

Comparing twin pregnancies with self and donor oocytes EP12.41

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Figure 1: Study flow chart and delivery results

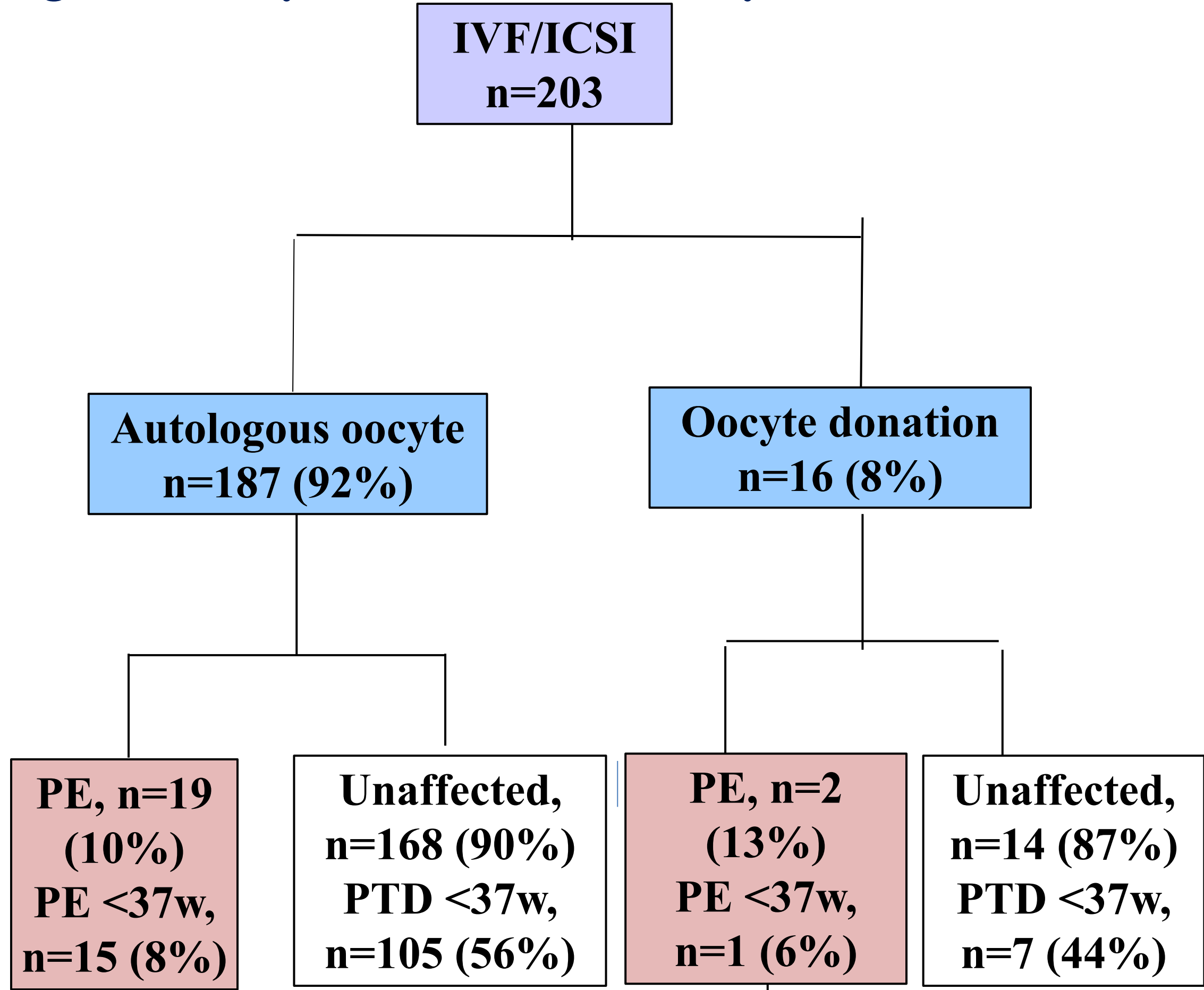


Table 1: Maternal characteristics at enrollment according to type of IVF

Parameter	Autologous Oocyte (n=187)	Oocyte Donation (n=16)	p
Maternal age y, Me (IQR)	35.6 (32.6-39.5)	43.9 (41.5-45.8)	<0.001
Donor's age y, Me (IQR)	-	24.5 (23.0-25.0)	<0.001*
Advanced Maternal Age (>40 y), n (%)	37 (19.8)	14 (87.5)	<0.001
GA wk. at enrollment, Me (IQR)	12.6 (12.1-13.0)	12.6 (12.4-12.9)	0.459
CRL mm, Me (IQR)	64.6 (57.3-71.0)	66.3 962.3-72.2)	0.173
BMI kg/m², Me (IQR)	24.9 (21.9-29.7)	24.8 (22.5-28.7)	0.462
Nulliparous, n (%)	127 (67.9)	6 (37.5)	0.014
Ethnicity, n (%)			0.233
White	165 (88.2)	12 (75.0)	
Other	22 (11.8)	4 (25.0)	
Maternal Chronic Diseases, n (%)			
DM	2 (1.1)	0 (0)	0.678
Thrombophilia	7 (4.9)	1 (7.9)	0.715
Hypothyroidism	20 (10.7)	4 (25.0)	0.103
CVD, n (%)	7 (4.9)	0 (0)	0.678
Maternal Pregnancy History, n (%)			
PTD	2 (1.1)	0 (0)	0.678
GDM	3 (1.6)	1 (6.3)	0.282
FGR	5 (2.7)	0 (0)	0.508
PE	4 (2.1)	0 (0)	0.555
Reasons for IVF/ICSI, n (%)			<0.001
Diminished ovarian reserve	0 (0)	11 (68.8)	
Ovulatory dysfunction	34 (18.2)	0 (0)	
Male factors	45 (24.1)	0 (0)	
Others	108 (57.7)	5 (31.2)	
Embryo type, n (%)			<0.001
Fresh	107 (57.2)	0 (0)	
Frozen	80 (42.8)	16 (100)	
Chorionicity, n (%)			0.251
DCDA	151 (80.7)	11 (68.8)	
MCDA	36 (19.3)	5 (31.3)	
Number of embryos transferred, n (%)			
Two	156 (83.4)	(62.5)10	0.037
One split into two	31 (16.6)	6 (37.5)	0.042
Early Split (DCDA)	14 (7.5)	1 (6.3)	
Late Split (MCDA)	(9.1)17	5 (31.3)	

Figure 2: Box plot of first trimester markers of PE prediction by IVF type

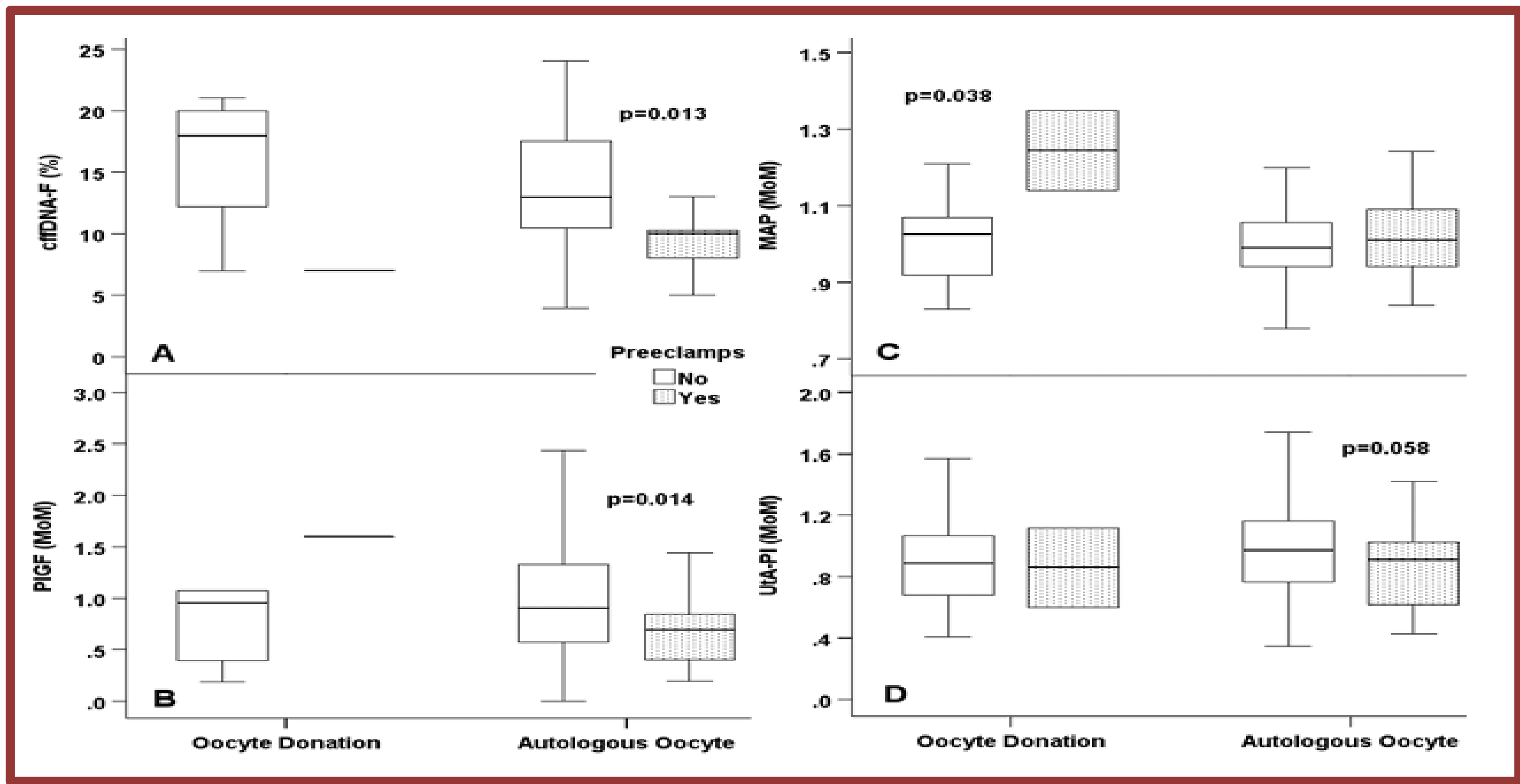


Table 2: Maternal and newborn characteristics at delivery according to type of IVF

Parameter	Autologous Oocyte (n=187)	Oocyte Donation (n=16)	p
Maternal			
GA wk. at delivery, Me (IQR)	36.9 (35.0-37.3)	37.0 (35.7-37.3)	0.431
GA at Delivery (DCDA)	36.9 (35.0-37.4)	37.3 (37.0-37.3)	0.112
GA at Delivery (MCDA)	36.4 (34.6-37.0)	35.3 (33.7-36.1)	0.054
Cesarean section delivery, n (%)	148 (79.1)	16 (100)	0.046
At maternal choice, n (%)	72 (38.5)	10 (62.5%)	0.021
Complications, n (%)			
PTD	105 (56.1)	7 (43.8)	0.338
PE	19 (10.2)	2 (12.5)	0.768
PE <37 weeks	15 (8.0)	1 (6.2)	0.801
GDM	32 (17.1)	4 (25.0)	0.493
Any complication*, n (%)	120 (64.2)	9 (56.3)	0.527
Newborn	n=374	n=32	
Birth weight, g, Me (IQR)	2415 (2080-2690)	2478 (2033-2705)	0.477
DCDA	2395 (2105-2733)	2521 (2365-2820)	0.167
MCDA	2323 (2020-2620)	2084 (1825-2330)	0.069
Frozen oocyte, g (Me) (IQR)	2418 (2110-2705)	2478 (2033-2705)	0.482
Birthweight <1500 g, n (%)	17 (4.5)	2 (6.3)	0.720
FGR <10%, n (%)	38 (10.2)	5 (15.6)	0.335
Only frozen oocyte, n (%)	(5.3)20	5 (15.6)	0.106
NICU days, Me (IQR)	11 (3-20)	10 (8-82)	0.297
Respiratory, Asphyxia, n (%)	52 (13.9)	5 (15.6)	0.681
Only frozen oocyte, n (%)	19 (5.8)	5 (15.6)	0.06
Transfer of 2	n=156	n=10	
Birth weight, Me (IQR)	2418 (2090-2693)	2545 (2278-2803)	0.106
FGR, n (%)	33 (10.6)	1 (5.0)	0.506
One split into 2	n=31	n=6	
DCDA	n=28	n=2	
Birth weight, Me (IQR)	2580 (2260-2970)	2700 (2580-2820)	0.355
FGR <10%, n (%)	2 (7.1)	0 (0)	0.869
MCDA	n=34	n=10	
Birth weight, Me (IQR)	2300 (1954-2540)	1995 (1825-2330)	0.163
FGR <10%, n (%)	3 (8.8)	4 (40.0)	0.037

Conclusions:

- Maternal profile of donated oocyte recipients is **in accordance with the literature**.
- No significant differences in the frequency of major obstetric syndromes and newborn complications** when comparing between donated and autologous oocyte.
- Oocyte split into two occurs in **38%** of pregnancies by donor oocytes.
- Split after insemination generate **MCDA twins**, who delivered earlier at increased rate of FGR.
- Lower first and second trimester UtA-PI** in pregnancies with donor oocytes, other markers have similar level.
- Given high rate of PE in twins (>9%), first trimester risk of developing PE appears not to be affected by the origin of the oocytes, but need to be adjusted to the origin of the oocytes and to markers levels**