

Table.S1 Semen quality parameters of ejaculates used in the study

Parameters	*Reference limit (WHO)	Semen sample ** (n=27)
Sperm concentration	$\geq 15 \times 10^6/\text{mL}$	81 ± 29
Total sperm count in ejaculate	$\geq 39 \times 10^6$	165 ± 21
Semen volume	$\geq 1.5 \text{ mL}$	2.6 ± 1.3
Sperm motility (PR + NP, %)	$\geq 40\%$	87 ± 7.8
Sperm progressive motility	$\geq 32\%$	78 ± 10
Viability (live spermatozoa, %)	$\geq 58\%$	91 ± 4.8
Semen pH	≥ 7.2	8.0 ± 1.5

PR: progressive motility; **NP:** non-progressive motility.

Data are presented as the mean + SEM.

*Lower reference limits of semen parameters were defined by the World Health Organization (2010) standards.

** Obtained from 20 healthy donors.