

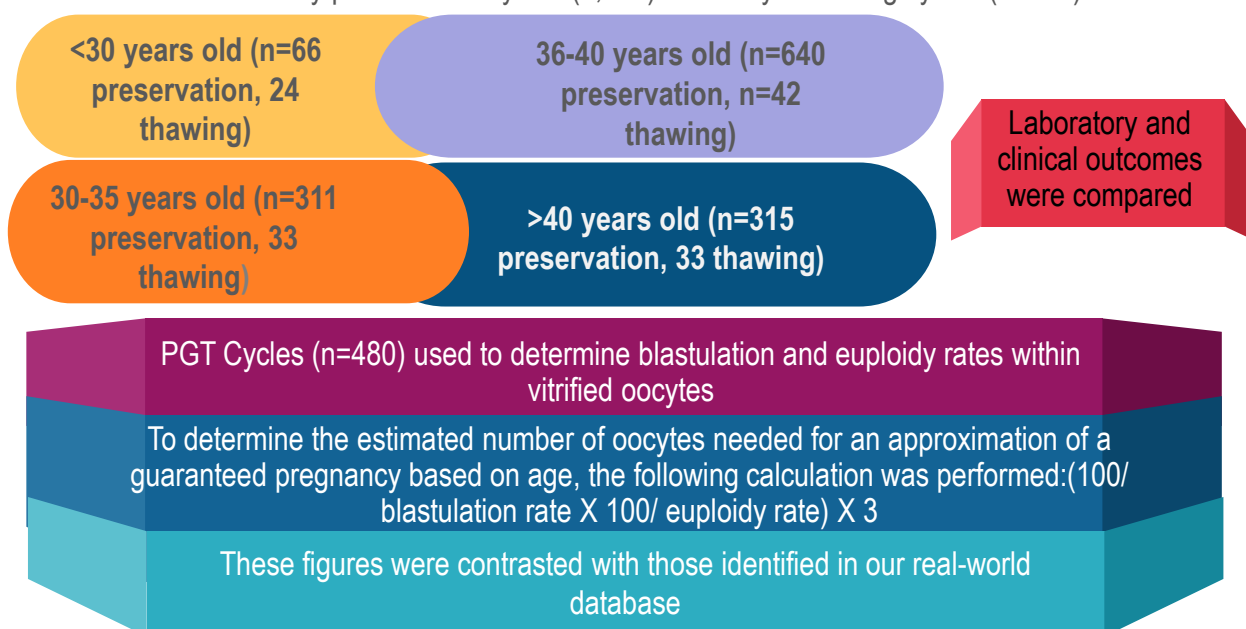
Too cool to be late: the discrepancy between the required and obtained oocyte number in a social fertility preservation program

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INTRODUCTION: Previous reports on fertility preservation indicate that, typically, a larger number of oocytes are retrieved in patients aged ≤ 35 when compared to older patients. The goal for the present study was to evaluate: (i) the outcomes of thawed oocytes from a social fertility preservation (SFP) program by age and (ii) whether the number of cryopreserved oocytes is sufficient to achieve pregnancy.

METHODS: Fertility preservation cycles (1,332) and oocyte thawing cycles (n=132)



RESULTS

Blastulation rates, euploidy rates, the number of oocytes required to form an euploid blastocyst, and the number of oocytes required to form three euploid embryos, stratified by age.

Female Age (years old)	< 30	30 to 35	36 to 40	> 40
Blastulation rate	60.8	54.0	51.9	42.8
Oocytes required per 1 blastocyst	1.64	1.83	1.92	2.33
Euploidy rate (%)	65.7	51.0	32.3	16.3
Blastocysts required per 1 euploid blastocyst	1.52	1.96	3.09	6.13
Oocytes required per 1 euploid blastocyst	2.49	3.58	7.52	14.3
Oocytes required for 3 euploid blastocysts	7.47	10.7	22.5	42.8
Survival rate (%)	90.7 \pm 33.6 ^a	81.4 \pm 40.4 ^{a,b}	83.4 \pm 35.5 ^{a,b}	72.3 \pm 34.9 ^b
Pregnancy rate (%)	50.0 \pm 17.7 ^{a,b}	56.0 \pm 85.0 ^a	46.3 \pm 69.0 ^{a,b}	21.4 \pm 93.0 ^b

Different superscript letters in a line represent significant differences ($p < 0.05$).

CONCLUSION: The outcomes of thawed oocytes from SFP programs diminish with age, and the number of cryopreserved oocytes is below the desirable quantity for a successful pregnancy.