

Supplementary Table 1. Hazard ratios (99% CI) for Prostate Cancer Mortality by Genotype

Gene	rs Number	Genotype	Hazard Ratios (99% CI)*	
			Multivariate Model 1 [†]	Multivariate Model 2 [‡]
COX-2	rs2745557	CT/TT	0.94 (0.63, 1.42)	1.08 (0.72, 1.63)
	rs5275	TC	1.06 (0.71, 1.60)	1.03 (0.69, 1.55)
		CC	1.46 (0.84, 2.53)	1.30 (0.74, 2.26)
		TC/CC	1.08 (0.68, 1.70)	1.04 (0.66, 1.64)
	rs689470	CT/TT	1.06 (0.69, 1.61)	1.22 (0.58, 2.57)
	rs20432	TG/GG	1.13 (0.74, 1.72)	1.06 (0.69, 1.61)
IL-1RN	rs878972	AC	1.10 (0.75, 1.63)	1.06 (0.72, 1.58)
		CC	1.39 (0.69, 2.78)	1.20 (0.60, 2.40)
		TC/CC	0.97 (0.65, 1.44)	1.01 (0.68, 1.50)
	rs3087263	GA/AA	1.05 (0.65, 1.71)	0.86 (0.53, 1.39)
	rs315951	CG	0.73 (0.48, 1.10)	0.74 (0.49, 1.12)
		GG	1.06 (0.61, 1.85)	1.11 (0.63, 1.93)
IL-6	rs1474348	GC	0.97 (0.63, 1.49)	1.10 (0.71, 1.69)
		CC	0.85 (0.50, 1.44)	0.98 (0.58, 1.66)
	rs2069845	AG	1.29 (0.81, 2.05)	1.22 (0.77, 1.94)
		AA	1.47 (0.87, 2.50)	1.37 (0.81, 2.33)
	rs1800795	GC	0.90 (0.58, 1.38)	0.95 (0.62, 1.46)
		CC	0.77 (0.46, 1.31)	0.87 (0.51, 1.47)
	rs1800796	GC/CC	1.18 (0.62, 2.24)	1.27 (0.67, 2.42)
	rs1800797	GA	0.96 (0.62, 1.48)	0.98 (0.63, 1.50)
		AA	0.83 (0.49, 1.41)	0.91 (0.54, 1.54)
IL-10	rs1800871	CT	0.96 (0.65, 1.43)	0.92 (0.62, 1.37)
		TT	1.24 (0.63, 2.43)	1.30 (0.66, 2.57)
	rs1800872	CA	0.96 (0.64, 1.43)	0.92 (0.62, 1.37)
		AA	1.23 (0.63, 2.42)	1.30 (0.66, 2.42)
	rs3024509	TC/CC	1.10 (0.64, 1.90)	1.08 (0.62, 1.86)
	rs3024505	CT/TT	1.17 (0.76, 1.79)	1.31 (0.86, 2.00)
	rs1800896	AG	1.03 (0.67, 1.60)	1.01 (0.65, 1.57)
		GG	1.14 (0.69, 1.90)	1.12 (0.67, 1.86)
	rs1554286	CT	0.89 (0.59, 1.34)	0.84 (0.56, 1.27)
		TT	0.99 (0.43, 2.32)	1.00 (0.43, 2.35)
IRAK1	rs1059702	CT/TT	1.13 (0.65, 1.94)	1.16 (0.67, 2.00)
	rs7061789	TC/CC	1.04 (0.64, 1.68)	1.01 (0.63, 1.64)
	rs1059703	TC/CC	1.15 (0.68, 1.93)	1.11 (0.66, 1.87)
	rs3027878	TG/GG	1.02 (0.63, 1.66)	0.99 (0.61, 1.60)
IRAK4	rs1057190	TC/CC	1.27 (0.83, 1.97)	1.26 (0.82, 1.94)
	rs4251431	GT/TT	1.17 (0.72, 1.90)	1.08 (0.67, 1.75)
	rs4251571	AG/GG	0.58 (0.18, 1.87)	0.46 (0.14, 1.48)
	rs4251459	TC/CC	1.28 (0.81, 1.94)	1.25 (0.81, 1.94)
	rs4251487	GC/CC	1.45 (0.60, 3.51)	1.60 (0.66, 3.87)
	rs4251545	GA/AA	1.16 (0.73, 1.86)	1.10 (0.69, 1.76)
	rs4251559	AG	1.15 (0.75, 1.76)	1.14 (0.67, 1.94)
		GG	1.17 (0.76, 1.79)	1.01 (0.60, 1.72)
MIC-1	rs1058587	CG	0.97 (0.65, 1.45)	0.98 (0.66, 1.47)
		GG	1.06 (0.54, 2.08)	1.00 (0.51, 1.96)

Gene	rs Number	Genotype	Hazard Ratios (99% CI)*	
			Multivariate Model 1 [†]	Multivariate Model 2 [‡]
	rs1059519	CG	0.79 (0.53, 1.18)	0.85 (0.57, 1.26)
	rs1059369	GG	0.65 (0.29, 1.42)	0.86 (0.39, 1.88)
		AT	1.26 (0.86, 1.85)	1.22 (0.83, 1.80)
		TT	1.14 (0.53, 2.45)	1.05 (0.49, 2.26)
	rs1227732	GT/TT	0.54 (0.34, 0.87)	0.58 (0.36, 0.94)
MyD88	rs4988453	CA/AA	0.72 (0.38, 1.37)	0.65 (0.34, 1.23)
TIRAP	rs646005	TC	0.89 (0.59, 1.33)	0.90 (0.60, 1.34)
		CC	0.87 (0.49, 1.55)	0.93 (0.52, 1.67)
	rs8177376	TG	1.02 (0.68, 1.51)	1.08 (0.72, 1.60)
		GG	0.92 (0.39, 2.15)	0.88 (0.38, 2.07)
	rs12290468	GA/AA	1.24 (0.66, 2.31)	0.97 (0.52, 1.81)
TLR1	rs5743551	AG	0.78 (0.51, 1.18)	0.80 (0.52, 1.21)
		GG	0.38 (0.12, 1.22)	0.38 (0.12, 1.23)
	rs5743556	TC/CC	0.75 (0.49, 1.15)	0.79 (0.51, 1.21)
		N/A	TC/CC	1.10 (0.74, 1.64)
	rs5743604	TC	0.87 (0.59, 1.30)	0.96 (0.64, 1.42)
		CC	0.38 (0.12, 1.23)	0.40 (0.12, 1.29)
	rs5743611	GC/CC	0.96 (0.60, 1.54)	0.92 (0.57, 1.47)
	rs4624663	AG/GG	0.92 (0.44, 1.93)	0.99 (0.47, 2.07)
TLR2	rs3804099	TC	0.85 (0.56, 1.29)	0.85 (0.56, 1.29)
		CC	0.94 (0.56, 1.58)	0.89 (0.53, 1.49)
	rs3804100	TC/CC	1.41 (0.84, 2.35)	1.33 (0.80, 2.23)
TLR3	rs3775296	CA/AA	1.12 (0.75, 1.65)	1.05 (0.71, 1.56)
	rs5743313	CT/TT	1.10 (0.74, 1.63)	1.06 (0.72, 1.58)
	rs3775291	CT	0.98 (0.66, 1.45)	1.03 (0.70, 1.53)
		TT	1.09 (0.55, 2.15)	1.42 (0.72, 2.81)
	rs5743303	AT/TT	1.13 (0.76, 1.68)	1.06 (0.50, 1.17)
	rs5743305	TA	1.00 (0.67, 1.49)	1.03 (0.69, 1.54)
		AA	1.16 (0.64, 2.11)	1.17 (0.65, 2.13)
TLR4	rs11536889	GC/CC	1.11 (0.71, 1.72)	1.14 (0.74, 1.78)
	rs10759932	TC/CC	1.02 (0.67, 1.55)	1.09 (0.72, 1.66)
	rs2149356	GT	0.86 (0.57, 1.31)	0.84 (0.55, 1.28)
		TT	0.89 (0.47, 1.72)	0.97 (0.51, 1.87)
	rs4986790	AG/GG	0.87 (0.45, 1.68)	0.96 (0.50, 1.86)
	rs1927914	AG	1.05 (0.71, 1.55)	1.07 (0.72, 1.58)
		GG	0.85 (0.44, 1.66)	0.96 (0.49, 1.88)
	rs10759933	AC/CC	1.00 (0.53, 1.89)	1.07 (0.56, 2.03)
	rs5030721	GA/AA	0.82 (0.18, 3.68)	0.74 (0.17, 3.33)
	rs11536871	AC/CC	0.86 (0.32, 2.32)	0.90 (0.33, 2.45)
	rs7873784	GC/CC	0.95 (0.61, 1.47)	1.04 (0.67, 1.62)
	rs11536891	TC/CC	0.91 (0.58, 1.42)	0.99 (0.63, 1.55)
	TLR5	n/a	CT	0.83 (0.54, 1.27)
TT			0.77 (0.46, 1.31)	0.75 (0.44, 1.27)
rs2241096		CT/TT	1.03 (0.66, 1.62)	1.07 (0.69, 1.68)
rs2072493		AG/GG	0.99 (0.65, 1.51)	0.95 (0.62, 1.44)
rs5744174		TC	0.98 (0.63, 1.53)	0.98 (0.63, 1.53)

Gene	rs Number	Genotype	Hazard Ratios (99% CI)*	
			Multivariate Model 1 [†]	Multivariate Model 2 [‡]
		CC	1.13 (0.68, 1.88)	1.19 (0.71, 1.98)
	rs1053954	AG/GG	0.86 (0.50, 1.48)	0.84 (0.49, 1.45)
TLR6	rs5743788	CG/GG	1.00 (0.63, 1.60)	1.02 (0.64, 1.63)
			1.42 (0.86, 2.32)	1.37 (0.83, 2.24)
	rs5743795	GA/AA	0.73 (0.47, 1.13)	0.78 (0.50, 1.20)
	rs5743806	GC	0.75 (0.50, 1.13)	0.76 (0.51, 1.15)
		CC	1.15 (0.65, 2.03)	1.17 (0.66, 2.07)
	rs5743810	CT	1.11 (0.73, 1.70)	1.15 (0.75, 1.76)
		TT	1.47 (0.87, 2.48)	1.37 (0.81, 2.32)
	rs5743815	TC/CC	1.34 (0.56, 3.24)	1.14 (0.47, 2.76)
TLR7	rs2302267	TG/GG	1.24 (0.57, 2.68)	1.17 (0.54, 2.54)
	rs179019	CA/AA	1.00 (0.64, 1.56)	1.06 (0.68, 1.65)
	rs179016	GC/CC	1.24 (0.86, 1.82)	1.16 (0.80, 1.70)
	rs1620233	CT/TT	1.60 (0.94, 2.72)	1.48 (0.87, 2.51)
	rs179008	AT/TT	0.95 (0.61, 1.48)	0.90 (0.58, 1.41)
TLR8	rs1548731	CT/TT	1.17 (0.77, 1.78)	1.00 (0.66, 1.52)
	rs4830806	CT/TT	0.92 (0.62, 1.35)	0.85 (0.57, 1.25)
	rs5744068	CT/TT	1.12 (0.68, 1.87)	0.95 (0.57, 1.59)
	rs5744080	CT/TT	1.02 (0.69, 1.52)	0.97 (0.65, 1.45)
	rs5744088	GC/CC	1.13 (0.68, 1.87)	0.96 (0.58, 1.59)
TLR9	rs187084	TC	1.57 (1.02, 2.41)	1.43 (0.93, 2.21)
		CC	1.02 (0.57, 1.84)	1.01 (0.56, 1.81)
TLR10	rs11466617	TC/CC	0.71 (0.45, 1.11)	0.71 (0.45, 1.11)
	rs11466640	CT/TT	0.77 (0.50, 1.18)	0.80 (0.52, 1.24)
	rs4274855	GA/AA	0.78 (0.51, 1.21)	0.83 (0.54, 1.28)
	rs11096957	AC	0.88 (0.60, 1.30)	0.92 (0.63, 1.36)
		CC	0.52 (0.26, 1.05)	0.55 (0.27, 1.11)
	rs11096955	AC	1.02 (0.69, 1.51)	1.10 (0.74, 1.62)
		CC	0.58 (0.29, 1.20)	0.67 (0.33, 1.37)
	rs11466657	TC/CC	0.56 (0.17, 1.79)	0.49 (0.15, 1.59)
rs4129009	AG/GG	0.76 (0.50, 1.17)	0.56 (0.17, 1.79)	
TNF- α	rs1799724	CT/TT	0.97 (0.56, 1.68)	1.00 (0.57, 1.74)
	rs1800750	GA/AA	0.49 (0.04, 6.65)	0.55 (0.04, 7.33)
	rs3093662	AG/GG	0.92 (0.41, 2.04)	0.85 (0.38, 1.90)
	rs361525	GA/AA	0.98 (0.41, 2.37)	0.99 (0.41, 2.39)
	rs3093664	AG/GG	0.78 (0.43, 1.44)	0.85 (0.46, 1.57)
	rs3093665	AC/CC	0.35 (0.03, 4.57)	0.29 (0.02, 3.78)
	rs1800629	GA/AA	1.37 (0.94, 2.01)	1.37 (0.93, 2.01)
	rs769178	GT/TT	0.99 (0.55, 1.78)	0.97 (0.54, 1.75)
	rs1800630	CA/AA	1.06 (0.71, 1.60)	1.13 (0.75, 1.70)

* Homozygous wildtype carriers represent the referent group for all analyses

[†]Controlling for age and geographic location

[‡] Controlling for age, geographic location, and indicator variables for curative and hormonal treatment

Supplementary Table 2. Description/Frequencies of Haplotypes and Hazard Ratios (99% CI) for Prostate Cancer Mortality

Gene	htSNPs included	Haplotypes	Frequency	Multivariate 1*		Multivariate 2 [†]	
				HR (99% CI)	Global LRT p-value	HR (99% CI)	Global LRT p-value
TLR4	rs1927914	ATAAAGG	0.53 (0.51-0.55)	1.00 (Ref)	0.85	1.00 (Ref)	0.84
	rs10759932	GTAAAGG	0.13 (0.12-0.14)	0.90 (0.59-1.37)		0.96 (0.63-1.45)	
	rs10759933	GCAAAGG	0.13 (0.12-0.14)	1.05 (0.71-1.57)		1.11 (0.74-1.65)	
	rs11536871	ATAAAGC	0.12 (0.11-0.14)	1.08 (0.71-1.65)		1.16 (0.76-1.77)	
	rs4986790	Rare (<0.05)	0.09	0.88 (0.52-1.48)		0.95 (0.57-1.60)	
	rs5030721						
	rs1153889						
TLR6-1-10	rs5743788	GGGTT	0.40 (0.39-0.42)	1.00 (Ref)	0.23	1.00 (Ref)	0.27
	rs5743795	CGCCT	0.32 (0.30-0.33)	0.90 (0.66-1.22)		0.93 (0.69-1.26)	
	rs5743806	CAGCT	0.18 (0.17-0.20)	0.72 (0.49-1.07)		0.77 (0.52-1.13)	
	rs5743810	GGGCT	0.08 (0.07-0.09)	1.08 (0.66-1.76)		1.21 (0.73-2.00)	
	rs5743815	Rare (<0.05)	0.02	--		--	
	rs5743604	TG	0.65 (0.63-0.67)	1.00 (Ref)	0.08	1.00 (Ref)	0.15
	rs5743611	CG	0.24 (0.22-0.26)	0.75 (0.54-1.05)		0.79 (0.57-1.10)	
		TC	0.11 (0.10-0.12)	0.88 (0.60-1.35)		0.86 (0.55-1.33)	
	rs4624663	ATCGAATA	0.63 (0.61-0.64)	1.00 (Ref)	0.12	1.00 (Ref)	0.17
	rs11466617	ATCGCCTA	0.16 (0.14-0.17)	0.87 (0.59-1.27)		0.92 (0.62-1.36)	
	rs11466640	ACTACCTG	0.15 (0.13-0.16)	0.78 (0.52-1.17)		0.81 (0.54-1.20)	
	rs4274855	Rare (<0.05)	0.06	0.66 (0.35-1.22)		0.66 (0.35-1.23)	
	rs11096957						
	rs11096955						
	rs11466657						
rs4129009							
IL1-RN	rs878972	ATGC	0.39 (0.37-0.40)	1.00 (Ref)	0.92	1.00 (Ref)	0.49
	rs315934	ATGG	0.16 (0.14-0.17)	0.98 (0.63-1.52)		1.08 (0.69-1.68)	
	rs3087263	CTGC	0.15 (0.14-0.16)	1.12 (0.73-1.71)		1.25 (0.80-1.93)	
	rs315951	ACGG	0.14 (0.12-0.15)	0.93 (0.60-1.45)		0.89 (0.57-1.38)	
		CTAC	0.08 (0.07-0.09)	1.11 (0.67-1.83)		0.90 (0.54-1.48)	
		ACGC	0.05 (0.04-0.06)	1.13 (0.58-2.18)		1.38 (0.70-2.71)	
		Rare (<0.05)	0.03	--		--	
IRAK1	rs1059702	CTTT	0.81	1.00 (Ref)	0.82	1.00 (Ref)	0.73
	rs7061789	TCCG	0.12	1.15 (0.66-1.99)		1.14 (0.66-1.98)	
	rs1059703	Rare (<0.05)	0.07	1.04 (0.47-2.33)		0.87 (0.39-1.95)	
	rs3027878						

Gene	htSNPs included	Haplotypes	Frequency	Multivariate 1*		Multivariate 2†	
				HR (99% CI)	Global LRT p-value	HR (99% CI)	Global LRT p-value
IRAK4	rs1057190 rs4251431 rs4251571 rs4251459 rs4251487 rs4251545	TCATGG CTACGA Rare (<0.05)	0.87 (0.86-0.88) 0.09 (0.08-0.10) 0.04	1.00 (Ref) 1.16 (0.75-1.79) --	0.39	1.00 (Ref) 1.05 (0.69-1.60) --	0.75
IL-6	rs1800797 rs1800796 rs1800795 rs1474348 rs2069845	AGCCG GGGGA Rare (<0.05)	0.48 (0.46-0.50) 0.43 (0.41-0.45) 0.09	1.00 (Ref) 1.16 (0.88-1.53) 0.87 (0.52-1.47)	0.22	1.00 (Ref) 1.08 (0.82-1.43) 0.86 (0.51-1.46)	0.48
COX-2	rs2745557 rs5275 rs4648276 rs689470 rs20432	CTTCT CCTCT TTTCT CCCCG	0.48 (0.46-0.50) 0.22 (0.20-0.24) 0.16 (0.15-0.18) 0.11 (0.09-0.12)	1.00 (Ref) 1.10 (0.78-1.55) 0.97 (0.66-1.43) 1.10 (0.71-1.70)	0.83	1.00 (Ref) 1.13 (0.80-1.60) 1.10 (0.75-1.62) 1.08 (0.70-1.68)	0.79
MIC-1	rs1058587 rs1059519 rs1059369 rs1227732	GCAG CCTG CCAG CGAT CGAG	0.28 (0.26-0.29) 0.27 (0.25-0.28) 0.17 (0.15-0.18) 0.16 (0.14-0.17) 0.13 (0.12-0.14)	1.00 (Ref) 1.11 (0.79-1.57) 1.03 (0.68-1.56) 0.63 (0.39-1.02) 1.09 (0.71-1.68)	0.02	1.00 (Ref) 1.10 (0.78-1.55) 1.00 (0.66-1.53) 0.68 (0.42-1.10) 1.23 (0.79-1.92)	0.05
IL-10	rs1800872 rs3024509 rs3024505 rs1800896 rs1554286	CTCGC CTCAC ATCAT CTTGC CCCCG Rare (<0.05)	0.28 (0.26-0.29) 0.27 (0.25-0.29) 0.22 (0.20-0.23) 0.12 (0.11-0.14) 0.07 (0.06-0.08) 0.04	1.00 (Ref) 0.89 (0.63-1.25) 0.93 (0.65-1.34) 1.09 (0.71-1.67) 1.05 (0.61-1.81) --	0.86	1.00 (Ref) 0.91 (0.65-1.27) 0.93 (0.64-1.34) 1.25 (0.81-1.93) 1.03 (0.60-1.77) --	0.60

*Models control for age at diagnosis and geographic location

†Models control for age at diagnosis, geographic location, and indicator variables for curative and hormonal treatment

Abbreviations: HR – Hazard ratio; LRT – Likelihood ratio test