

Supplementary Table 1: Cohort 1 demographic information

Characteristic	Reproductively Young ≤33 years (n=16)	Reproductively Old ≥37 years (n=16)	p-value
Age (years)	30.5 ± 1.7	40.3 ± 2.0	<0.000001
BMI (kg/m²)	22.5 ± 1.9	24.5 ± 2.6	0.02
FSH (mIU/mL)	6.2 ± 2.4	7.5 ± 2.9	0.18
AMH (ng/mL)	3.1 ± 1.7	1.7 ± 1.1	0.01
Total AFC	24.4 ± 8.4	12.8 ± 5.1	<0.0001
Total ovarian volume (mL)	13.9 ± 4.8	10.1 ± 4.9	0.03
Average US probe distance (cm)	0.7 ± 0.4	0.8 ± 0.2	0.68
Number of SWE measurements	24 ± 0	23.2 ± 3	0.33
Total FSH Dose (IU)	3861 ± 1312	4659 ± 1206	0.08
Total retrieved oocytes	20 ± 12	11 ± 7	0.02
Total mature (MII) oocytes	15 ± 10	8.6 ± 5.6	0.03
Percent MII oocytes (%)	74.1 ± 17	76.0 ± 17	0.75
Cycle Diagnosis (n=)			
<i>Planned fertility preservation</i>	9	2	
<i>Male infertility</i>	6	2	
<i>Diminished ovarian reserve</i>	-	7	
<i>Unexplained infertility</i>	-	4	
<i>Non-infertile indication</i>	1	1	