

Supplement Table 1. Motility kinetic values of SU- and DGC-sperm (n=7)

Variable		0 hour	2 hours	4 hours	6 hours
VAP ($\mu\text{m}/\text{s}$)	SU	46.9 \pm 4.3	58.5 \pm 5.9	56.0 \pm 6.1	62.2 \pm 6.7
	DGC	55.9 \pm 5.9	58.5 \pm 5.7	62.9 \pm 6.9	67.6 \pm 5.0
VSL ($\mu\text{m}/\text{s}$)	SU	38.3 \pm 3.5	48.5 \pm 5.2	45.4 \pm 4.9	50.5 \pm 6.0
	DGC	43.9 \pm 4.3	47.4 \pm 4.7	50.2 \pm 5.3	52.6 \pm 3.5
VCL ($\mu\text{m}/\text{s}$)	SU	70.9 \pm 6.2	84.9 \pm 7.8	82.4 \pm 7.9	92.4 \pm 8.6
	DGC	83.3 \pm 7.4	89.6 \pm 7.4	96.5 \pm 9.5*	104.0 \pm 7.2*
ALH (μm)	SU	3.6 \pm 0.3	4.2 \pm 0.4	4.0 \pm 0.4	4.5 \pm 0.4
	DGC	4.1 \pm 0.5	4.4 \pm 0.4	4.8 \pm 0.5	5.1 \pm 0.5
BCF (Hz)	SU	16.7 \pm 1.9	16.8 \pm 3.0	16.6 \pm 1.8	15.6 \pm 2.6
	DGC	13.6 \pm 2.6	14.9 \pm 2.7	14.3 \pm 2.6	15.8 \pm 3.6
STR (%)	SU	79.8 \pm 2.2	79.1 \pm 1.9	79.2 \pm 1.5	77.4 \pm 2.0
	DGC	76.1 \pm 1.4	78.6 \pm 1.4	78.2 \pm 1.0	75.5 \pm 1.8
LIN (%)	SU	52.9 \pm 2.4	55.2 \pm 2.2	54.6 \pm 2.3	53.1 \pm 2.1
	DGC	51.9 \pm 1.5	52.9 \pm 1.5	52.7 \pm 1.2	50.5 \pm 1.5

Values are presented as mean \pm standard error of mean.

SU: swim-up, DGC: density gradient centrifugation, VAP: average path velocity, VSL: straight line velocity, VCL: curvilinear velocity, ALH: amplitude of lateral head displacement, STR: straightness (VSL/VAP), LIN: linearity (VSL/VCL).

*p<0.05 vs. SU.