SNP	MAF	normal acc. fibers*		coiled axonemes*		normal 9+2 axoneme*		normal fibrous sheath*		% immaturity*		fertility index (FI)		*in situ* motility		motility 'a'		motility 'b'	
		β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p
rs2042791	0.408	0.03 (0.04)	0.499	0.00 (0.04)	0.964	0.00 (0.06)	0.998	0.01 (0.04)	0.879	-0.02 (0.03)	0.442	2.10 (12.56)	0.868	-0.48 (0.83)	0.563	-0.14 (0.50)	0.785	0.30 (0.59)	0.615
rs2042792	0.333	0.05 (0.04)	0.207	-0.01 (0.04)	0.774	0.04 (0.06)	0.479	0.01 (0.04)	0.835	-0.01 (0.03)	0.829	-16.83 (13.14)	0.209	0.05 (0.84)	0.955	0.00 (0.50)	0.994	0.25 (0.59)	0.673
rs12623569	0.282	0.01 (0.04)	0.702	0.02 (0.03)	0.601	0.00 (0.05)	0.978	0.09 (0.04)	**0.014**[c]	0.04 (0.03)	0.1	20.80 (10.72)	0.06	1.13 (0.74)	0.132	0.31 (0.45)	0.5	-0.65 (0.53)	0.221
rs16851495	0.142	-0.12 (0.06)	**0.041**[c]	0.01 (0.05)	0.873	-0.16 (0.08)	**0.039**[c]	-0.03 (0.06)	0.674	-0.03 (0.04)	0.515	-10.07 (16.19)	0.538	-0.90 (1.18)	0.453	-0.71 (0.70)	0.32	0.10 (0.85)	0.905

SNP	MAF	motility 'a+b'		total motility		necrosis		% necrosis*		sperm/mL^		volume/mL		total sperm		apoptosis		% apoptosis*	
		β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p
rs2042791	0.408	0.16 (0.76)	0.831	-0.32 (1.25)	0.798	-0.78 (5.1)	0.878	0.00 (0.06)	0.991	-0.13 (0.34)	0.715	-0.21 (0.47)	0.66	4.45 (20.26)	0.827	-1.94 (2.28)	0.399	-0.04 (0.03)	0.292
rs2042792	0.333	0.26 (0.76)	0.739	0.30 (1.25)	0.81	-6.21 (5.04)	0.224	-0.06 (0.06)	0.303	-0.55 (0.35)	0.128	0.04 (0.47)	0.939	18.60 (20.25	0.363	-1.75 (2.30)	0.45	-0.03 (0.03)	0.305
rs12623569	0.282	-0.35 (0.69)	0.616	0.78 (1.13)	0.49	-2.73 (4.60)	0.556	-0.04 (0.05)	0.471	0.44 (0.32)	0.178	-0.25 (0.42)	0.55	12.83 (18.33	0.487	-1.93 (2.07)	0.356	-0.03 (0.03)	0.361
rs16851495	0.142	-0.61 (1.08)	0.579	-1.50 (1.77)	0.401	11.55 (7.10)	0.11	0.14 (0.08)	0.084	0.46 (0.53)	0.382	0.24 (0.70)	0.723	47.74 (29.11	0.107	1.68 (3.28)	0.611	0.02 (0.05)	0.637