Abstract: studied the effect of magneto-laser therapy (MLT) on immunohistochemical characteristics of endometrial in patients with luteal phase insufficiency (LPD).

Methods: The influence of magneto-laser therapy on the dynamics of expression of progesterone receptors (PR) in the endometrium for the 23 patients with LPD was evaluated. Were used laser radiation and alternating magnetic field with a frequency of 50Hz repeated pulses for 10 minutes at 5,7,9,11,13 day during the single menstrual cycle and while using double barrier contraception, with the parameters of action: the power laser radiation output of 10 mW and magnetic field induction 25 mT.

Results: MLT in first phase of the menstrual cycle in patients with LPD, showed a significant increase in the number of cellular structures with positive RP expression in the stroma (79.0± 8.56%) and in the endometrial glands (85,32±3,32%) in comparison with parameters before treatment.

Conclusion: Our results indicate that the proposed modes of magneto-laser therapy increase RP expression in the stroma and endometrial glands for patients with LPD and can be applied as a method for pre-gestation preparation of the endometrium.