

Supplementary Table 1a: Embryological and clinical outcomes of patients with Y-chromosome microdeletions (TESE)

TESE	AZFa	AZFb	AZFc	P ^a
Patients (n)	4 + (1)	3	29 + (8)	36 + (9)
Cycles (n)	5	3	43	51
COC (n, mean, range)	26 (5.2±3.4) (3–12)	19 (6.3±2.5) (3–9)	430 (10±5.4) (0–25)	NS: a=0.728; b=0.308; c=0.263
MII (n, mean, range)	24 (4.8±3.7) (2–12)	17 (5.7±2.6) (2–8)	351 (8.4±4.6) (0–22)	NS: a=0.758; b=0.418; c=0.341
Maturation rate (MII/COC)	92.3	89.5	81.6	NS: a=0.744; b=0.166; c=0.381
2PN (n, mean, range)	16 (3.2±2.6) (0–8)	8 (2.7±0.9) (2–4)	186 (4.5±2.5) (1–10)	NS: a=0.733; b=0.393; c=0.456
FR (2PN/MI)	66.7	47.1	52.9	NS: a=0.209; b=0.189; c=0.640
Embryos cleaved (n, mean, range)	15 (3.8±2.5) (2–8)	7 (2.3±1.2) (1–4)	178 (4.3±2.4) (1–10)	NS: a=0.358; b=0.700; c=0.394
ECR (d2/2PN)	93.8	87.5	95.7	NS: a=0.598; b=0.724; c=0.280
Day 3 embryos (n, mean, range)	15 (3.8±2.5) (2–8)	7 (2.3±1.2) (1–4)	165 (4.02±2.6) (0–10)	NS: a=0.406; b=0.872; c=0.579
Day 3 grade A/B embryos (n, rate, range)	7 (46.7) (1–3)	5 (71.4) (1–2)	111 (67.3) (0–9)	NS: a=0.953; b=0.344; c=0.570
Embryos at day 5 (n, mean, range)	8 (2±3.4) (0–8)	-	62 (1.9±3.1) (0–10)	NS: a=0.582; b=0.975; c=0.339
BL (n, range)	1 (1–1)	-	17 (0–5)	NS: 0.629
BLR (BL/d5)	12.5	-	27.4	NS: 0.364
ETC (n, range, rate)	4 (3–5) (80.0)	3 (3–3) (100)	40 (2–5) (93.02)	NS: a=0.408; b=0.319; c=0.636
n° ET (n, mean, range)	10 (2.5±0.5) (2–3)	7 (2.3±0.5) (2–3)	91 (2.2±0.75) (0–3)	NS: a=0.725; b=0.824; c=0.810
BP (/ETC) (n, rate)	-	1 (33.3)	15 (37.5)	NS: 0.885
CP (/ETC) (n, rate)	-	1 (33.3)	15 (37.5)	NS: 0.885
Sacs (n, range)	-	1 (1–1)	18 (1–2)	-
IR (n° sacs/n° ET)	-	14.3	19.8	NS: 0.723
Sg (/CP) (n, rate)	-	1 (100)	13 (86.7)	-
Tw (/CP) (n, rate)	-	-	2 (13.3)	-
Triplets (/CP) (n, rate)	-	-	-	-
Ect P (/CP) (n, rate, range)	-	-	-	-
Abortion (/CP) (n, rate)	-	1 (100)	5 (33.3)	-
OP (/ETC) (n, rate) (CP-abortion)	-	-	10 (25.0)	NS: 0.323
Delivery (/ETC) (n, rate)	-	-	10 (25.0)	NS: 0.323
Stillbirth (/ETC) (n, rate)	-	-	-	-
LBDR (/ETC) (n, rate) (delivery-stillbirth)	-	-	10 (25.0)	NS: 0.323
NB (/ETC) (n, rate)	-	-	12 (30.0)	NS: 0.264
NB (Sg; Tw)	-	-	8 (Sg); 2 (Tw)	-
Male (/NB) (n, rate)	-	-	4 (33.3)	-
Female (/NB) (n, rate)	-	-	8 (66.6)	-
Male/female ratio	-	-	0.5	-
NB malform (n, rate)	-	-	1 (8.3)	-
Major (/NB) (n, rate)	-	-	1 (8.3)	-
Minor (/NB) (n, rate)	-	-	-	-
NB Chr abn (n, rate, range)	-	-	-	-
ENdeath (/ETC) (n, rate, range)	-	-	-	-

TESE: results from ICSI with fresh testicular sperm. Comparisons – a: AZFa versus AZFb; b: AZFa versus AZFc; c: AZFb versus AZFc. Values in “n”, range, rate or mean±s.d. *Significant differences (P<0.05); NS: not significant. AZFa, (1): one patient has repeated TESE (1 cycle). AZFc, (8): eight patients repeated TESE (14 cycles). AZFc, Abortion: 5 abortions of singleton pregnancies. COC: cumulus-ooocyte complexes (aspirated oocytes); MII: mature oocytes at metaphase II of meiosis; 2PN: normal fertilized oocytes (with 2 pronuclei and 2 polar bodies); FR: fertilization rate; ECR: embryo cleavage rate; Day 3 grade A/B embryos: high quality embryos at day 3; BL: blastocysts; BLR: blastocyst rate; ETC: embryo transfer cycles; n° ET: total number of transferred embryos; BP: biochemical pregnancy; CP: clinical pregnancy; IR: implantation rate; Ect P: ectopic pregnancy; OP: ongoing pregnancy; LBDR: live birth delivery rate; NB: newborn; NB malform: newborn malformations; Chr abn: newborn chromosome abnormalities; ENdeath: early neonatal death; TESE: testicular sperm extraction; AZF: azoospermia factor; s.d.: standard deviation; Sg: singletons; Tw: twins