

Supplementary Table S1. Top 50 GWAS candidate SNPs for sperm motility

SNP	Chr	osition (hg19)	Effect/Referenc e	Genotype	Effect allele	Beta	SE	P
rs16845389	1	199635121	A/T	13/179/619	0.13	-4.66	1.05	9.82E-06
rs2502139	1	199695633	A/G	72/341/398	0.30	-3.34	0.76	1.35E-05
rs906492	2	17270582	A/G	16/189/606	0.14	-4.37	1.01	1.78E-05
rs4324323	2	17271023	T/C	16/189/606	0.14	-4.37	1.01	1.78E-05
rs13013588	2	17271580	T/C	16/189/606	0.14	-4.37	1.01	1.78E-05
rs13027296	2	17271585	G/A	16/195/600	0.14	-4.41	1.00	1.27E-05
rs10177601	2	17271863	T/C	16/189/606	0.14	-4.37	1.01	1.78E-05
rs12614980	2	17272688	A/G	16/191/604	0.14	-4.39	1.01	1.49E-05
rs4832486	2	17272918	C/A	16/191/604	0.14	-4.39	1.01	1.49E-05
rs1546620	2	17273229	A/G	16/191/604	0.14	-4.39	1.01	1.49E-05
rs2135975	2	17273301	T/G	16/191/604	0.14	-4.39	1.01	1.49E-05
rs7419703	2	17273752	G/C	16/191/604	0.14	-4.39	1.01	1.49E-05
rs1807869	2	17273993	A/G	16/189/606	0.14	-4.37	1.01	1.78E-05
rs1515988	2	17274314	C/T	16/189/606	0.14	-4.37	1.01	1.78E-05
rs6545209	2	51528685	C/G	65/320/426	0.28	-3.47	0.78	9.22E-06
rs2033644	2	212221868	G/T	39/305/467	0.24	-3.83	0.84	6.47E-06
rs2033643	2	212221870	A/C	39/305/467	0.24	-3.83	0.84	6.47E-06
rs12992745	2	212228115	C/T	40/299/472	0.23	-3.84	0.84	5.76E-06
rs12992319	2	212236888	A/G	41/300/470	0.24	-3.93	0.84	2.97E-06
rs1821659	2	212238982	C/T	42/302/467	0.24	-3.97	0.83	2.11E-06
rs1821658	2	212239070	G/C	42/302/467	0.24	-3.97	0.83	2.11E-06
rs7565960	2	212242434	A/G	40/294/477	0.23	-4.02	0.84	1.89E-06
rs13003941	2	212243703	T/G	41/297/473	0.23	-3.93	0.84	2.98E-06
rs3748962	2	212251864	C/T	41/302/468	0.24	-3.86	0.84	4.58E-06
rs934606	2	212252955	T/C	41/305/465	0.24	-3.98	0.83	2.15E-06
rs3791686	2	212258353	C/T	40/307/464	0.24	-4.25	0.84	4.47E-07
rs1836719	2	212259228	G/A	40/307/464	0.24	-4.22	0.84	5.29E-07
rs77504578	3	149243715	G/T	31/250/530	0.19	-3.84	0.88	1.47E-05
rs2717890	7	25261227	G/C	29/217/565	0.17	-3.95	0.91	1.64E-05
rs2523108	7	25261692	T/G	29/218/564	0.17	-3.95	0.91	1.66E-05
rs2058730	7	37234756	T/C	87/362/362	0.33	-3.25	0.75	1.49E-05
rs6994812	8	1192014	A/G	2/140/669	0.09	-5.69	1.27	8.45E-06
rs4976861	8	1192107	C/G	2/141/668	0.09	-5.64	1.27	9.45E-06
rs4976873	8	1192254	A/C	2/141/666	0.09	-5.64	1.27	9.64E-06
rs4976874	8	1192257	T/C	2/140/669	0.09	-5.69	1.27	8.45E-06
rs4976875	8	1192438	T/G	2/144/665	0.09	-5.58	1.26	1.03E-05
rs4976876	8	1192523	C/G	2/144/665	0.09	-5.58	1.26	1.03E-05
rs36075054	8	25603376	T/C	1/74/736	0.05	7.49	1.67	8.39E-06
rs35681473	8	25616093	C/T	1/74/736	0.05	7.49	1.67	8.39E-06
rs60099273	8	25619704	T/C	1/74/736	0.05	7.49	1.67	8.39E-06
rs11177017	12	68431871	G/C	136/415/260	0.42	-3.23	0.72	9.22E-06
rs7486855	12	68437933	C/A	113/402/296	0.39	-3.18	0.73	1.72E-05
rs7967312	12	68438049	A/C	137/415/259	0.42	-3.36	0.72	3.87E-06
rs7979260	12	68441042	G/A	140/416/255	0.43	-3.43	0.72	2.38E-06
rs11504215	12	68451702	A/C	137/414/260	0.42	-3.19	0.72	1.14E-05
rs10878737	12	68453476	A/G	137/417/257	0.43	-3.21	0.72	1.10E-05
rs7969323	12	68461229	C/G	140/417/254	0.43	-3.29	0.72	6.13E-06
rs56113814	14	48422308	T/C	34/271/506	0.21	-3.85	0.86	9.40E-06
rs7492796	14	105888138	G/A	1/37/773	0.02	-9.79	2.25	1.50E-05
rs28730331	14	105889343	T/C	1/36/774	0.02	-10.10	2.27	9.98E-06

Data are shown as the estimated liner regression statistic Beta, SE and P value using an additive genetic model with adjustments for age, BMI, ejaculation abstinence and time from masturbation to test.

Abbreviations: SNP, single-nucleotide polymorphism; Chr, chromosome.