Morphokinetic parameters of embryos with numerical or structural anomalies are delayed in comparison to euploid embryos.

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November 23, 2019
BSRM Scientific Meeting

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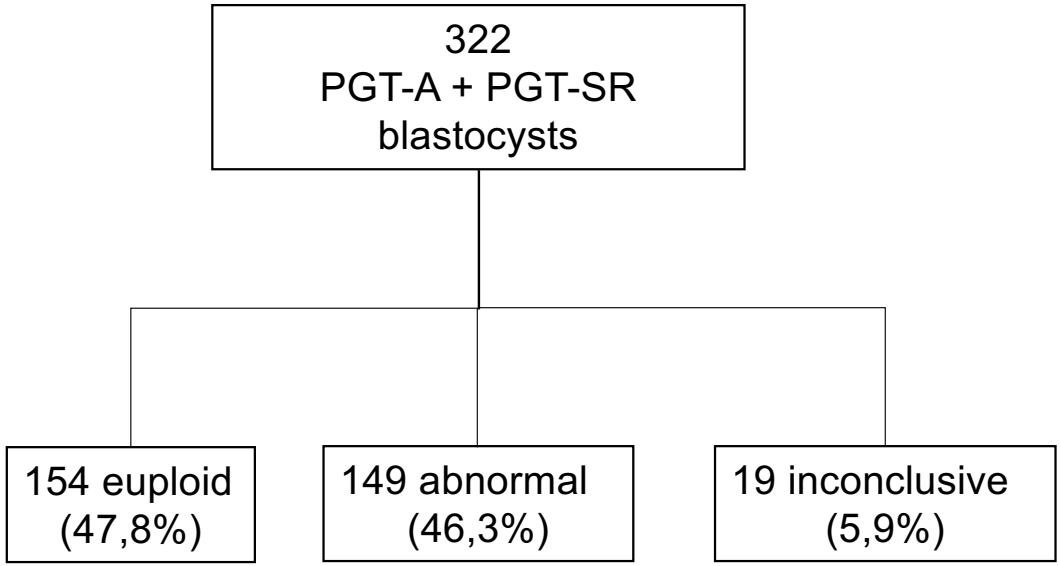
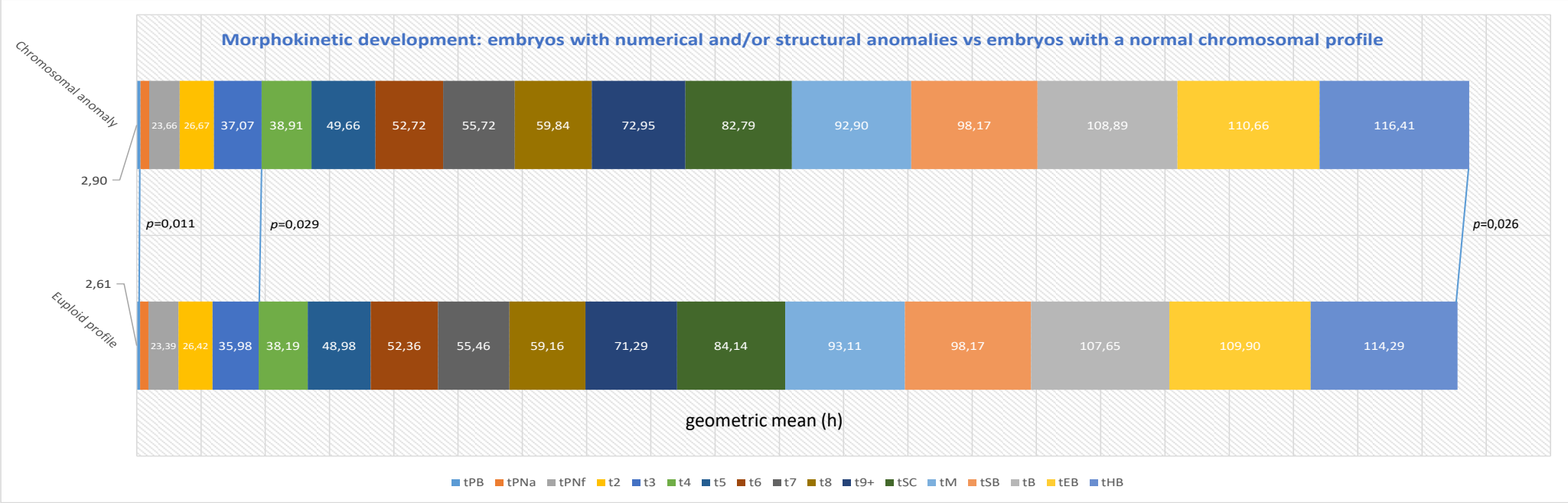
- Ploidy status → implantation
  - → PGT not performed by default
- Embryo kinetics → embryo quality
- Embryo kinetics → ploidy status?



- Time-lapse imaging → Embryoscope™
- PGT → NGS



- tPB2
- t3

} Significant difference

- tHB
  - Significant difference
    → artificially induced by LAH

kinetic parameter		euploid profile (N=154)			chromosomal anomaly (N=149)			
PN (tPNf-tPNa)			16,56	16,03-17,10		16,48	15,95-17,02	0,8
CC1 (t2-tPNf)			2,79	2,61-2,99		2,79	2,59-2,99	0,928
CC2 (t3-t2)			8,81	7,99-9,75		9,75	8,81-10,70	0,148
S2 (t4-t3)			1,38	1,09-1,74		1,26	1,00-1,60	0,586
S3(t8-t5)			6,55	5,53-7,74		6,58	5,53-7,83	0,967
compaction (tm-tsc)			7,08	6,30-7,98		8,91	7,89-10,05	0,004
blastulation (tb-tsb)			8,95	8,34-9,62		9,75	9,06-10,80	0,065

- Compaction time → significant difference

Conclusions

- tPB2, t3 and tcompaction (tM – tSC) faster in embryo's without numerical and/or structural anomalies.

- The analysis of morphokinetics can aid in the prediction of euploid embryos, but it cannot replace the PGT analysis.
  - Each lab should have their own model taking culture conditions into consideration.

Thank you for your attention

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