

Advanced KPI Framework for IVF Pregnancy Prediction Models in IVF protocols

Sergeev S.; Diakova I.

Supplementary 1. Data for DNN model training and validation

Data, mean values (SD)	Train and internal validation	Clinic #1	Clinic #2
Protocols	8732	6240	3888
Patient age	36.02 (5.53)	38.3 (5.33)	34.0 (5.7)
IVF attempt number	2.5	3.1	1.5
Antral follicle count	10.14 (8.28)	7.54 (5.63)	16.3 (9.64)
Number of oocytes	8.36 (6.55)	4.92 (3.82)	13.04 (7.32)
Number of inseminated	6.16 (5.07)	4.0 (3.0)	11.19 (6.68)
2pN	4.35 (3.73)	3.47 (2.86)	8.15 (5.37)
Day 3 embryos number	4.07 (3.69)	3.4 (3.09)	8.12 (5.36)
Day 5 embryos number	3.71 (4.21)	2.16 (1.25)	4.56 (4.27)
Total Blastocyst number	2.27 (2.96)	1.25 (1.16)	3.33 (3.43)
Good Blastocyst number	1.16 (1.89)	1.2 (1.2)	0.34 (0.35)
Number of transferred embryos	2.05 (2.03)	1.7 (1.0)	1.2 (0.8)
Number of cryo embryos	1.74 (2.08)	1.2 (1.2)	3.3 (3.3)
Fertilization rate	0.68 (0.3)	0.72 (0.35)	0.74 (0.31)
Cleavage rate	0.96 (0.16)	0.99 (0.13)	0.99 (0.4)
Blastocyst rate	0.37 (0.36)	0.44 (0.38)	0.40 (0.4)
TGBDR	0.19 (0.27)	0.42 (0.28)	0.34 (0.35)
Oocyte retrieval rate	0.85 (0.23)	0.83 (0.7)	0.78 (0.5)
KPIScore	14.96 (5.27)	13.51 (0.44)	19.49 (4.89)

TGBDR - total good quality blastocyst development rate