

Supplementary Table 1: Overall semen parameters in fertile and infertile men with bilateral varicocele and those selected for proteomic analysis

Parameter	Fertile men (n=10)	Bilateral varicocele (n=17)	P value
Samples selected for varicocele analysis			
Age (y)	39.75±8.53	32.00±5.72	0.025
Concentration (10^6 mL $^{-1}$)	52.70±41.52	35.51±44.86	0.15
Motility (%)	51.67±11.04	41.76±19.78	0.32
Round cell (10^6 mL $^{-1}$)	0.85±0.69	2.32±2.50	0.12
Leukocytospermia (10^6 mL $^{-1}$)	0.00±0.00	0.24±0.45	0.30
Morphology (%)	8.00±4.10	2.25±2.27	0.002
ROS (RLU sec $^{-1}$ million $^{-1}$ sperm)	58.9 (12, 110)	894.9 (149.2, 2842)	0.007
TAC levels (Micromoles Trolox)	2051.57±441.63	1988.85±553.35	0.78
DNA Fragmentation (%)	14.4±3.9	16.4 ± 10.1	1.0
Range (%)	(8.5–18.2)	(7.0–48.3)	
Samples selected for proteomic analysis			
Age (y)	34.40±4.63	31.70±6.7	0.72
Concentration (10^6 mL $^{-1}$)	80.60±29.60	71.90±44.80	0.78
Motility (%)	53.80±3.76	44.30±30.70	0.64
Round cell (10^6 mL $^{-1}$)	0.75±0.61	0.80±0.20	0.85
Leukocytospermia (10^6 mL $^{-1}$)	0.00±0.00	0.00±0.00	NA
Morphology (%)	8.4±3.88	5.00±2.00	0.18
ROS (RLU sec $^{-1}$ million $^{-1}$ sperm)	57.05 (13.4, 82.3)	250.1 (138.4, 2915.2)	0.18
TAC levels (Micromoles Trolox)	2229.25±378.12	2230.00±848.50	0.82
DNA Fragmentation (%)	19.0±4.7	24.9±20.7	0.67
Range (%)	(13.6–26.4)	(8.9.0–48.3)	

P<0.05 considered significant by Kruskal-Wallis test