

Supplementary Table S1 Nanoparticle tracking analysis of semen vesicles using a Nanosight device.

A.			
	Nz	SA	OA
Size mean (nm)	128 ± 5.20	128.57 ± 5.14	128 ± 1.18
Size mode (nm)	100.57 ± 2.94	101.82 ± 4.85	108.8 ± 6.35
Size D10 (nm)	77.23 ± 3.27	77.28 ± 3.36	77.4 ± 1.66
Size D50 (nm)	105.57 ± 3.65	106.78 ± 3.60	107.87 ± 1.29
Size D90 (nm)	169.4 ± 13.31	175.12 ± 19.70	169.2 ± 6.89

B.			
Bin centre (nm)	Percentile undersize		
	Nz (%)	SA (%)	OA (%)
5	0 ± 0	0 ± 0	0 ± 0
15	0 ± 0	1.59E-09 ± 3.89E-09	0 ± 0
25	3.67E-10 ± 6.36E-10	1E-3 ± 3E-3	2.52E-06 ± 4.37E-06
35	1E-3 ± 2E-3	0.01 ± 0.02	2E-4 ± 4E-4
45	2E-3 ± 3E-3	0.03 ± 0.03	3E-4 ± 5E-4
55	0.01 ± 0.01	0.06 ± 0.07	1E-3 ± 5E-4
65	0.43 ± 0.36	0.76 ± 0.43	0.16 ± 0.10
75	3.55 ± 1.26	4.01 ± 1.97	3.04 ± 1.19
85	13.71 ± 4.69	13.26 ± 4.72	12.15 ± 0.75
95	27.80 ± 4.94	27.22 ± 5.86	26.13 ± 1.63
105	43.53 ± 3.32	41.80 ± 5.25	39.05 ± 1.24
115	55.79 ± 4.39	54.81 ± 4.85	52.93 ± 2.05
125	64.58 ± 5.50	64.63 ± 4.77	64.58 ± 1.94
135	72.02 ± 5.13	71.64 ± 4.49	72.60 ± 1.90
145	79.11 ± 4.18	77.84 ± 3.23	78.66 ± 2.06
155	84.72 ± 3.18	83.22 ± 2.27	83.55 ± 1.89
165	88.44 ± 2.39	87.02 ± 2.53	87.44 ± 1.56
175	90.88 ± 2.37	89.78 ± 3.13	90.30 ± 1.57
185	92.59 ± 2.59	91.76 ± 3.46	92.38 ± 1.32
195	93.82 ± 2.58	93.22 ± 3.51	93.74 ± 1.08
205	94.72 ± 2.28	94.35 ± 3.46	94.91 ± 0.78
215	95.45 ± 1.75	95.24 ± 3.29	96.25 ± 0.43
225	96.03 ± 1.14	96.03 ± 2.97	97.04 ± 0.30
235	96.48 ± 0.76	96.75 ± 2.55	97.62 ± 0.43
245	96.86 ± 0.68	97.43 ± 2.13	98.08 ± 0.55
255	97.28 ± 0.72	98.00 ± 1.77	98.41 ± 0.57
265	97.72 ± 0.82	98.40 ± 1.51	98.64 ± 0.55
275	98.07 ± 0.89	98.67 ± 1.36	98.83 ± 0.48
285	98.28 ± 0.89	98.85 ± 1.26	98.99 ± 0.39
295	98.42 ± 0.86	98.99 ± 1.18	99.10 ± 0.32
305	98.53 ± 0.82	99.12 ± 1.11	99.28 ± 0.21

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Supplementary Table S1 Continued

B.			
Bin centre (nm)	Percentile undersize		
	Nz (%)	SA (%)	OA (%)
315	98.65 ± 0.78	99.21 ± 1.06	99.42 ± 0.08
325	98.79 ± 0.74	99.25 ± 1.01	99.51 ± 0.06
335	98.93 ± 0.68	99.28 ± 0.96	99.57 ± 0.11
345	99.10 ± 0.56	99.31 ± 0.90	99.62 ± 0.13
355	99.29 ± 0.37	99.35 ± 0.83	99.65 ± 0.14
365	99.47 ± 0.19	99.40 ± 0.75	99.71 ± 0.17
375	99.58 ± 0.10	99.46 ± 0.68	99.75 ± 0.22
385	99.67 ± 0.07	99.55 ± 0.62	99.78 ± 0.23
395	99.73 ± 0.11	99.63 ± 0.58	99.80 ± 0.23
405	99.77 ± 0.14	99.69 ± 0.54	99.84 ± 0.19
415	99.80 ± 0.15	99.73 ± 0.51	99.90 ± 0.09
425	99.83 ± 0.14	99.77 ± 0.46	99.95 ± 0.03
435	99.87 ± 0.10	99.80 ± 0.41	99.97 ± 0.04
445	99.92 ± 0.05	99.84 ± 0.34	99.97 ± 0.04
455	99.96 ± 0.02	99.88 ± 0.27	99.97 ± 0.04
465	99.98 ± 0.02	99.90 ± 0.21	99.97 ± 0.04
475	99.98 ± 0.02	99.92 ± 0.17	99.97 ± 0.04
485	99.98 ± 0.02	99.93 ± 0.15	99.97 ± 0.04
495	99.98 ± 0.02	99.93 ± 0.13	99.97 ± 0.04
505	99.98 ± 0.02	99.94 ± 0.13	99.97 ± 0.04
515	99.98 ± 0.02	99.94 ± 0.12	99.97 ± 0.04
525	99.98 ± 0.02	99.94 ± 0.11	99.98 ± 0.04
535	99.98 ± 0.02	99.94 ± 0.11	99.98 ± 0.04
545	99.98 ± 0.02	99.95 ± 0.10	99.98 ± 0.04
555	99.98 ± 0.02	99.95 ± 0.09	99.98 ± 0.04
565	99.98 ± 0.02	99.96 ± 0.07	99.98 ± 0.04
575	99.98 ± 0.02	99.97 ± 0.06	99.98 ± 0.04
585	99.98 ± 0.02	99.97 ± 0.05	99.98 ± 0.04
595	99.98 ± 0.02	99.98 ± 0.04	99.98 ± 0.04
605	99.98 ± 0.02	99.98 ± 0.03	99.98 ± 0.04
615	99.98 ± 0.02	99.99 ± 0.03	99.98 ± 0.03
625	99.98 ± 0.02	99.99 ± 0.03	99.98 ± 0.03
635	99.98 ± 0.01	99.99 ± 0.03	99.99 ± 0.03
645	99.99 ± 0.01	99.99 ± 0.03	99.99 ± 0.02
655	99.99 ± 0.01	99.99 ± 0.03	100 ± 0
665	99.99 ± 0.01	99.99 ± 0.03	100 ± 0
675	99.99 ± 0.01	99.99 ± 0.03	100 ± 0
685	99.99 ± 0.01	99.99 ± 0.03	100 ± 0
695	99.99 ± 0.01	99.99 ± 0.03	100 ± 0
705	99.99 ± 0.01	99.99 ± 0.03	100 ± 0

Continued

Supplementary Table SI *Continued*

B.			
Bin centre (nm)	Percentile undersize		
	Nz (%)	SA (%)	OA (%)
715	100 ± 0	99.99 ± 0.03	100 ± 0
725	100 ± 0	99.99 ± 0.03	100 ± 0
735	100 ± 0	99.99 ± 0.03	100 ± 0
745	100 ± 0	99.99 ± 0.03	100 ± 0
755	100 ± 0	99.99 ± 0.03	100 ± 0
765	100 ± 0	99.99 ± 0.03	100 ± 0
775	100 ± 0	99.99 ± 0.03	100 ± 0
785	100 ± 0	99.99 ± 0.03	100 ± 0
795	100 ± 0	99.99 ± 0.03	100 ± 0
805	100 ± 0	99.99 ± 0.03	100 ± 0
815	100 ± 0	99.99 ± 0.03	100 ± 0
825	100 ± 0	99.99 ± 0.03	100 ± 0
835	100 ± 0	99.99 ± 0.03	100 ± 0
845	100 ± 0	99.99 ± 0.03	100 ± 0
855	100 ± 0	99.99 ± 0.03	100 ± 0
865	100 ± 0	99.99 ± 0.03	100 ± 0
875	100 ± 0	99.99 ± 0.03	100 ± 0
885	100 ± 0	99.99 ± 0.03	100 ± 0
895	100 ± 0	99.99 ± 0.03	100 ± 0
905	100 ± 0	99.99 ± 0.03	100 ± 0
915	100 ± 0	99.99 ± 0.03	100 ± 0
925	100 ± 0	99.99 ± 0.03	100 ± 0
935	100 ± 0	99.99 ± 0.03	100 ± 0
945	100 ± 0	99.99 ± 0.03	100 ± 0
955	100 ± 0	99.99 ± 0.03	100 ± 0
965	100 ± 0	99.99 ± 0.03	100 ± 0
975	100 ± 0	99.99 ± 0.03	100 ± 0
985	100 ± 0	99.99 ± 0.03	100 ± 0
995	100 ± 0	100 ± 0	100 ± 0

A. Merged data. B. Percentile of particle concentration by size. Size numbers ± SD are given for each group of individuals with different diagnoses. Nz, normozoospermic individuals; SA, infertile patients with secretory azoospermia; OA, infertile patients with obstructive azoospermia.