Objective
To compare the use of Estradiol valerate pretreatment in GnRH antagonist cycles for IVF Cycle programming

Design

Materials and Methods
The control group (n=385) received a standard ovarian stimulation protocol. In the pretreatment group (n=406), patients were administered estradiol valerate at a daily dose of 2x2mg from day 25 of the preceding cycle onwards, during 6-10 consecutive days, depending on the day of the week. The patients included in this study were women 40 years of age, with a serum FSH concentration on day 3 of the menstrual cycle below 12 IU/L and a regular menstrual cycle of 21-35 days.

Results
The clinical pregnancy rates per started cycle were similar in the pretreatment group (56.3%) compared with the control group (50.0%). Stimulation duration was significantly longer (9.3 vs. 10.5, p=0.0001) and significantly more embryos (6.7 vs. 7.3, p=0.0462) were obtained in estradiol pretreatment group. Higher clinical pregnancy rate (50.0% vs. 56.3%, p=0.1071) was observed in estradiol pretreatment group, but statistically not significant.

Conclusion
Cycle programming is quite convenient for patients. Scheduling GnRH antagonist cycle with estradiol pretreatment lead to an avoidance of oocyte retrievals during weekend days, without deleterious impact on the IVF outcomes.