

**Table S1** Primer sequence of the single nucleotide polymorphisms used in the study

<b>SNP</b>	<b>Allele change</b>	<b>Primer sequence</b>
rs10983755	G>A	F,5'-ATTGGAAGTGCTTGGAGGA-3' R,5'-TTGTAAAGCTTTAGGACAGTGTCT-3'
rs11536879	A>G	F,5'-CATGTTCTCTGCAATGGTTG-3' R,5'-GCAGCAAGGGTTGAAAAACT-3'
rs4986790	A>G	F,5'-AGCATACTTAGACTACTACCTCCATG-3' R,5'-GAGAGATTGAGTTCAATGTGGG-3'
rs4986791	C>T	F,5'-GGTGCTGTTCTCAAAGTGATTTGGGAGAA-3' R,5'-GGAAATCCAGATGTTCTAGTTGTTCTAACGCC-3'
rs1927907	G>A	F,5'-TTCAACCCTGCTGCTTCT-3' R,5'-CGAAAAGGCAAAGGATGTCT-3'
rs7873784	G>C	F,5'-ACGTTGGATGATGAGAGGTACCCCTTAAC-3' R,5'-ACGTTGGATGGCTCTAAAGATCAGCTGTAT-3'
rs115336889	G>C	F,5'-GTCATTCCAAAGTTATTGCCTA-3' R,5'-CTGTGGTCATATTCCAGTTT-3'

**Table S2** Association of haplotypes composed of rs10983755, rs4986791, rs1927907 and rs115336889 with susceptibility to benign prostatic hyperplasia.

Haplotype	Case		Control		Odds ratio	Lower limit	Upper limit	P-value
	Frequency	Number	Frequency	Number				
GCGG	0.032	16	0.111	107	<b>0.26</b>	<b>0.15</b>	<b>0.45</b>	<0.001
GCGC	0.138	69	0.190	183	<b>0.68</b>	<b>0.50</b>	<b>0.92</b>	<b>0.012</b>
GTGG	0.108	54	0.126	121	0.84	0.60	1.18	0.321
GTGC	0.461	231	0.214	206	<b>3.15</b>	<b>2.49</b>	<b>3.98</b>	<0.001
GTAC	0.069	35	0.053	52	1.32	0.85	2.05	0.221
ATGC	0.081	41	0.053	52	<b>1.56</b>	<b>1.02</b>	<b>2.39</b>	<b>0.038</b>

**Table S3** Comparison of haplotypes composed of rs10983755, rs4986791 and rs1927907 between aggressive and non-aggressive benign prostatic hyperplasia populations

Haplotype	Aggressive		Non-aggressive		Odds ratio	Lower limit	Upper limit	P-value
	Frequency	Number	Frequency	Number				
GCG	0.119	26	0.202	58	<b>0.54</b>	<b>0.32</b>	<b>0.88</b>	<b>0.014</b>
GTG	0.673	145	0.495	141	<b>2.09</b>	<b>1.45</b>	<b>3.01</b>	<0.001
GTA	0.075	16	0.087	25	0.83	0.43	1.6	0.581
ATG	0.092	20	0.109	31	0.84	0.46	1.51	0.553