characteristics and the outcomes of a series of patients affected by borderline ovarian tumors (BOT) and invasive epithelial ovarian cancers (EOC).

Results 129 patients were included, 69 (53%) affected by BOT and 60 (47%) by EOC. The majority of patients (74%) diagnosed in the first trimester of pregnancy were treated with surgery ± chemotherapy. During the second trimester, 22 patients received surgery and 16 surgery + chemotherapy. In the third trimester, only two patients were treated with surgery because of severe symptomatic diseases. No major surgical or chemotherapy-related adverse events were reported. The median gestational age at the delivery was 39, three patients had a preterm delivery due to oncological reasons. Birthweight was significantly lower in women treated with chemotherapy (mean 2528 grams vs 3031, p: 0.01). 20 patients with BOT relapsed and two of them died (one relapsed as low-grade serous carcinoma and one as a mucinous carcinoma). Among patients with EOC, the relapse rate was 25% and mortality was 18%. In two patients a benign disease was suspected, and they were not treated during pregnancy. Unfortunately, they relapsed and subsequently died.

Conclusion Treatment of ovarian tumors is feasible during pregnancy and obstetrical outcomes are satisfactory. Both surgery and chemotherapy appear to be safe and effective. When chemotherapy is administered during pregnancy, fetal growth should be carefully monitored. Further research is needed to enlighten the possible influence of pregnancy on the oncological outcome of ovarian cancer patients.