

Supplementary table 1. Summary of clinical parameters of all individuals

No.	Age	Sperm concentration ($10^6/\text{mL}$)	Total motility (%)	Progressive motility (%)	Normal sperm percentage (%)	Type
1	25	25.78	54.11	48.92	5.24	Normal
2	25	34.26	44.3	39.09	4.25	Normal
3	26	115.15	53.94	44.33	7.11	Normal
4	28	46.78	40.97	33.63	5.53	Normal
5	28	70.13	50.6	41.77	6.13	Normal
6	29	46.02	58.55	49.09	5.69	Normal
7	29	16.9	53.96	51.49	4.25	Normal
8	30	53.39	70.53	57.05	5.63	Normal
9	32	61.26	42.62	33.06	4.81	Normal
10	34	69.96	40.83	33.33	5.74	Normal
11	35	35.98	40.93	37.67	5.02	Normal
12	45	15.19	48.46	44.05	5.71	Normal
13	22	78.33	27.35	23.29	5.16	Asthenozoospermia
14	23	28.57	19.53	17.97	5.5	Asthenozoospermia
15	24	21.25	25.98	25.2	4.33	Asthenozoospermia
16	25	76.32	37.94	28.29	5.66	Asthenozoospermia
17	25	37.66	20.44	17.78	5.12	Asthenozoospermia
18	26	88.7	28.49	22.08	5.24	Asthenozoospermia
19	26	170.55	39.45	24.73	7.94	Asthenozoospermia
20	26	36.49	31.19	25.23	5.58	Asthenozoospermia
21	26	193.7	22.81	20.51	5.24	Asthenozoospermia
22	27	72.39	38.84	28.9	4.25	Asthenozoospermia
23	27	63.1	16.98	13.26	4.69	Asthenozoospermia
24	27	96.9	36.27	27.29	7.35	Asthenozoospermia
25	27	75.15	15.14	14.48	4.81	Asthenozoospermia
26	28	92.23	22.5	18.51	6.13	Asthenozoospermia
27	28	59.81	26.49	22.92	4.21	Asthenozoospermia
28	28	67.11	39.15	30.92	6.64	Asthenozoospermia
29	28	63.77	23.88	20.73	6.16	Asthenozoospermia
30	28	34.34	29.82	24.95	5.24	Asthenozoospermia
31	30	51.9	20.97	19.35	4.65	Asthenozoospermia
32	30	33.25	26.17	23.15	4.27	Asthenozoospermia
33	30	52.55	21.66	16.56	5.63	Asthenozoospermia
34	30	48.7	28.18	24.05	5.24	Asthenozoospermia
35	30	69.85	21.25	17.09	4.23	Asthenozoospermia
36	30	65.95	29.44	26.14	7.91	Asthenozoospermia
37	31	75.49	24.83	22.84	4.37	Asthenozoospermia
38	32	22.01	30.8	27.38	6.34	Asthenozoospermia
39	32	50.22	23.67	23.33	4.23	Asthenozoospermia
40	35	41.17	19.51	16.26	5.63	Asthenozoospermia
41	36	19.49	30.9	29.61	6.54	Asthenozoospermia
42	36	36.99	22.62	20.81	5.19	Asthenozoospermia
43	37	111.81	21.11	15.27	5.09	Asthenozoospermia
44	37	55.67	22.04	20.44	4.72	Asthenozoospermia
45	38	73.31	19.86	16.21	5.99	Asthenozoospermia
46	40	49.37	20	12.54	4.15	Asthenozoospermia
47	40	54.23	33.33	27.47	5.63	Asthenozoospermia
48	30	54.07	45.51	40.87	2.8	Teratozoospermia
49	33	13.89	44.18	38.96	6.05	Oligozoospermia
50	28	25.44	13.16	13.16	2.34	Teratoasthenozoospermia
51	25	84.35	8.33	7.34	3.26	Teratoasthenozoospermia
52	25	50.87	12.83	10.86	2.38	Teratoasthenozoospermia
53	25	76.98	14.35	12.17	2.9	Teratoasthenozoospermia
54	26	27.34	20.41	18.37	2.36	Teratoasthenozoospermia
55	26	34.81	2.24	1.6	3.26	Teratoasthenozoospermia
56	33	105.45	15.56	11.75	2.91	Teratoasthenozoospermia
57	27	9.96	25.21	24.37	4.61	Oligoasthenozoospermia
58	23	12.38	24.77	22.07	5.63	Oligoasthenozoospermia
59	30	5.01	31.43	27.62	1.91	OAT
60	31	10.15	34.07	29.67	1.9	OAT

OAT: Oligoasthenoteratozoospermia