

**Supplementary Table S2.** All-cause death, results from Cox regression analyses based on the subpopulation (sample delivery 1987–2015) and stratified according to prior diagnoses (any vs none).

	Any prior diagnoses, N = 12 331			No prior diagnoses, N = 47 326		
	HR	95% CI	P-value	HR	95% CI	P-value
<b>Semen volume (ml)</b>						
0–1	2.22	1.20; 4.14	0.012	1.52	1.27; 1.82	<0.001
>1–2	1.24	0.72; 2.1	0.44	1.38	1.20; 1.58	<0.001
>2–3	0.80	0.47; 1.36	0.40	1.15	1.004; 1.31	0.044
>3–4	0.96	0.56; 1.64	0.87	1.02	0.89; 1.17	0.82
>4–5	0.88	0.56; 1.64	0.69	0.94	0.81; 1.10	0.46
>5	Ref.			Ref.		
P-trend			0.035			<0.001
<b>Sperm concentration (million/ml)</b>						
Azoospermia	1.75	0.94; 3.23	0.076	1.38	1.19; 1.60	<0.001
>0–5	1.94	1.22; 3.08	0.005	1.46	1.29; 1.66	<0.001
>5–15	1.17	0.70; 1.94	0.55	1.31	1.15; 1.50	<0.001
>15–40	0.95	0.61; 1.46	0.80	1.13	1.01; 1.26	0.028
>40–80	0.83	0.54; 1.28	0.39	1.11	0.995; 1.23	0.063
>80	Ref.			Ref.		
P-trend			0.002			<0.001
<b>Total sperm count (million)</b>						
Azoospermia	2.06	1.14; 3.74	0.017	1.39	1.21; 1.61	<0.001
>0–10	2.58	1.67; 4.00	<0.001	1.53	1.35; 1.73	<0.001
>10–20	1.30	0.59; 2.85	0.52	1.42	1.18; 1.70	<0.001
>20–40	1.14	0.61; 2.13	0.67	1.34	1.16; 1.55	<0.001
>40–80	1.69	1.10; 2.61	0.018	1.14	1.01; 1.29	0.042
>80–160	0.90	0.57; 1.42	0.66	1.15	1.04; 1.27	0.009
>160	Ref.			Ref.		
P-trend			<0.001			<0.001
<b>Motility (ABC, %)</b>						
0–10	1.79	0.38; 8.42	0.46	1.45	1.03; 2.04	0.034
11–20	3.41	1.19; 9.79	0.022	1.14	0.81; 1.60	0.46
21–40	1.38	0.57; 3.38	0.48	1.15	0.93; 1.41	0.19
41–60	1.34	0.64; 2.81	0.44	1.24	1.06; 1.46	0.007
61–80	1.00	0.50; 1.99	0.99	0.94	0.82; 1.08	0.39
80–100	Ref.			Ref.		
P-trend			0.008			<0.001
<b>Total motile count (million)</b>						
Azoospermia	1.13	0.15; 8.24	0.91	1.40	1.05; 1.87	0.021
>0–5	2.64	1.68; 4.14	<0.001	1.55	1.36; 1.77	<0.001
>5–10	1.06	0.42; 2.68	0.90	1.41	1.26; 1.72	<0.001
>10–40	1.62	1.06; 2.48	0.025	1.24	1.11; 1.40	<0.001
>40–80	1.05	0.65; 1.70	0.85	1.16	1.04; 1.30	0.011
>80–120	1.04	0.63; 1.73	0.88	1.20	1.06; 1.35	0.004
>120	Ref.			Ref.		
P-trend			<0.001			<0.001
<b>Morphology (%)</b>						
<5th PCTL	1.44	0.72; 2.90	0.31	1.42	1.15; 1.74	0.001
5–25th PCTL	1.49	0.78; 2.84	0.23	1.20	1.02; 1.41	0.032
25–50th PCTL	0.84	0.44; 1.61	0.61	1.20	1.05; 1.36	0.006
50–75th PCTL	1.24	0.66; 2.34	0.51	1.04	0.92; 1.18	0.54
75–95th PCTL	1.19	0.58; 2.44	0.63	0.90	0.78; 1.04	0.14
>95th PCTL	Ref.			Ref.		
P-trend			0.25			<0.001

Data are presented as hazard ratio (HR) with 95% CI. Attained age as the underlying time scale, including strata of period of semen sampling (5-year intervals) and adjusted for period of abstinence and educational status at time of semen sampling.