



**AMERICAN SOCIETY FOR
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Title:

MULTIPLE PREGNANCY RATES ARE LOWER WHEN UTILIZING LETROZOLE (LET) COMPARED TO CLOMIPHENE CITRATE (CC) FOR OVULATION INDUCTION (OI) OR CONTROLLED OVARIAN HYPERSTIMULATION (COH)

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Objective:

LET use for OI and COH has widely increased in the past few years. Several studies have compared its' effectiveness in terms of pregnancy outcomes to the more formerly used CC. The objective of this study was to compare the multiple pregnancy rates between LET and CC protocol.

Design:

Retrospective analysis

Materials and Methods:

All patients <40 years with normal ovarian reserve (normal FSH, normal AMH, normal AFC) and normal semen parameters undergoing a LET or CC cycle from January 2010-November 2013 were analyzed. LET or CC was administered on days 3-7 with US monitoring initiated on cycle day 12 and/or until a follicle >20mm was observed. Intrauterine insemination or sexual intercourse was recommended 24 to 36 hours after hCG trigger. The numbers of sacs were evaluated at first ultrasound (US) 14 days later. Categorical variables were assessed by Fisher's exact test for small frequencies with significance at a p-value of <0.05.

Results:

A total of 7,064 cycles were included in the study. No significant differences were observed in age, basal FSH or clinical PR in LET (n=1829) compared to CC cycles (n=5235). Notwithstanding, the multiple pregnancy rate was significantly increased in the CC cohort (9.4%), nearly doubled that to LET cycles (4.8%).



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Conclusions:

Our pooled data demonstrated a lower multiple pregnancy rate in LET cycles (4.8%) versus CC cycles (9.4%) in spite of similar pregnancy rates between both agents. Notably, 6 triplets were observed in CC cycles and none were observed after LET use. Although pregnancy rates are similar, our analysis suggests a clear difference in multiple pregnancy rates between these two agents. Prospective studies are needed to confirm our findings.

Support:

None.

Table:

	LET	CC	Stats
Endometrial thickness	7.6 (\pm 2.4)	8 (\pm 2.4)	p<0.05
Fols >14mm	2.09 (\pm 1.2)	2.39 (\pm 1)	p<0.05
Preg rate (%)	13.5% (247/1829)	12.8% (674/5235)	NS
Twins (n)	12	58	
Triples (n)	0	6	
Multiple PR (%)	4.8%	9.4%	p<0.05