**Introduction/Background** By analyzing the longitudinal data of serum CA (cancer antigen) 125 data during follow-up, we developed a framework for the dynamic determination of the follow-up interval based on serum biomarkers.

**Methodology** The longitudinal data of CA125 tests from routine 3-month follow-up visits of advanced epithelial ovarian cancer were retrospectively retrieved. A repeated-measure analysis using mixed model effects was developed to predict the probability of short-term recurrence (within 3 months and 6 months). The probability was calculated for the three predefined risk groups: serum CA125 levels lower than 10 U/ml, between 10 and 20 U/ml, and higher than 20 U/ml.

**Results** The 346 CA125 test results from 115 patients were subjected to longitudinal analysis. For results less than 10 U/ml, the predicted probabilities that the patient would experience recurrent disease within 3 and 6 months were 4.1% and 14.0%, respectively. For results between 10 U/ml and 20 U/ml, the predicted probabilities were 9.8% and 40.5%, respectively. For results greater than 20 U/ml, the predicted probabilities increased to 40.3% and 61.0%, respectively. Multivariate analysis indicated that the current CA125 level was the sole factor significantly associated with recurrence both within 3 months and within 6 months (all P < 0.001).

**Conclusion** We developed a risk model to predict the short-term recurrence risk of ovarian cancer and proposed a framework for the dynamic determination of the follow-up interval based on the results of CA125 testing.

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**Figure 1**

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**Abstract 2022-RA-1715-ESGO**

**ONCOLOGICAL OUTCOMES OF LAPAROSCOPY IN PATIENTS WHO UNDERWENT A CONSERVATIVE FERTILITY TREATMENT IN OVARIAN BORDERLINE TUMOURS**

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**Introduction/Background** Borderline ovarian tumours (BOTs) have an average age at the diagnosis of 40 years and around 30% of patients have not completed their childbearing. Fertility sparing surgery (FSS) is considered the best treatment without an impact on the overall survival rate. However, the safety of laparoscopy for FSS in BOTs remains limited with short follow-up and ESGO and ESMO guidelines indicate open surgery as the standard approach. We aim to assess the long-term oncological safety of laparoscopy in the FSS treatment of BOTs.

**Methodology** This is a retrospective single-centre study including 34 women who underwent laparoscopic FSS for BOTs, between January 2000 and June 2019 at Hospital Clinic of Barcelona. FSS was considered when the uterus and at least part of the ovarian tissue was conserved. Patients were scheduled for transvaginal ultrasound and blood test including CA125 for 10 years or until loss. Chi-square and Fisher's tests were applied for qualitative variables. Student T-tests or Mann-Whitney tests were applied for continuous variables.

**Results** Median age was 32 years. Unilateral cystectomy was performed in 15 patients (44.1%), bilateral cystectomy in 2