

**Supplemental Table 1. Genotype and allele frequencies of the studied variants in patients with CRPC.**

Allelic variant <sup>†</sup>	Effect	n <sup>‡</sup>	Genotype frequencies <sup>§</sup>			Allele frequencies	
			Wt	Het	Var	<i>p</i>	<i>q</i>
<i>Caucasians</i>							
<i>ERα</i> (rs2234693) <i>T&gt;C</i>	IVS1-397C/T	128	25 (19.5)	75 (58.6)	28 (21.9)	0.49	0.51
<i>ERα</i> (rs9340799) <i>A&gt;G</i>	IVS1-351A/G	129	42 (32.5)	69 (53.5)	18 (14.0)	0.59	0.40
<i>CYP19</i> (rs700519) <i>C&gt;T</i>	Exon 8 R264C	130	125 (96.0)	5 (4.0)	0 (0)	0.98	0.02
<i>African Americans</i>							
<i>ERα</i> (rs2234693) <i>T&gt;C</i>	IVS1-397C/T	10	2 (20.0)	4 (40.0)	4 (40.0)	0.40	0.60
<i>ERα</i> (rs9340799) <i>A&gt;G</i>	IVS1-351A/G	11	5 (50.0)	3 (30.0)	2 (20.0)	0.65	0.35
<i>CYP19</i> (rs700519) <i>C&gt;T</i>	Exon 8 R264C	12	6 (50.0)	6 (50.0)	0 (0)	0.75	0.25
<i>Asians</i>							
<i>ERα</i> (rs2234693) <i>T&gt;C</i>	IVS1-397C/T	4	0 (0)	3 (0.75)	1 (0.25)	0.38	0.62
<i>ERα</i> (rs9340799) <i>A&gt;G</i>	IVS1-351A/G	4	1 (0.25)	3 (0.75)	0 (0)	0.62	0.38
<i>CYP19</i> (rs700519) <i>C&gt;T</i>	Exon 8 R264C	4	1 (0.25)	2 (0.50)	1 (0.25)	0.50	0.50

Abbreviations: *p*, frequency for wild type allele; *q*, frequency for variant allele; Wt, homozygous wild type allele patient; Het, heterozygous patient; Var, homozygous variant patient.

<sup>†</sup>Variants were in Hardy-Weinberg equilibrium in Caucasians regardless of disease status ( $P>0.05$ ). Both *ERα* SNPs demonstrated genetic linkage in Caucasians ( $D'=1.0$ ,  $R^2=0.66$ ,  $P<0.001$ ).

<sup>‡</sup>Genotype data was not available in all patients, as not all samples yielded sufficient DNA or were able to amplified by PCR.

<sup>§</sup>Number represents patients with percentage in parenthesis; the difference in the total number of patients is due to the fact that not all samples yielded sequencing data or showed PCR amplification. There were 3 patients with unknown races with the following genotype information:  $n=2$  *ERα* rs2234693 wt,  $n=2$  *ERα* rs9340799 wt,  $n=3$  *CYP19* rs700519 wt.