Abstract 268 Figure 1

Abstract 268 Figure 2 Comparative graph of the ROC curves for the different models

prognostic factor for these patients. The ability to perform complete cytoreduction depends on the extent of disease and the skills of the surgical team. Several predictive models have been proposed to evaluate the possibility of performing complete cytoreductive surgery (CCS).

Methodology External validation of the prognostic value of three predictive models (Fagotti index and the R3 and R4 models) for predicting suboptimal cytoreductive surgery (SCS) in AOC was performed in this study. The scores of the 3 models were evaluated in one hundred and three consecutive patients diagnosed with AOC treated in a tertiary hospital were evaluated. Clinicopathological features were collected prospectively and analyzed retrospectively. The performance of the three models was evaluated, and calibration and discrimination were analyzed.

Result(s)* The calibration of the Fagotti, R3 and R4 models showed odds ratios of obtaining SCSs of 1.5, 2.4 and 2.4, respectively, indicating good calibration. The discrimination of the Fagotti, R3 and R4 models showed an area under the ROC curve of 83%, 70% and 81%, respectively. The negative

predictive values of the three models were higher than the positive predictive values for SCS.

Conclusion* The three models were able to predict suboptimal cytoreductive surgery for advanced ovarian cancer, but they were more reliable for predicting CCS. The R4 model discriminated better because it includes the laparotomic evaluation of the peritoneal carcinomatosis index.

270 POSTOPERATIVE INTESTINAL FISTULA IN PRIMARY ADVANCED OVARIAN CANCER SURGERY

^{1,2}A Serra*, ^{1,2}MT Climent, ^{1,2}A Lluca. ¹Hospital General Universitari de Castelló, Castelló de la Plana, Spain; ²Jaume I University, Castelló de la Plana, Spain

10.1136/ijgc-2021-ESGO.374

Introduction/Background* Advanced ovarian cancer (AOC) requires an aggressive surgery with large visceral resections in order to achieve an optimal or complete cytoreduction and increase the patient's survival. However, the surgical aggressiveness in the treatment of AOC is not exempt from major complications, such as the gastrointestinal fistula (GIF), which stands out among others due to its high morbidity and mortality.

Abstract 270 Figure 1 Disease-free survival according to the existence or absence of GIF

Abstract 270 Figure 2 Overall survival according to the existence or absence of GIF

Methodology We evaluated the clinicopathological features in patients with AOC and their association with GI. Data for 107 patients with AOC who underwent primary debulking surgery were analyzed retrospectively. Clinicopathological features, including demographic, surgical procedures and follow-up data, were analyzed in relation to GIF.

Result(s)* GIF was present in 11% of patients in the study, 5 (4.5%) and 7 (6.4%) of colorectal and small bowel origin, respectively. GIF was significantly associated with peritoneal cancer index (PCI) >20, more than 2 visceral resections, and multiple digestive resections. Overall and disease-free survival were also associated with GIF. Multivariate analysis identified partial bowel obstruction and operative bleeding as independent prognostic factors for survival. The presence of GIF is positively associated with poor prognosis in patients with AOC.

Conclusion* Given the importance of successful cytoreductive surgery in AOC, the assessment of the amount of tumor and the aggressiveness of the surgery to avoid the occurrence of GIF become a priority in patients with AOC.

280

IMPROVEMENT OF COMPLETE CYTOREDUCTION FOR ADVANCED-STAGE OVARIAN CANCER WITH ADJUVANT USE OF THE PLASMAJET DEVICE. RESULTS OF A RCT

^{1,2}G Nieuwenhuysen-de Boer, ³W Hofhuis, ⁴N Reesink-Peters, ⁵S Willemsen, ⁶IA Boere, ⁷IG Schoots, ⁸J Piek, ²L Hofman, ⁹J Beltman, ¹⁰WJ Van Driel, ¹¹HMJ Werner, ¹²M Dorman, ¹³L Haans, ¹⁴A Baalbergen, ¹⁵AMLDVan Haften-de Jong, ¹⁶I Nedelcu, ¹⁷PC Ewing-Graham, ¹HJ Van Beekhuizen. ¹Erasmus University Medical Center, Gynaecologic Oncology, Rotterdam, Netherlands; ²Albert Schweitzer Hospital, Gynaecology, Dordrecht, Netherlands; ³Franciscus Gasthuis and Vlietland, Gynaecology, Rotterdam, Netherlands; ⁴MST, Gynaecology, Enschede, Netherlands; ⁵Erasmus University Medical Center, Epidemiology and Statistics, Rotterdam, Netherlands; ⁶Erasmus University Medical Center, Medical Oncology, Rotterdam, Netherlands; ⁷Erasmus University Medical Center, Radiology and Nuclear Medicine, Rotterdam, Netherlands; ⁸Catharina Ziekenhuis, Gynaecologic Oncology, Eindhoven, Netherlands; ⁹Leiden University Medical Center (LUMC), Gynaecologic Oncology, Leiden, Netherlands; ¹⁰The Netherlands Cancer Institute (NKI), Gynaecologic Oncology, Amsterdam, Netherlands; ¹¹Academic Hospital Maastricht, Gynaecologic Oncology, Maastricht, Netherlands; ¹²Bravis Hospital, Gynaecology, Bergen op Zoom, Netherlands; ¹³HMC Antoniushove, Gynaecology, Leidschendam, Netherlands; ¹⁴Reinier de Graaf Gasthuis, Gynaecology, Delft, Netherlands; ¹⁵Haga Hospital (Leyweg), Gynaecology, Den Haag, Netherlands; ¹⁶Groene Hart Hospital, Gynaecology, Gouda, Netherlands; ¹⁷Erasmus University Medical Center, Pathology, Rotterdam, Netherlands

10.1136/ijgc-2021-ESGO.375

Results of the PlaComOv-study, a randomized, controlled trial in the Netherlands

Introduction/Background* The most important prognostic factor for patients with advanced-stage ovarian cancer is complete cytoreductive surgery (CRS). Standard surgical treatment with electrosurgery cannot always result in complete CRS, especially when many small metastases are found on the mesentery and intestinal surface. We investigated whether adjuvant use of the PlasmaJet® Device will help increase the complete cytoreduction rate.

Methodology 327 patients with FIGO stage IIIB-IV epithelial ovarian cancer (EOC) who underwent primary or interval CRS were assigned to either surgery with PlasmaJet (intervention) or without PlasmaJet (control group).

Primary outcome was the percentage of complete CRS. Secondary outcomes were duration of surgery, blood loss, number of bowel resections and colostomies, hospitalization, 30 day-morbidity and quality of life (QoL).

Result(s)* Complete CRS was achieved in 119 patients (75.8%) of the intervention group and in 115 patients (67.6%) of the control group (P=0.131).

A per-protocol analysis was performed in which data of 27 patients with unresectable disease were excluded, considering that the aim of the study was to examine the effectiveness of the use of the PlasmaJet in achieving CRS. Complete CRS was obtained in 85.6% in the intervention group and in 71.5% in the control group (absolute difference 14.1%, 95% confidence interval [CI], 0.047 to 0.230; P=0.005).

The number of colostomies was lower in the intervention group (6.5% versus 12.7%) but did not differ significantly (P=0.169). Patient-reported QoL six months after surgery differed between groups in favor of PlasmaJet surgery (95% CI, 0.455 to 8.350; P=0.029). Other secondary outcomes did not differ significantly.

Conclusion* The adjuvant use of the PlasmaJet during CRS for advanced stage ovarian cancer resulted in a significant higher proportion of complete CRS in patients with resectable disease and a higher QoL six months after surgery. (Funded by ZonMw, Trial Register NL62035.078.17.)

282

FEATURE SELECTION FOR TWO-YEAR PROGNOSIS IN ADVANCED STAGE HIGH GRADE SEROUS OVARIAN CANCER USING MACHINE LEARNING METHODS

¹A Laios*, ²A Katsenou, ³Y Tan, ³M Otify, ⁴R Hutson, ¹A Thangavelu, ⁴T Broadhead, ¹G Theophilou, ^{1,5}D Nugent, ¹D Dejong. ¹St James's University Hospital, Gynaecologic Oncology, Leeds, UK; ²Visual Informant Lab, University of Bristol, Electrical and Electronic Engineering, Bristol, UK; ³St James's University Hospital, Gynaecologic Oncology, Leeds, UK; ⁴St James's University Hospital, Gynaecologic Oncology, Leeds, UK; ⁵St James's University Hospital, Gynaecologic Oncology, Leeds, UK

10.1136/ijgc-2021-ESGO.376

Introduction/Background* The prognosis of advanced stage high grade serous ovarian cancer patients (HGSOC) is multifactorial, and could be accurately predicted by using Machine Learning (ML) algorithms. We designed a study to support the feature selection of selected clinical variables to define their relative survival impact on two-year prognosis prediction in HGSOC patients, who received surgical treatment.

Methodology This was a retrospective analysis of 209 FIGO stage III-IV HGSOC women, who were scheduled for cytoreductive surgery in SJUH, Leeds between Jan 2015 to Dec 2018 with curative or life-prolonging intent. The two-year