

Supplementary Table S1 Demographic and semen sample characteristics of men included in and men excluded from analyses.

Baseline characteristics (at visit 1)	Included (662 men and 1143 visits)	Excluded (349 men and 642 visits)	Missing ^b	P-value ^c
	N (%) / Mean (SD) ^a	N (%) / Mean (SD)		
Ever marijuana use	365 (55)	36 (51)	278	0.48
Ever cocaine use	148 (22)	11 (15)	278	0.18
Age (years)	36.3 (5.11)	36.5 (6.07)	7	0.94
BMI (kg/m ²)	27.5 (4.70)	28.5 (5.92)		0.008
Race				0.0004
Caucasian	581 (88)	276 (79)		
Black/African American	15 (2)	24 (7)		
Asian	33 (5)	26 (7)		
Native American/Alaska Native	33 (5)	23 (7)		
Education			268	0.07
Below college	106 (16)	20 (24)		
College or Graduate Degree	554 (84)	63 (76)		
Ever Smokers	190 (29)	114 (33)		0.19
Coffee ≥5 cup/week	407 (61)	48 (68)		0.31
Alcohol ≥1 days/week	453 (68)	50 (61)		0.17
History of reproductive tract diseases ^d	199 (30)	102 (29)		0.78
History of sexually transmitted diseases ^e	67 (10)	9 (11)	266	0.84
History of reproductive tract surgeries ^f	78 (12)	43 (12)		0.80
Infertility Diagnosis			522	0.02
Male Factor	79 (25)	63 (37)		
Female Factor	110 (35)	51 (29)		
Unexplained	128 (41)	58 (34)		
Semen Quality Parameters				
Ejaculate volume, mL	2.94 (1.47)	2.86 (1.46)	38	0.30
Sperm concentration, million/mL	82.9 (78.7)	81.4 (88.6)	116	0.82
Total sperm count, million	219 (213)	215 (261)	120	0.55
%Total Sperm Motility	48.0 (22.2)	43.1 (25.4)	116	0.001
%Progressive Sperm Motility	28.6 (15.0)	25.3 (16.5)	123	0.0002
Sperm morphology, % normal	6.64 (3.74)	6.32 (4.23)	204	0.05

Abbreviations: BMI; body mass index, mins; minutes.

^aN (%) is presented for categorical/binary variables and mean (standard deviation) is presented for continuous variables.

^bMissing observations are from the excluded men. Education was missing for two men. Infertility diagnosis was missing before 2004.

^cFrom Chi-square (or Fisher's exact test when appropriate) for discrete variables and Kruskal–Wallis for continuous variables.

^dGroin injury, testes not always in scrotum, varicocele, testicular torsion, testicular injury, hernia, epididymitis, prostatitis and seminal vesicle infection.

^eSyphilis, gonorrhoea, mycoplasma/ureaplasma, chlamydia, trichomonas, herpes, human papilloma virus, lymphogranuloma, group-B strep or other sexually transmitted diseases.

^fVaricocelectomy, orchidopexy, hydrocelectomy, repair of hernia, urethra, or hypospadias, sympathectomy or bladder neck surgery.