965 (0.676-1.379)
TLR4	rs2149356	M vs. W	Overall	4	0.270	0.523	0.976 (0.895-1.064)	0.976 (0.905-1.052)
		M vs. W	P-B	3	0.258	0.297	0.955 (0.866-1.052)	0.957 (0.881-1.039)
		M vs. W	N	3	0.142	0.550	0.973 (0.853-1.110)	0.972 (0.885-1.067)
		WM vs. WW	Overall	4	0.928	0.402	1.046 (0.941-1.163)	1.046 (0.941-1.163)
		WM vs. WW	P-B	3	0.906	0.567	1.034 (0.922-1.160)	1.034 (0.922-1.160)
		WM vs. WW	N	3	0.805	0.572	1.039 (0.909-1.189)	1.039 (0.909-1.189)
		MM + WM vs. WW	Overall	4	0.646	0.830	1.011 (0.916-1.116)	1.011 (0.916-1.116)
		MM + WM vs. WW	P-B	3	0.607	0.902	0.993 (0.892-1.106)	0.993 (0.892-1.106)
		MM + WM vs. WW	N	3	0.442	0.947	1.004 (0.886-1.138)	1.004 (0.886-1.138)
		MM vs. WW	Overall	4	0.155	0.188	0.895 (0.721-1.112)	0.897 (0.763-1.055)
		MM vs. WW	P-B	3	0.162	0.080	0.843 (0.658-1.080)	0.851 (0.710-1.020)
		MM vs. WW	N	3	0.073	0.507	0.897 (0.650-1.237)	0.902 (0.741-1.098)
		MM vs. WM + WW	Overall	4	0.178	0.099	0.877 (0.718-1.070)	0.878 (0.753-1.025)
		MM vs. WM + WW	P-B	3	0.165	0.046	0.831 (0.656-1.053)	0.838 (0.704-0.997)
		MM vs. WM + WW	N	3	0.087	0.388	0.879 (0.655-1.179)	0.885 (0.735-1.066)
TLR4	rs7873784	M vs. W	Overall	3	0.493	0.143	0.920 (0.823-1.029)	0.920 (0.823-1.029)
		M vs. W	P-B	2	0.266	0.274	0.929 (0.806-1.071)	0.932 (0.821-1.058)
		M vs. W	Y	2	0.432	0.463	0.951 (0.832-1.087)	0.951 (0.832-1.087)
		WM vs. WW	Overall	3	0.787	0.262	0.928 (0.814-1.057)	0.928 (0.814-1.057)
		WM vs. WW	P-B	2	0.960	0.504	0.951 (0.820-1.102)	0.951 (0.820-1.102)
		WM vs. WW	Y	2	0.527	0.273	0.917 (0.786-1.070)	0.917 (0.786-1.070)
		MM + WM vs. WW	Overall	3	0.735	0.185	0.918 (0.809-1.042)	0.918 (0.809-1.042)
		MM + WM vs. WW	P-B	2	0.607	0.373	0.937 (0.812-1.081)	0.937 (0.812-1.081)
		MM + WM vs. WW	Y	2	0.463	0.335	0.929 (0.799-1.079)	0.929 (0.799-1.079)
		MM vs. WW	Overall	3	0.144	0.282	0.822 (0.483-1.399)	0.815 (0.562-1.183)
		MM vs. WW	P-B	2	0.051	0.600	0.797 (0.341-1.863)	0.795 (0.519-1.216)
		MM vs. WW	Y	2	0.519	0.743	1.083 (0.672-1.745)	1.083 (0.673-1.743)

		MM vs. WM + WW	Overall	3	0.138	0.328	0.840 (0.492-1.435)	0.831 (0.574-1.204)
		MM vs. WM + WW	P-B	2	0.049	0.621	0.807 (0.345-1.888)	0.804 (0.527-1.227)
		MM vs. WM + WW	Y	2	0.559	0.664	1.110 (0.690-1.787)	1.111 (0.691-1.785)
IRS1	rs1801278	M vs. W	Overall	4	0.879	0.579	0.949 (0.785-1.146)	0.948 (0.785-1.145)
		M vs. W	Caucasian	2	0.554	0.612	0.923 (0.673-1.267)	0.922 (0.672-1.264)
		M vs. W	H-B	2	0.476	0.904	0.984 (0.734-1.321)	0.982 (0.732-1.317)
		M vs. W	P-B	2	0.796	0.533	0.924 (0.722-1.184)	0.924 (0.722-1.184)
		WM vs. WW	Overall	4	0.672	0.541	0.937 (0.757-1.159)	0.936 (0.756-1.158)
		WM vs. WW	Caucasian	2	0.921	0.358	0.830 (0.559-1.234)	0.830 (0.559-1.234)
		WM vs. WW	H-B	2	0.570	0.687	1.068 (0.779-1.465)	1.067 (0.778-1.463)
		WM vs. WW	P-B	2	0.987	0.234	0.839 (0.629-1.120)	0.839 (0.629-1.120)
		MM + WM vs. WW	Overall	4	0.800	0.539	0.938 (0.762-1.154)	0.937 (0.762-1.153)
		MM + WM vs. WW	Caucasian	2	0.740	0.442	0.864 (0.595-1.257)	0.864 (0.594-1.255)
		MM + WM vs. WW	H-B	2	0.517	0.881	1.026 (0.752-1.399)	1.024 (0.751-1.395)
		MM + WM vs. WW	P-B	2	0.924	0.338	0.873 (0.661-1.153)	0.873 (0.661-1.153)
		MM vs. WW	Overall	4	0.667	0.964	1.006 (0.512-1.975)	0.985 (0.510-1.902)
		MM vs. WW	Caucasian	2	0.716	0.782	1.121 (0.512-2.451)	1.116 (0.512-2.433)
		MM vs. WW	Mixed	2	0.285	0.614	0.763 (0.178-3.274)	0.726 (0.209-2.517)
		MM vs. WW	H-B	2	0.857	0.318	0.482 (0.115-2.026)	0.481 (0.114-2.022)
		MM vs. WW	P-B	2	0.625	0.573	1.239 (0.577-2.663)	1.245 (0.582-2.663)
		MM vs. WM + WW	Overall	4	0.633	0.940	1.050 (0.538-2.049)	1.026 (0.535-1.966)
		MM vs. WM + WW	Caucasian	2	0.701	0.674	1.184 (0.547-2.564)	1.179 (0.546-2.545)
		MM vs. WM + WW	H-B	2	0.842	0.314	0.480 (0.114-2.015)	0.479 (0.114-2.010)
		MM vs. WM + WW	P-B	2	0.644	0.481	1.304 (0.613-2.776)	1.310 (0.618-2.777)
VEGF	rs833061	M vs. W	Overall	4	0.019	0.667	0.935 (0.688-1.270)	0.969 (0.823-1.141)
		M vs. W	Asian	2	0.016	0.323	0.732 (0.394-1.359)	0.820 (0.653-1.031)
		M vs. W	H-B	2	0.016	0.323	0.732 (0.394-1.359)	0.820 (0.653-1.031)
		M vs. W	P-B	2	1.000	0.223	1.158 (0.915-1.466)	1.158 (0.915-1.466)
		M vs. W	N	3	0.007	0.679	0.905 (0.566-1.448)	0.963 (0.783-1.183)
		WM vs. WW	Overall	4	0.000	0.748	0.905 (0.490-1.668)	0.936 (0.742-1.182)

		WM vs. WW	Asian	2	0.001	0.319	0.571 (0.190-1.718)	0.704 (0.521-0.953)
		WM vs. WW	H-B	2	0.001	0.319	0.571 (0.190-1.718)	0.704 (0.521-0.953)
		WM vs. WW	P-B	2	1.000	0.057	1.435 (0.989-2.082)	1.435 (0.989-2.082)
		WM vs. WW	N	3	0.000	0.782	0.874 (0.336-2.272)	0.908 (0.671-1.227)
		MM + WM vs. WW	Overall	4	0.001	0.754	0.912 (0.512-1.624)	0.941 (0.752-1.178)
		MM + WM vs. WW	Asian	2	0.002	0.317	0.590 (0.210-1.660)	0.727 (0.545-0.970)
		MM + WM vs. WW	H-B	2	0.002	0.317	0.590 (0.210-1.660)	0.727 (0.545-0.970)
		MM + WM vs. WW	P-B	2	1.000	0.062	1.416 (0.982-2.041)	1.416 (0.982-2.041)
		MM + WM vs. WW	N	3	0.000	0.791	0.884 (0.356-2.196)	0.915 (0.680-1.231)
		MM vs. WW	Overall	4	0.872	0.781	1.063 (0.693-1.629)	1.062 (0.693-1.629)
		MM vs. WW	Asian	2	0.712	0.774	0.920 (0.521-1.624)	0.920 (0.521-1.625)
		MM vs. WW	H-B	2	0.712	0.774	0.920 (0.521-1.624)	0.920 (0.521-1.625)
		MM vs. WW	P-B	2	1.000	0.452	1.282 (0.671-2.449)	1.282 (0.671-2.449)
		MM vs. WW	N	3	0.771	0.618	1.163 (0.644-2.098)	1.162 (0.644-2.097)
		MM vs. WM + WW	Overall	4	0.991	0.983	1.004 (0.671-1.504)	1.004 (0.671-1.504)
		MM vs. WM + WW	Asian	2	0.747	0.974	1.009 (0.581-1.753)	1.009 (0.581-1.753)
		MM vs. WM + WW	H-B	2	0.747	0.974	1.009 (0.581-1.753)	1.009 (0.581-1.753)
		MM vs. WM + WW	P-B	2	1.000	0.997	0.999 (0.552-1.807)	0.999 (0.552-1.807)
		MM vs. WM + WW	N	3	0.960	0.908	1.033 (0.598-1.784)	1.033 (0.598-1.783)
VEGF	rs1570360	M vs. W	Overall	3	0.025	0.086	0.769 (0.569-1.038)	0.853 (0.748-0.974)
		M vs. W	P-B	2	0.366	0.153	0.904 (0.786-1.039)	0.904 (0.786-1.038)
		WM vs. WW	Overall	3	0.055	0.347	0.838 (0.579-1.211)	0.908 (0.754-1.092)
		WM vs. WW	P-B	2	0.645	0.822	0.978 (0.805-1.189)	0.978 (0.805-1.189)
		MM + WM vs. WW	Overall	3	0.031	0.175	0.767 (0.522-1.126)	0.859 (0.721-1.023)
		MM + WM vs. WW	P-B	2	0.909	0.432	0.929 (0.772-1.117)	0.929 (0.772-1.117)
		MM vs. WW	Overall	3	0.041	0.072	0.542 (0.278-1.056)	0.688 (0.514-0.923)
		MM vs. WW	P-B	2	0.095	0.219	0.681 (0.368-1.258)	0.755 (0.554-1.027)
		MM vs. WM + WW	Overall	3	0.074	0.085	0.604 (0.340-1.071)	0.721 (0.545-0.953)
		MM vs. WM + WW	P-B	2	0.061	0.247	0.675 (0.347-1.313)	0.765 (0.571-1.025)
IGF1	(CA)19	M vs. W	Overall	8	0.003	0.526	1.057 (0.891-1.253)	1.059 (0.969-1.157)

		M vs. W	Caucasian	2	0.056	0.534	0.874 (0.572-1.336)	0.908 (0.732-1.125)
		M vs. W	H-B	3	0.071	0.502	1.087 (0.852-1.386)	1.100 (0.948-1.276)
		M vs. W	P-B	5	0.003	0.782	1.038 (0.799-1.346)	1.036 (0.927-1.158)
		M vs. W	Y	7	0.003	0.383	1.087 (0.901-1.312)	1.083 (0.986-1.190)
		WM vs. WW	Overall	8	0.001	0.944	1.011 (0.734-1.393)	1.093 (0.936-1.276)
		WM vs. WW	Caucasian	2	0.004	0.286	0.594 (0.229-1.546)	0.667 (0.486-0.915)
		WM vs. WW	H-B	3	0.226	0.146	1.145 (0.864-1.518)	1.178 (0.945-1.468)
		WM vs. WW	P-B	5	0.000	0.773	0.919 (0.515-1.638)	1.017 (0.819-1.263)
		WM vs. WW	Y	7	0.000	0.938	1.014 (0.706-1.456)	1.105 (0.941-1.298)
		MM + WM vs. WW	Overall	8	0.001	0.719	1.054 (0.792-1.403)	1.097 (0.954-1.261)
		MM + WM vs. WW	Caucasian	2	0.013	0.349	0.700 (0.332-1.476)	0.748 (0.559-1.002)
		MM + WM vs. WW	H-B	3	0.096	0.499	1.109 (0.822-1.496)	1.138 (0.938-1.379)
		MM + WM vs. WW	P-B	5	0.001	0.984	1.005 (0.597-1.693)	1.054 (0.860-1.290)
		MM + WM vs. WW	Y	7	0.001	0.639	1.082 (0.777-1.507)	1.140 (0.979-1.327)
		MM vs. WW	Overall	8	0.069	0.250	1.175 (0.893-1.547)	1.155 (0.960-1.389)
		MM vs. WW	Caucasian	2	0.352	0.875	1.036 (0.669-1.605)	1.036 (0.669-1.602)
		MM vs. WW	H-B	3	0.217	0.585	1.135 (0.770-1.673)	1.088 (0.803-1.475)
		MM vs. WW	P-B	5	0.043	0.420	1.192 (0.778-1.826)	1.195 (0.948-1.507)
		MM vs. WW	Y	7	0.096	0.141	1.255 (0.927-1.700)	1.239 (1.009-1.521)
		MM vs. WM + WW	Overall	8	0.204	0.499	1.086 (0.902-1.308)	1.050 (0.912-1.209)
		MM vs. WM + WW	Caucasian	2	0.908	0.287	1.250 (0.829-1.886)	1.250 (0.829-1.886)
		MM vs. WM + WW	H-B	3	0.317	0.627	1.090 (0.791-1.504)	1.076 (0.800-1.447)
		MM vs. WM + WW	P-B	5	0.116	0.613	1.104 (0.850-1.433)	1.042 (0.888-1.223)
		MM vs. WM + WW	Y	7	0.188	0.333	1.135 (0.922-1.397)	1.077 (0.927-1.250)
FGFR4	rs351855	M vs. W	Overall	4	0.033	0.785	1.026 (0.854-1.233)	1.037 (0.947-1.135)
		M vs. W	Caucasian	2	0.478	0.050	1.110 (1.000-1.232)	1.110 (1.000-1.232)
		M vs. W	P-B	3	0.773	0.044	1.111 (1.003-1.231)	1.111 (1.003-1.231)
		WM vs. WW	Overall	4	0.009	0.634	1.078 (0.791-1.469)	1.132 (0.994-1.289)
		WM vs. WW	Caucasian	2	0.308	0.004	1.233 (1.064-1.429)	1.231 (1.067-1.421)
		WM vs. WW	P-B	3	0.595	0.003	1.232 (1.071-1.417)	1.232 (1.071-1.417)

MM + WM vs. WW	Overall	4	0.007	0.736	1.053 (0.780-1.420)	1.102 (0.975-1.246)
MM + WM vs. WW	Caucasian	2	0.341	0.008	1.201 (1.049-1.376)	1.201 (1.049-1.376)
MM + WM vs. WW	P-B	3	0.635	0.007	1.202 (1.052-1.372)	1.202 (1.052-1.372)
MM vs. WW	Overall	4	0.192	0.472	0.915 (0.686-1.222)	0.929 (0.760-1.136)
MM vs. WW	Caucasian	2	0.890	0.552	1.076 (0.845-1.370)	1.076 (0.845-1.370)
MM vs. WW	P-B	3	0.964	0.569	1.072 (0.844-1.361)	1.072 (0.844-1.362)
MM vs. WM + WW	Overall	4	0.929	0.455	0.934 (0.780-1.118)	0.934 (0.780-1.118)
MM vs. WM + WW	Caucasian	2	0.897	0.867	0.980 (0.777-1.236)	0.980 (0.777-1.236)
MM vs. WM + WW	P-B	3	0.973	0.847	0.978 (0.777-1.230)	0.978 (0.777-1.230)

Note: Hardy-Weinberg equilibrium (HWE); P-B: population-based; H-B: hospital-based; Y: Studies conformed to HWE; N: studies did not conform to HWE; Mixed: more than two descendant; $^{*}P$ value less than [0.05/ (5*13)] means statistically significant.

Table S3. Details of the sensitivity analyses for the polymorphisms in genes of PI3K/Akt signaling pathway and prostate cancer risk.

Polymorphism	Comparison	Study Omitted	Estimate	95%CI	Effect Model
rs1800795 (*IL-6*)	M vs. W	Mandal *et al.* (2014)	1.752	1.214-2.530	Random
		Zhang *et al.* (2010)	0.760	0.564-1.025	
		Zabaleta *et al.* (2009)	0.883	0.622-1.255	
		Zabaleta *et al.* (2009)	0.658	0.259-1.672	
		Dossus *et al.* (2010)	0.679	0.647-0.713	
		Wang *et al.* (2009)	1.037	0.806-1.333	
		Moore *et al.* (2009)	0.941	0.825-1.073	
		Pierce *et al.* (2009)	0.818	0.656-1.021	
		Pierce *et al.* (2009)	0.988	0.429-2.274	
		Kesarwani *et al.* (2008)	0.939	0.688-1.281	
		Michaud *et al.* (2006)	0.873	0.735-1.037	
		Bao *et al.* (2008)	(Excluded)		
	MM vs. WW	Mandal *et al.* (2014)	2.676	1.248-5.739	Random
		Zhang *et al.* (2010)	0.652	0.345-1.230	
		Zabaleta *et al.* (2009)	0.804	0.411-1.573	
		Zabaleta *et al.* (2009)	0.488	0.104-2.295	
		Dossus *et al.* (2010)	0.228	0.199-0.263	
		Wang *et al.* (2009)	1.008	0.597-1.700	
		Moore *et al.* (2009)	0.867	0.667-1.127	
		Pierce *et al.* (2009)	0.729	0.455-1.168	
		Pierce *et al.* (2009)	0.157	0.010-2.576	
		Kesarwani *et al.* (2008)	0.707	0.300-1.666	
		Michaud *et al.* (2006)	0.731	0.514-1.040	
		Bao *et al.* (2008)	(Excluded)		
	MW vs. WW	Mandal *et al.* (2014)	0.685	0.411-1.143	Fixed
		Zhang *et al.* (2010)	1.433	0.935-2.197	
		Zabaleta *et al.* (2009)	1.383	0.753-2.540	

	Zabaleta *et al.* (2009)	0.820	0.155-4.348	
	Dossus *et al.* (2010)	1.009	0.944-1.078	
	Wang *et al.* (2009)	0.837	0.567-1.234	
	Moore *et al.* (2009)	1.241	0.977-1.577	
	Pierce *et al.* (2009)	1.610	1.121-2.311	
	Pierce *et al.* (2009)	0.739	0.273-1.996	
	Kesarwani *et al.* (2008)	0.975	0.650-1.463	
	Michaud *et al.* (2006)	1.030	0.791-1.341	
	Bao *et al.* (2008)	(Excluded)		
MM vs. MW + WW	Mandal *et al.* (2014)	1.720	1.083-2.733	Random
	Zhang *et al.* (2010)	0.687	0.460-1.025	
	Zabaleta *et al.* (2009)	0.754	0.430-1.323	
	Zabaleta *et al.* (2009)	0.780	0.231-2.641	
	Dossus *et al.* (2010)	0.794	0.745-0.846	
	Wang *et al.* (2009)	1.145	0.793-1.653	
	Moore *et al.* (2009)	0.828	0.661-1.037	
	Pierce *et al.* (2009)	0.647	0.458-0.915	
	Pierce *et al.* (2009)	1.154	0.457-2.915	
	Kesarwani *et al.* (2008)	0.980	0.662-1.451	
	Michaud *et al.* (2006)	0.902	0.703-1.155	
	Bao *et al.* (2008)	(Excluded)		
MM + MW vs. WW	Mandal *et al.* (2014)	2.362	1.123-4.966	Random
	Zhang *et al.* (2010)	0.773	0.423-1.411	
	Zabaleta *et al.* (2009)	0.978	0.564-1.696	
	Zabaleta *et al.* (2009)	0.471	0.103-2.156	
	Dossus *et al.* (2010)	0.229	0.200-0.263	
	Wang *et al.* (2009)	0.908	0.567-1.455	
	Moore *et al.* (2009)	1.007	0.822-1.234	
	Pierce *et al.* (2009)	0.975	0.649-1.465	

		Pierce *et al.* (2009)	0.151	0.009-2.457	
		Kesarwani *et al.* (2008)	0.699	0.303-1.614	
		Michaud *et al.* (2006)	0.743	0.540-1.023	
		Bao *et al.* (2008)	(Excluded)		
rs1800796	M vs. W	Wang *et al.* (2009)	1.216	0.671-2.201	Fixed
(*IL-6*)		Pierce *et al.* (2009)	0.930	0.573-1.509	
		Pierce *et al.* (2009)	1.855	0.653-5.269	
		Sun *et al.* (2004)	1.305	0.975-1.747	
	MM vs. WW	Wang *et al.* (2009)	1.305	0.975-1.747	Fixed
		Pierce *et al.* (2009)	0.345	0.014-8.517	
		Pierce *et al.* (2009)	0.450	0.021-9.406	
		Sun *et al.* (2004)	0.884	0.104-7.555	
	MW vs. WW	Wang *et al.* (2009)	0.734	0.393-1.370	Fixed
		Pierce *et al.* (2009)	1.104	0.670-1.818	
		Pierce *et al.* (2009)	0.331	0.077-1.426	
		Sun *et al.* (2004)	0.811	0.595-1.105	
	MM vs. MW + WW	Wang *et al.* (2009)	1.294	0.699-2.396	Fixed
		Pierce *et al.* (2009)	0.915	0.556-1.507	
		Pierce *et al.* (2009)	2.309	0.684-7.800	
		Sun *et al.* (2004)	1.276	0.941-1.731	
	MM + MW vs. WW	Wang *et al.* (2009)	0.336	0.014-8.287	Fixed
		Pierce *et al.* (2009)	0.454	0.022-9.495	
		Pierce *et al.* (2009)	0.801	0.094-6.833	
		Sun *et al.* (2004)	3.565	0.651-19.508	
(CA)19	M vs. W	Chen *et al.* (2006)	1.443	1.015-2.053	Random
(*IGF1*)		Chen *et al.* (2006)	1.062	0.538-2.097	
		Neuhausen *et al.* (2005)	0.935	0.712-1.228	
		Schildkraut *et al.* (2005)	0.594	0.389-0.908	
		Tsuchiya *et al.* (2005)	0.749	0.592-0.947	

	Friedrichsen *et al.* (2005)	1.107	0.930-1.317	
	Nam *et al.* (2003)	0.817	0.684-0.976	
	Hernandez *et al.* (2007)	1.137	0.869-1.488	
MM vs. WW	Chen *et al.* (2006)	1.223	0.630-2.375	Random
	Chen *et al.* (2006)	1.882	0.302-11.729	
	Neuhausen *et al.* (2005)	0.804	0.450-1.438	
	Schildkraut *et al.* (2005)	0.408	0.184-0.903	
	Tsuchiya *et al.* (2005)	0.596	0.306-1.160	
	Friedrichsen *et al.* (2005)	1.141	0.777-1.675	
	Nam *et al.* (2003)	0.631	0.436-0.915	
	Hernandez *et al.* (2007)	1.167	0.764-1.781	
MW vs. WW	Chen *et al.* (2006)	0.359	0.209-0.615	Random
	Chen *et al.* (2006)	0.425	0.069-2.613	
	Neuhausen *et al.* (2005)	0.951	0.637-1.421	
	Schildkraut *et al.* (2005)	1.655	0.791-3.460	
	Tsuchiya *et al.* (2005)	1.409	1.044-1.902	
	Friedrichsen *et al.* (2005)	1.069	0.733-1.559	
	Nam *et al.* (2003)	1.463	1.021-2.096	
	Hernandez *et al.* (2007)	0.961	0.550-1.676	
MM vs. MW + WW	Chen *et al.* (2006)	2.118	1.324-3.386	Random
	Chen *et al.* (2006)	2.118	0.364-12.320	
	Neuhausen *et al.* (2005)	0.989	0.677-1.444	
	Schildkraut *et al.* (2005)	0.512	0.261-1.003	
	Tsuchiya *et al.* (2005)	0.696	0.521-0.930	
	Friedrichsen *et al.* (2005)	1.024	0.715-1.466	
	Nam *et al.* (2003)	0.660	0.470-0.926	
	Hernandez *et al.* (2007)	1.121	0.787-1.596	
MM + MW vs. WW	Chen *et al.* (2006)	0.823	0.437-1.549	Fixed
	Chen *et al.* (2006)	0.898	0.363-2.226	

		Neuhausen *et al.* (2005)	0.783	0.456-1.346	
		Schildkraut *et al.* (2005)	0.553	0.287-1.065	
		Tsuchiya *et al.* (2005)	0.687	0.357-1.321	
		Friedrichsen *et al.* (2005)	1.203	0.944-1.532	
		Nam *et al.* (2003)	0.839	0.651-1.081	
		Hernandez *et al.* (2007)	1.163	0.764-1.771	
rs11536889 (*TLR4*)	M vs. W	Chen *et al.* (2005)	1.021	0.821-1.269	Random
		Zheng *et al.* (2004)	0.822	0.675-1.001	
		Shui *et al.* (2012)	1.257	1.059-1.491	
		Cheng *et al.* (2007)	0.835	0.641-1.087	
		Wang *et al.* (2009)	0.922	0.666-1.276	
	MM vs. WW	Chen *et al.* (2005)	1.506	0.670-3.383	Fixed
		Zheng *et al.* (2004)	1.340	0.623-2.882	
		Shui *et al.* (2012)	0.855	0.508-1.439	
		Cheng *et al.* (2007)	0.720	0.336-1.542	
		Wang *et al.* (2009)	0.872	0.287-2.646	
	MW vs. WW	Chen *et al.* (2005)	1.046	0.815-1.342	Random
		Zheng *et al.* (2004)	1.346	1.079-1.680	
		Shui *et al.* (2012)	0.685	0.560-0.838	
		Cheng *et al.* (2007)	1.176	0.861-1.607	Fixed
		Wang *et al.* (2009)	1.094	0.746-1.604	
	MM vs. MW + WW	Chen *et al.* (2005)	1.004	0.788-1.278	Random
		Zheng *et al.* (2004)	1.675	1.397-2.008	
		Shui *et al.* (2012)	1.013	0.827-1.242	
		Cheng *et al.* (2007)	0.960	0.720-1.281	
		Wang *et al.* (2009)	1.017	0.706-1.464	
	MM + MW vs. WW	Chen *et al.* (2005)	1.522	0.679-3.413	Fixed
		Zheng *et al.* (2004)	1.426	0.664-3.061	
		Shui *et al.* (2012)	0.789	0.470-1.325	

		Cheng *et al.* (2007)	0.744	0.348-1.589	
		Wang *et al.* (2009)	0.895	0.297-2.702	
rs4986790	M vs. W	Chen *et al.* (2005)	0.938	0.668-1.317	Random
(*TLR4*)		Cheng *et al.* (2007)	0.752	0.518-1.091	
		Wang *et al.* (2009)	1.511	0.885-2.580	
		Balistreri *et al.* (2010)	6.319	0.823-48.492	
	MM vs. WW	Chen *et al.* (2005)	1.620	0.385-6.809	Fixed
		Cheng *et al.* (2007)	1.925	0.174-21.310	
		Wang *et al.* (2009)	1.332	0.053-33.269	
		Balistreri *et al.* (2010)		(Excluded)	
	MW vs. WW	Chen *et al.* (2005)	1.151	0.796-1.665	Random
		Cheng *et al.* (2007)	1.428	0.963-2.118	
		Wang *et al.* (2009)	0.644	0.371-1.118	
		Balistreri *et al.* (2010)	0.174	0.022-1.369	
	MM vs. MW + WW	Chen *et al.* (2005)	0.901	0.630-1.290	Random
		Cheng *et al.* (2007)	0.718	0.487-1.060	
		Wang *et al.* (2009)	1.553	0.894-2.696	
		Balistreri *et al.* (2010)	6.180	0.791-48.316	
	MM + MW vs. WW	Chen *et al.* (2005)	1.642	0.391-6.897	Fixed
		Cheng *et al.* (2007)	2.004	0.181-22.170	
		Wang *et al.* (2009)	1.217	0.049-30.373	
		Balistreri *et al.* (2010)	(Excluded)		
rs2149356 (*TLR4*)	M vs. W	Chen *et al.* (2005)	1.172	0.997-1.378	Fixed
		Zheng *et al.* (2004)	0.984	0.847-1.144	
		Shui *et al.* (2012)	1.017	0.898-1.153	
		Cheng *et al.* (2007)	0.935	0.781-1.119	
	MM vs. WW	Chen *et al.* (2005)	1.565	1.092-2.244	
		Zheng *et al.* (2004)	0.991	0.725-1.356	Fixed
		Shui *et al.* (2012)	1.128	0.848-1.502	
		Cheng *et al.* (2007)	0.905	0.631-1.298	

	MW vs. WW	Chen *et al.* (2005)	0.991	0.789-1.245	
		Zheng *et al.* (2004)	1.037	0.840-1.279	
		Shui *et al.* (2012)	1.058	0.891-1.256	
		Cheng *et al.* (2007)	1.116	0.852-1.462	
	MM vs. MW + WW	Chen *et al.* (2005)	1.107	0.893-1.372	Fixed
		Zheng *et al.* (2004)	0.971	0.800-1.179	
		Shui *et al.* (2012)	0.978	0.831-1.151	
		Cheng *et al.* (2007)	0.899	0.699-1.156	
	MM + MW vs. WW	Chen *et al.* (2005)	1.559	1.105-2.198	Fixed
		Zheng *et al.* (2004)	1.006	0.744-1.360	
		Shui *et al.* (2012)	1.157	0.879-1.524	
		Cheng *et al.* (2007)	0.958	0.687-1.335	
rs10759932 (*TLR4*)	M vs. W	Chen *et al.* (2005)	1.288	1.040-1.595	Random
		Zheng *et al.* (2004)	0.919	0.770-1.096	
		Shui *et al.* (2012)	0.946	0.798-1.121	
		Cheng *et al.* (2007)	0.424	0.343- 0.525	
	MM vs. WW	Chen *et al.* (2005)	1.181	0.516- 2.702	Random
		Zheng *et al.* (2004)	0.664	0.347- 1.268	
		Shui *et al.* (2012)	0.988	0.575-1.698	
		Cheng *et al.* (2007)	0.035	0.013-0.095	
	MW vs. WW	Chen *et al.* (2005)	0.727	0.569-0.928	Random
		Zheng *et al.* (2004)	1.040	0.848-1.274	
		Shui *et al.* (2012)	1.079	0.885-1.314	
		Cheng *et al.* (2007)	0.792	0.596-1.052	
	MM vs. MW + WW	Chen *et al.* (2005)	1.363	1.073-1.731	Random
		Zheng *et al.* (2004)	0.936	0.768-1.140	
		Shui *et al.* (2012)	0.933	0.771-1.128	
		Cheng *et al.* (2007)	0.644	0.500-0.828	
	MM + MW vs. WW	Chen *et al.* (2005)	1.086	0.476-2.479	Random
		Zheng *et al.* (2004)	0.670	0.352-1.278	

		Shui *et al.* (2012)	1.004	0.585-1.723	
		Cheng *et al.* (2007)	0.033	0.012-0.089	
rs1927914 (*TLR4*)	M vs. W	Chen *et al.* (2005)	1.151	0.980-1.353	Fixed
		Zheng *et al.* (2004)	1.017	0.891-1.161	
		Song *et al.* (2009)	1.292	0.906-1.843	
	MM vs. WW	Chen *et al.* (2005)	1.553	1.079-2.235	Random
		Zheng *et al.* (2004)	0.964	0.714-1.301	
		Song *et al.* (2009)	0.719	0.270-1.914	
	MW vs. WW	Chen *et al.* (2005)	1.021	0.812-1.283	Random
		Zheng *et al.* (2004)	0.919	0.762-1.107	
		Song *et al.* (2009)	0.432	0.262-0.713	
	MM vs. MW + WW	Chen *et al.* (2005)	3.426	2.601-4.514	Random
		Zheng *et al.* (2004)	4.475	3.451-5.803	
		Song *et al.* (2009)	13.626	5.896-31.492	
	MM + MW vs. WW	Chen *et al.* (2005)	1.035	0.711-1.506	Random
		Zheng *et al.* (2004)	1.757	1.379-2.238	
		Song *et al.* (2009)	0.911	0.418-1.988	
rs7873784 (*TLR4*)	M vs. W	Chen *et al.* (2005)	1.174	0.958-1.438	Fixed
		Shui *et al.* (2012)	1.013	0.862-1.192	
		Cheng *et al.* (2007)	1.137	0.898-1.440	
	MM vs. WW	Chen *et al.* (2005)	1.940	1.044-3.608	Fixed
		Shui *et al.* (2012)	0.816	0.444-1.500	
		Cheng *et al.* (2007)	1.127	0.522-2.431	
	MW vs. WW	Chen *et al.* (2005)	0.956	0.749-1.219	Fixed
		Shui *et al.* (2012)	0.948	0.787-1.142	
		Cheng *et al.* (2007)	0.851	0.644-1.124	
	MM vs. MW + WW	Chen *et al.* (2005)	1.120	0.887-1.415	Fixed
		Shui *et al.* (2012)	1.037	0.865-1.242	
		Cheng *et al.* (2007)	1.171	0.894-1.533	

	MM + MW vs. WW	Chen *et al.* (2005)	1.916	1.034-3.549	Fixed
		Shui *et al.* (2012)	0.805	0.438-1.477	
		Cheng *et al.* (2007)	1.077	0.501-2.315	
rs833061	M vs. W	Fukuda *et al.* (2007)	1.020	0.779-1.33	Random
(*VEGFA*)		Onen *et al.* (2008)	0.864	0.619-1.206	
		Lin *et al.* (2003)	1.924	1.239-2.988	
	MM vs. WW	Fukuda *et al.* (2007)	1.924	1.239-2.988	Fixed
		Onen *et al.* (2008)	1.038	0.559-1.92	
		Lin *et al.* (2003)	0.780	0.312-1.948	
	MW vs. WW	Fukuda *et al.* (2007)	0.980	0.681-1.411	Random
		Onen *et al.* (2008)	1.435	0.847-2.429	
		Lin *et al.* (2003)	0.319	0.180-0.564	
	MM vs. MW + WW	Fukuda *et al.* (2007)	1.024	0.726-1.444	Random
		Onen *et al.* (2008)	0.706	0.421-1.185	
		Lin *et al.* (2003)	2.946	1.687-5.143	
	MM + MW vs. WW	Fukuda *et al.* (2007)	1.029	0.565-1.875	Fixed
		Onen *et al.* (2008)	1.001	0.433-2.316	
		Lin *et al.* (2003)	0.800	0.195-3.286	
rs1570360	M vs. W	Sfar *et al.* (2006)	1.996	1.300-3.067	Random
(*VEGFA*)		Jacobs *et al.* (2008)	1.064	0.904-1.252	
		McCarron *et al.* (2013)	1.230	0.941-1.607	
	MM vs. WW	Sfar *et al.* (2006)	3.759	1.325-10.666	Random
		Jacobs *et al.* (2008)	1.137	0.796-1.623	
		McCarron *et al.* (2013)	2.153	1.114-4.164	
	MW vs. WW	Sfar *et al.* (2006)	0.459	0.253-0.832	Random
		Jacobs *et al.* (2008)	0.950	0.755-1.196	
		McCarron *et al.* (2013)	1.053	0.728-1.522	
	MM vs. MW + WW	Sfar *et al.* (2006)	2.398	1.359-4.231	Random
		Jacobs *et al.* (2008)	1.070	0.861-1.328	

		McCarron *et al.* (2013)	1.096	0.771-1.557	
	MM + MW vs. WW	Sfar *et al.* (2006)	2.578	0.948-7.006	Random
		Jacobs *et al.* (2008)	1.110	0.791-1.557	
		McCarron *et al.* (2013)	2.207	1.170-4.165	
rs1801278	M vs. W	Saracevic *et al.* (2011)	1.462	0.514-4.160	Fixed
(*IRS1*)		Fall *et al.* (2008)	0.985	0.725-1.338	
		Li *et al.* (2005)	1.122	0.775-1.625	
		Neuhausen *et al.* (2005)	1.051	0.754-1.464	
	MM vs. WW	Saracevic *et al.* (2011)	1.592	0.064-39.707	Fixed
		Fall *et al.* (2008)	2.216	0.445-11.026	
		Li *et al.* (2005)	0.457	0.041-5.064	
		Neuhausen *et al.* (2005)	0.860	0.384-1.928	
	MW vs. WW	Saracevic *et al.* (2011)	0.789	0.265-2.351	Fixed
		Fall *et al.* (2008)	1.098	0.789-1.528	
		Li *et al.* (2005)	0.841	0.567-1.247	
		Neuhausen *et al.* (2005)	0.837	0.547-1.281	
	MM vs. MW + WW	Saracevic *et al.* (2011)	1.374	0.466-4.049	
		Fall *et al.* (2008)	0.945	0.684-1.307	
		Li *et al.* (2005)	1.161	0.787-1.713	
		Neuhausen *et al.* (2005)	1.130	0.758-1.684	
	MM + MW vs. WW	Saracevic *et al.* (2011)	1.557	0.062-38.789	Fixed
		Fall *et al.* (2008)	2.242	0.451-11.150	
		Li *et al.* (2005)	0.448	0.040-4.954	
		Neuhausen *et al.* (2005)	0.813	0.367-1.802	
rs351855	M vs. W	FitzGerald *et al.* (2009)	0.920	0.816-1.038	Random
(*FGFR4*)		FitzGerald *et al.* (2009)	0.875	0.504-1.518	
		Ho *et al.* (2010)	0.843	0.682-1.041	
		Ma *et al.* (2010)	1.244	1.022-1.514	
	MM vs. WW	FitzGerald *et al.* (2009)	0.938	0.713-1.233	Fixed

	FitzGerald *et al.* (2009)	1.156	0.188-7.112	
	Ho *et al.* (2010)	0.900	0.540-1.501	Fixed
	Ma *et al.* (2010)	1.522	1.046-2.215	
MW vs. WW	FitzGerald *et al.* (2009)	1.179	0.999-1.391	Random
	FitzGerald *et al.* (2009)	1.250	0.657-2.377	
	Ho *et al.* (2010)	1.399	1.052-1.862	
	Ma *et al.* (2010)	0.650	0.452-0.933	
MM vs. MW + WW	FitzGerald *et al.* (2009)	0.865	0.739-1.012	Random
	FitzGerald *et al.* (2009)	0.825	0.444-1.534	
	Ho *et al.* (2010)	0.742	0.565-0.975	
	Ma *et al.* (2010)	1.532	1.098-2.137	
MM + MW vs. WW	FitzGerald *et al.* (2009)	1.012	0.778-1.316	Fixed
	FitzGerald *et al.* (2009)	1.222	0.200-7.471	
	Ho *et al.* (2010)	1.050	0.641-1.720	
	Ma *et al.* (2010)	1.152	0.863-1.538	

M: mutated allele; W: wild allele.

Table S4. *P* values of Egger's test for the polymorphisms in genes of PI3K/Akt signaling pathway.

Polymorphism	Egger's test
	P **> |t|**
rs1927914	0.393
rs10759932	0.704
rs2149356	0.961
rs4986790	0.169
rs11536889	0.354
rs7873784	0.370
rs833061	0.463
rs1570360	0.144
rs1801278	0.129
rs351855	0.929
rs1800796	0.895
rs1800795	**0.016**
(CA)19	0.954

Figure S1. Oncoprint of genes in PI3K/Akt signaling pathway according to Cbioportal website.

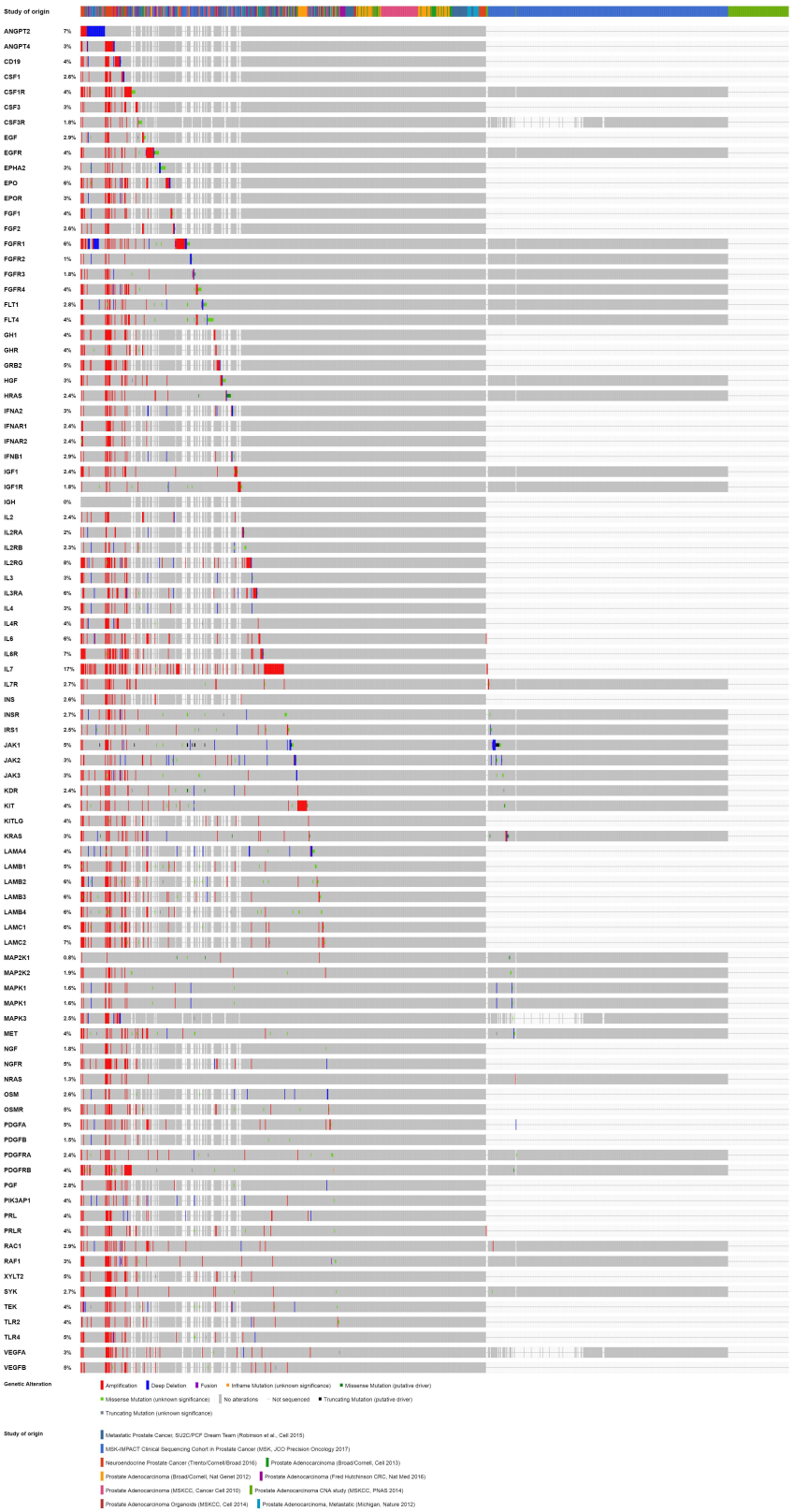

Figure S2. Alteration frequencies for genes encompassed in PI3K/Akt signaling pathway according to Cbioportal website.

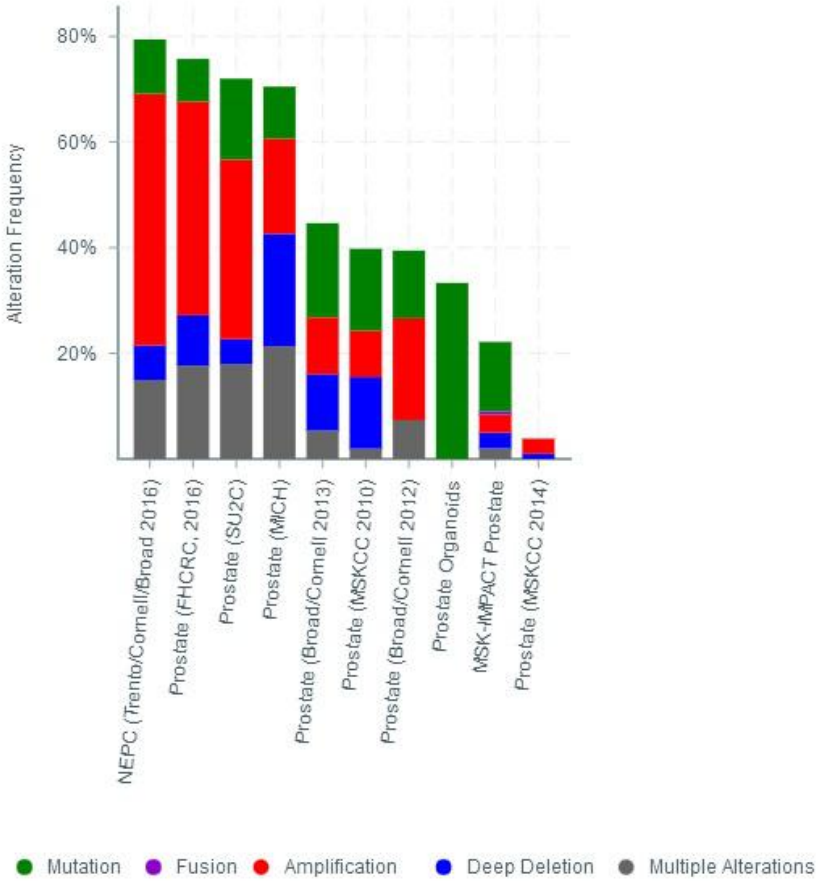

Figure S3. Flow chart of studies selection process for polymorphisms in *TLR4* gene.

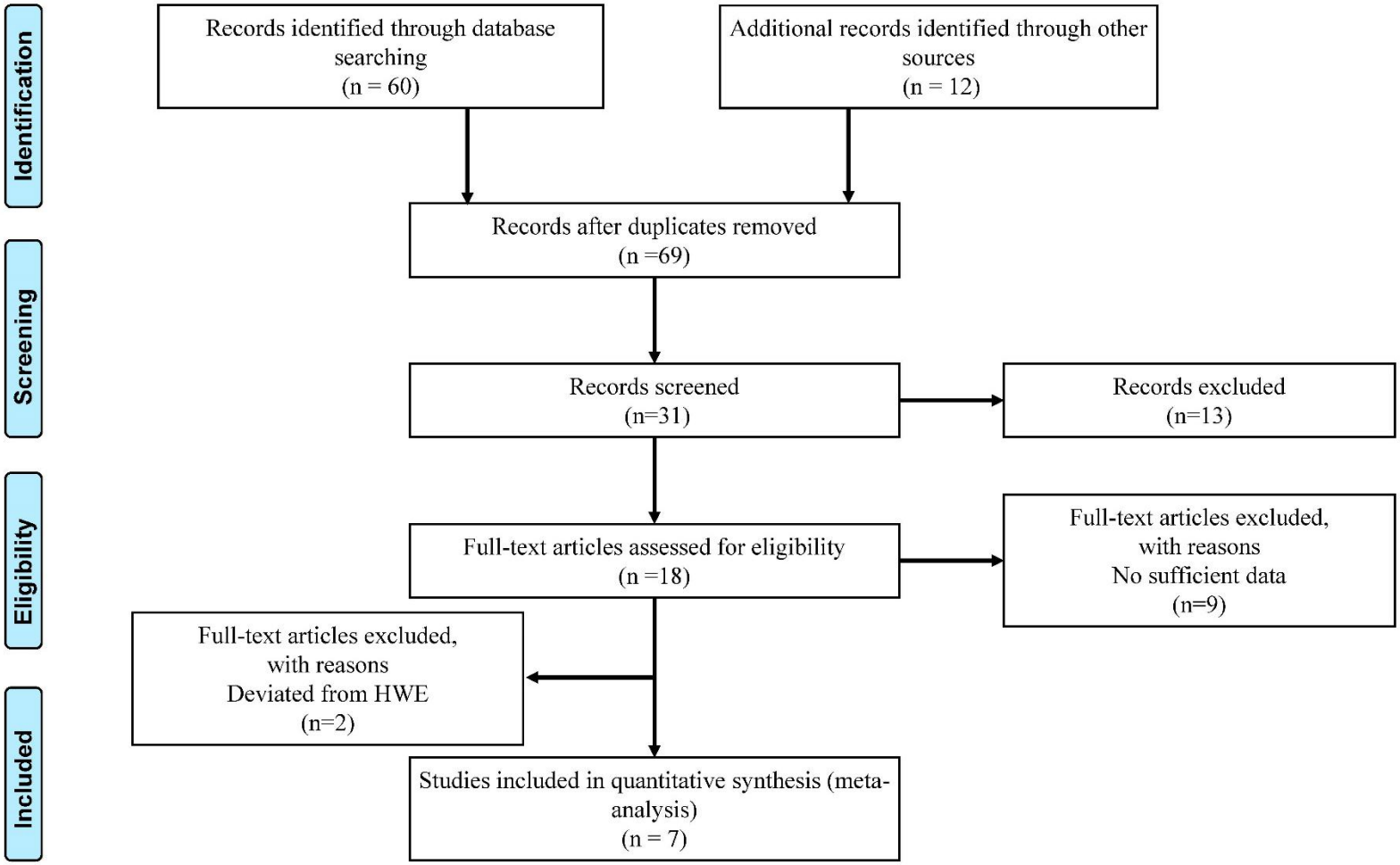

Figure S4. Flow chart of studies selection process for polymorphisms in *IL-6* gene.

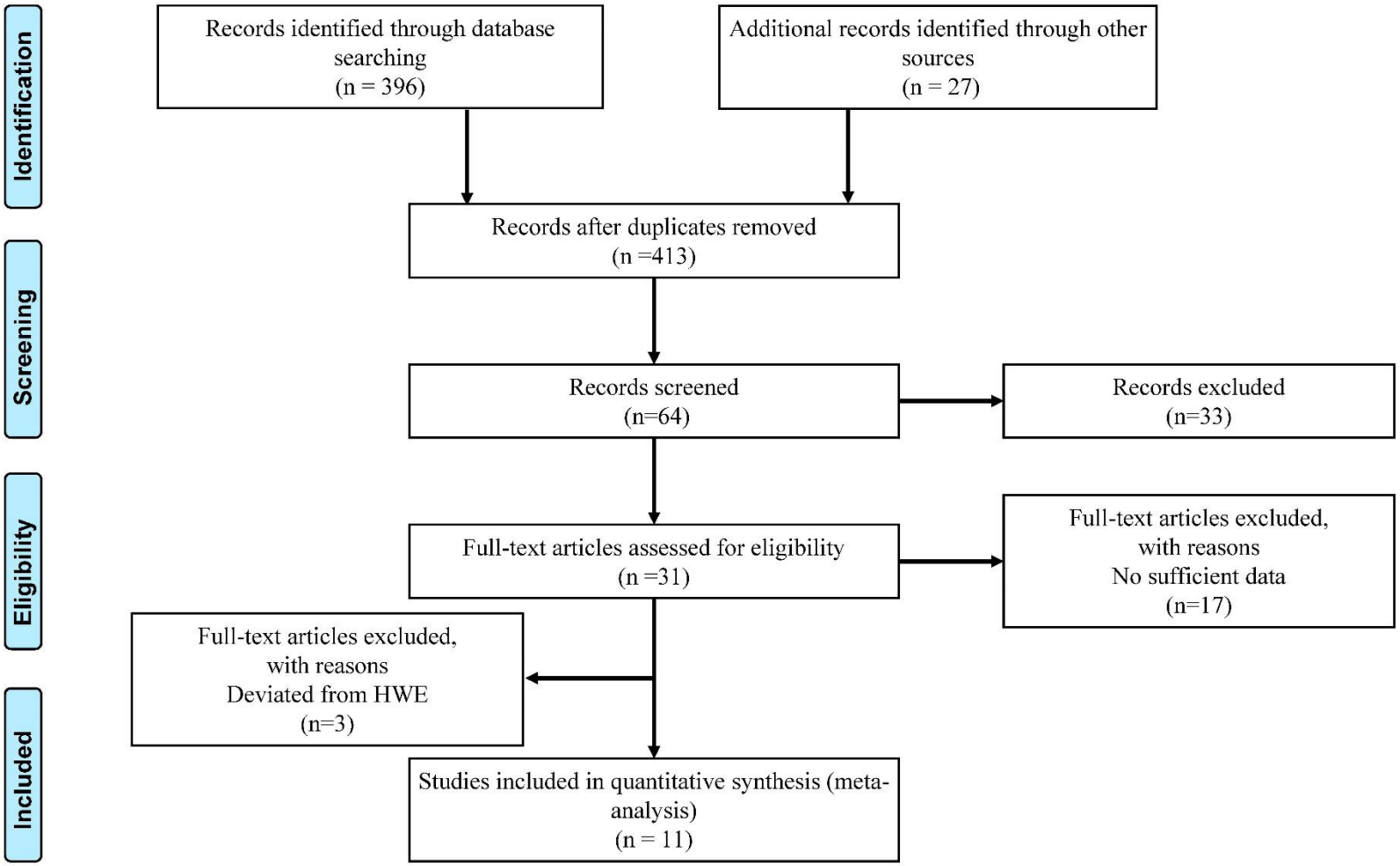

Figure S5. Flow chart of studies selection process for polymorphisms in *VEGF* gene.

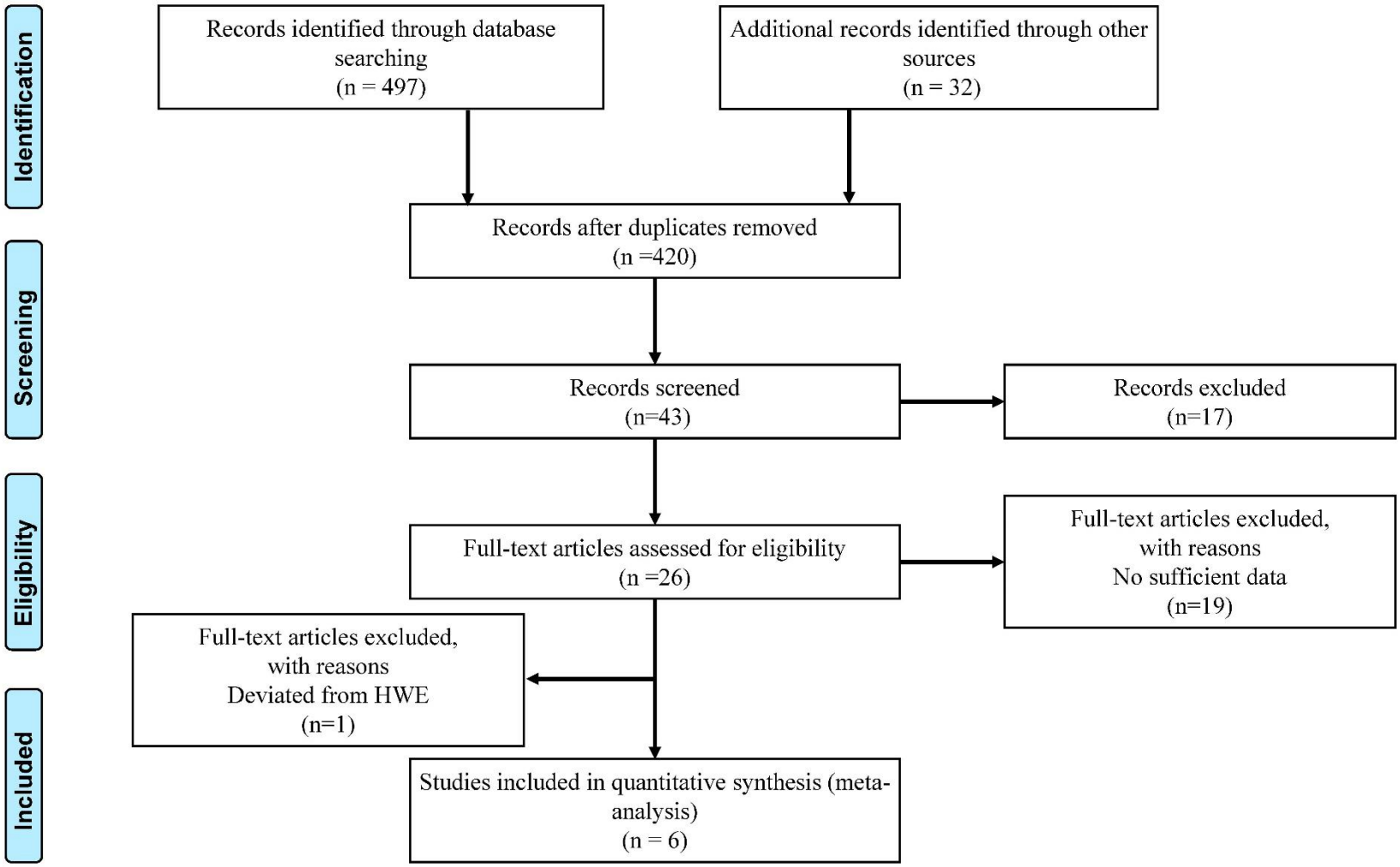

Figure S6. Flow chart of studies selection process for polymorphisms in *IRS1* gene.

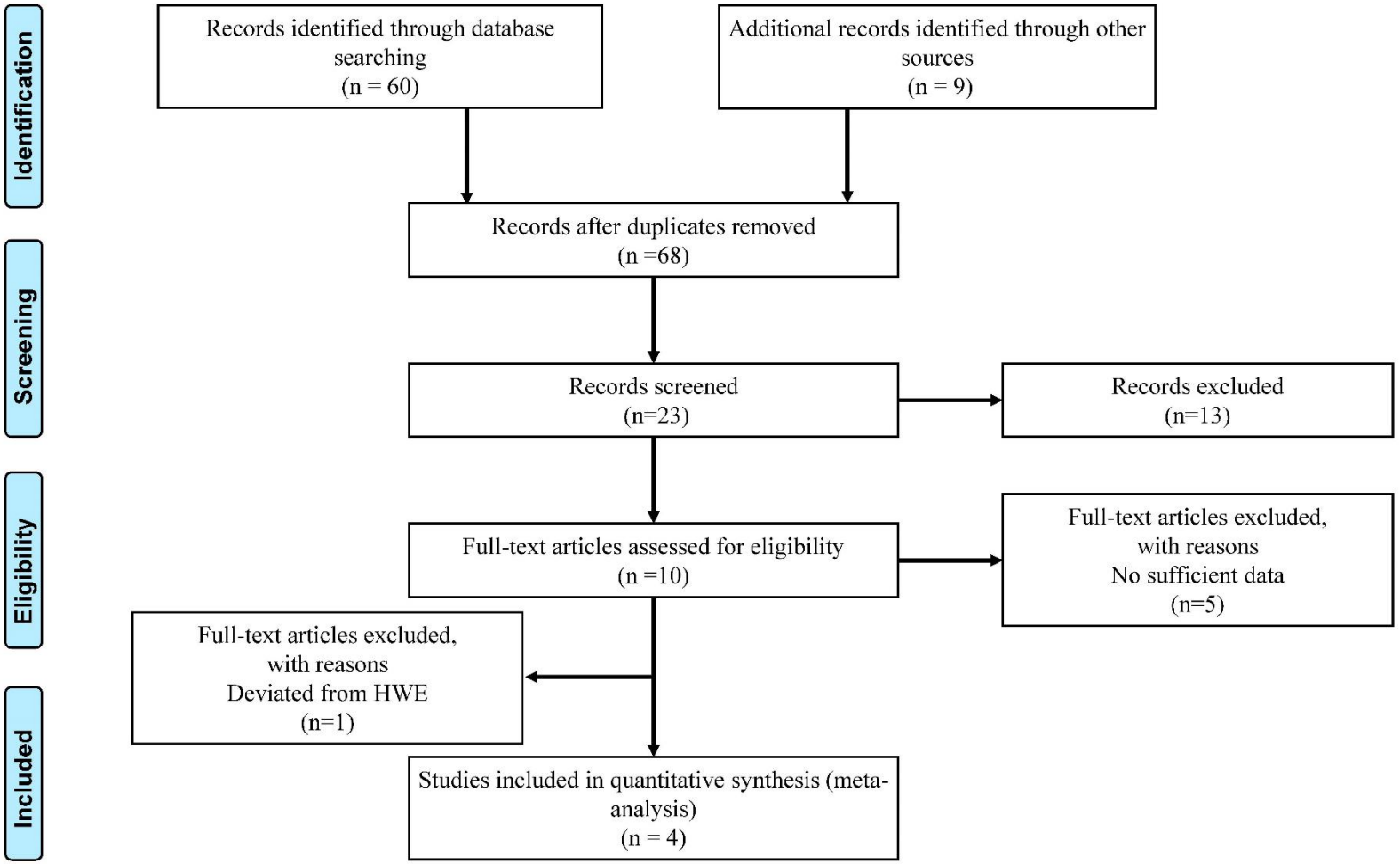

Figure S7. Flow chart of studies selection process for polymorphisms in *FGFR4* gene.

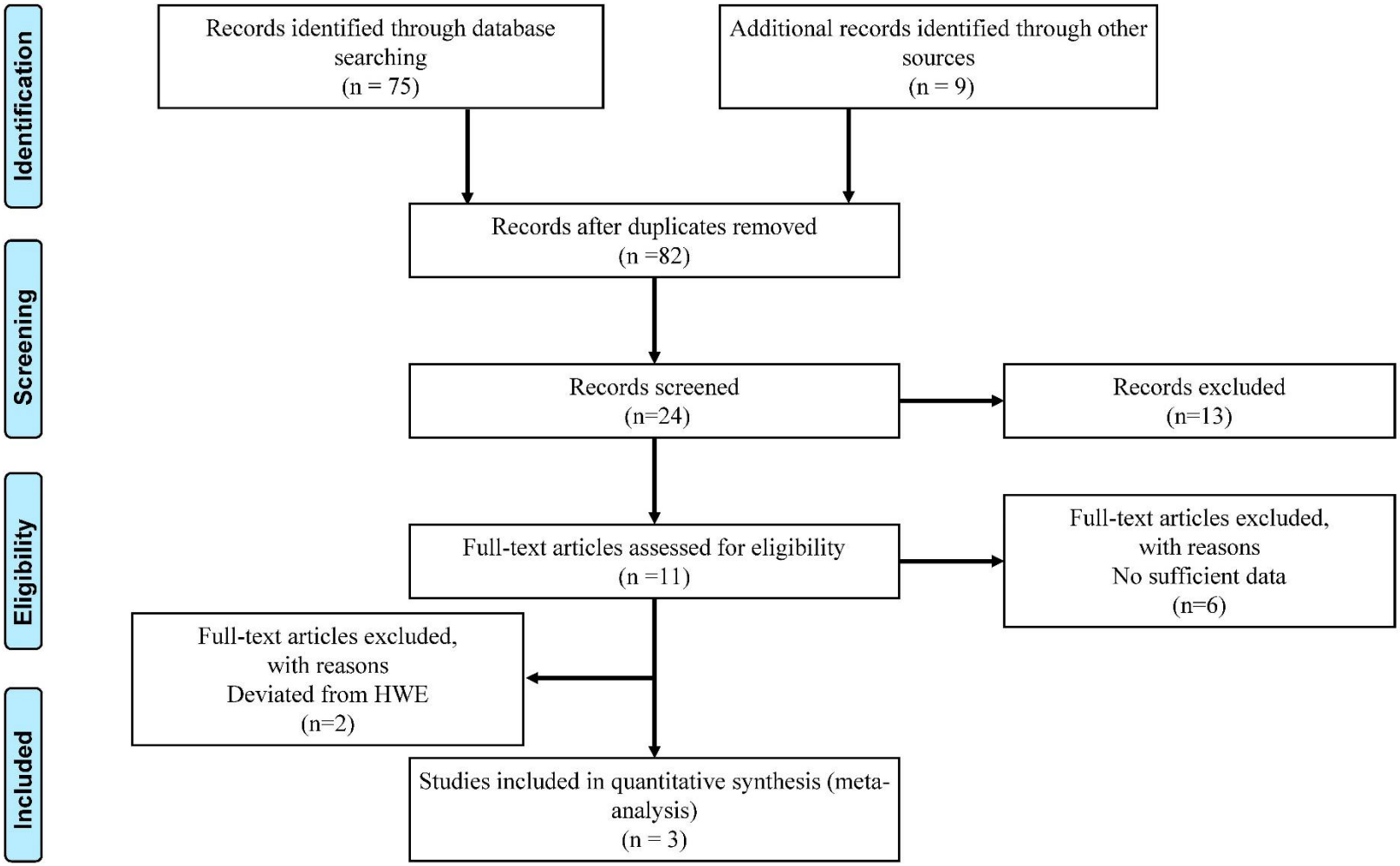

Figure S8. Flow chart of studies selection process for polymorphisms in *IGF1* gene.