



**AMERICAN SOCIETY FOR  
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**Title:**

A 9-YEAR ANALYSIS OF TRENDS IN OVARIAN RESPONSE TO STIMULATION IN ELECTIVE OOCYTE CRYOPRESERVATION AND IN VITRO FERTILIZATION PATIENTS

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**Objective:**

Advances in elective oocyte cryopreservation (EOC) have given women the opportunity to preserve their fertility and assist in their future goal of family building. The Society for Reproductive Medicine (SART) data provides infertility patients with realistic expectations for IVF success based on age and number of oocytes retrieved, scant data is available to guide EOC patients. Our study was designed to compare infertility patients to EOC patients over time with regard to ovarian responsiveness to controlled hyperstimulation.

**Design:**

Retrospective analysis

**Materials and Methods:**

EOC and IVF patients from 5/7/2005-3/26/2014 were included. Oocytes retrieved at the time of VOR were evaluated in EOC and IVF patients. Data was segregated by patient ages following the distribution set forth by ASRM guidelines (<35, 35-37, 38-40, >40).

**Results:**

Oocyte count at VOR for EOC (n=722) and IVF (n=12,065) patients were analyzed. No significant difference in the number of oocytes retrieved between groups was observed.

**Conclusions:**

Our study answers several key questions regarding trends in EOC patients and IVF patients over nearly a decade. While it had originally been hypothesized that women presenting for EOC often had a “premonition” or “insight” into their need for fertility preservation and were actually patients with diminished ovarian reserve, the data suggest the contrary. EOC patients respond similarly to IVF patients



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and do not demonstrate a higher incidence of ovarian dysfunction. In addition, the increased awareness and popularity of EOC over the past several years has not resulted in changes in this population's response to gonadotropins. Within our patient population, IVF patients VOR demographics can be used in setting realistic expectations for EOC patients.

**Support:**

None.

**Table:**

Oocyte Retrieval: IVF vs. EOC			
	IVF (n=12,065)	EOC (n=722)	p-value
<35	16.7±8.8 (n=4098)	16.3±10.4 (n=108)	0.7
35-37	13.8±7.8 (n=2637)	14.5±8.2 (n=239)	0.18
38-40	12.2±7.6 (n=2827)	13.1±9.3 (n=291)	0.06
>40	10.3±6.9 (n=2503)	9.2±6.5 (n=84)	0.14