

<sup>1</sup>Gynecological Oncology Dept., GINECO & Institut Curie & Université Paris Cité, Paris, France; <sup>2</sup>Gynecology, AGO & Universitätsklinik Charité, Campus Virchow Klinikum, Berlin, Germany; <sup>3</sup>Dept of Obstetrics & Gynaecology, University Hospital Leuven, Leuven Cancer Institute, and BGOG, Belgium; <sup>4</sup>Coordinating Centre for Clinical Trials (KKS), AGO & Philipps-University Marburg, Germany; <sup>5</sup>Surgical oncology, GINECO & ICO Institut de Cancerologie de l'Ouest René Gauducheau, Saint-Herblain, France; <sup>6</sup>Obstetrics, Gynecology, and Breast Cancer Center Dept., AGO & MHI – Med. Hochschule Hannover, Germany; <sup>7</sup>Gynecology / Oncology, Istituto Nazionale per lo Studio e la Cura dei Tumori di Napoli, Naples, Italy; <sup>8</sup>Department of Oncology, Rigshospitalet, Copenhagen, Denmark; <sup>9</sup>Gynecology & Gynecological Oncology, Centre François Baclesse, Caen, France; <sup>10</sup>Medical oncology, GINECO & Centre Anticancer Antoine Lacassagne, Nice, France; <sup>11</sup>Gynecology, GINECO & CHU Poitiers - Jean Bernard Hôpital, Poitiers, France; <sup>12</sup>Gynecology and Obstetrics, AGO & Universitätsmedizin Mainz, Germany; <sup>13</sup>Obstetrics & Gynecology, SGOG & Zhongshan Hospital - Fudan University, Shanghai, China; <sup>14</sup>Dept. of Gynecological Cancer, NSGO & Oslo University Hospital - The Norwegian Radium Hospital, Oslo, Norway; <sup>15</sup>Ob-Gyn, KGOG & Seoul National University Hospital, Seoul, Republic of Korea; <sup>16</sup>Medical Oncology Dept., Initia Centro Oncologico Integral - Hospital Quiron Salud Valencia, Spain; <sup>17</sup>Gynecologic Oncology Dept., Fondazione IRCCS - Istituto Nazionale dei Tumori, Milan, Italy; <sup>18</sup>Oncology, NSGO & Aarhus University Hospital, Aarhus, Denmark; <sup>19,20</sup>Gynecology & Gynecological Oncology, AGO & Kliniken Essen Mitte Evang. Huysens-Stiftung, Essen, Germany

## Background

Complete resection significantly improves survival in ovarian cancer patients with a platinum sensitive recurrence who fulfil the AGO score. We assessed the association of levels of CA125 at relapse with surgical and oncological outcome.

## Methods

We performed subgroup analyses of DESKTOP III with regard to CA125. CA125 at the time of surgery was classified as normal (Group A: <35 U/ml) versus elevated (Group B: 35 U/ml - 350 U/ml) versus strongly elevated (Group C: > 350 U/ml).

We assessed surgical outcome by CA125 and explored the prognostic value of CA125 disease were documented.

Overall survival (OS) is calculated from randomization into DESKTOP III.

## Results

Results: Baseline CA125 was available in 91% (370/407) of randomized patients, 181 randomized to chemotherapy alone and 189 to additional surgery. Median CA125 values and classified cohorts did not differ significantly between patients in the chemotherapy arm vs patients in the surgical arm. The complete resection rate in the 176 patients undergoing surgery was 74% (group A versus B versus C: 83% (48/58) and 72% (74/103) and 53% (8/15) (p=0.053), respectively). There were no relevant differences regarding surgical procedures, but there was a slightly longer duration of surgery (210 vs 223 vs 240 minutes), higher blood loss (195 vs 275 vs 350 ml), higher rate of infections (16 vs 17 vs 47%) in group A vs B vs C. Rate of relaparotomy was low in all cohorts (0%, 6%, and 7%, resp.). Higher CA125 levels were associated with shorter OS in the entire population (median OS: group A 59 months vs group B 48 months, HR 1.26 (95%CI: 0.92-1.71) versus group C 35 months, HR 2.05 (95% CI: 1.33-3.16); log-rank p=0.002). Similarly, in the chemotherapy alone arm (median OS: group A 53 months vs group B 48 months, HR 1.24 (95% CI: 0.81-1.90) versus group C 35 months, HR 1.90 (95% CI: 1.09-3.30)) and in the surgical arm (median OS: group A 61 months vs group B 52 months, HR 1.32 (95% CI: 0.84-2.05) versus group C 35 months, HR 2.06 (95% CI: 1.00-4.26)). Median OS in group C from surgical arm favoured complete resection compared to incomplete resection (HR 0.22 (95% CI: 0.04-1.31); log-rank p=0.049).

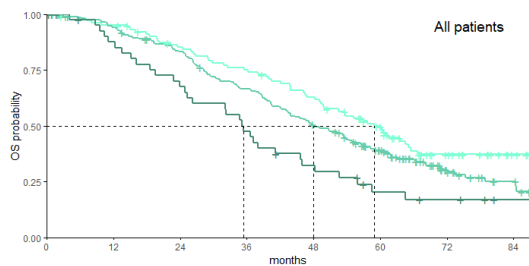
Surgical details	CA125 < 35 Pts (%)	CA125 = 35-350 Pts (%)	CA125 > 35 Pts (%)	Total Pts (%)
<b>n</b>	<b>58</b>	<b>103</b>	<b>15</b>	<b>176</b>
Peritonectomy	20 (34%)	39 (38%)	3 (20%)	62 (35%)
Splenectomy	7 (12%)	15 (15%)	1 (7%)	23 (13%)
Partial hepatectomy	2 (3%)	5 (5%)	1 (7%)	8 (5%)
Large bowel resection	12 (21%)	23 (22%)	4 (27%)	39 (22%)
Stoma diversion				
temporary	2 (3%)	4 (4%)	0 (0%)	6 (3%)
permanent	2 (3%)	4 (4%)	0 (0%)	6 (3%)
<b>Surgical treatment burden</b>	<b>Pts (%)</b>	<b>Pts (%)</b>	<b>Pts (%)</b>	<b>Pts (%)</b>
Duration (min; median, IQR)	210 (124-300)	223 (176-280)	240 (117-372)	222 (159-300)
Blood loss (ml; median, IQR)	195 (50-400)	275 (50-600)	350 (84-800)	250 (50-600)
RBC transfusion rate	7 (12%)	20 (19%)	3 (10%)	30 (17%)
post-OP fever > 38.5°C	2 (3%)	4 (4%)	2 (13%)	8 (5%)
Infections requiring antibiotic treatment	9 (16%)	17 (17%)	7 (47%)	33 (19%)
Re-laparotomy rate	0 (0%)	6 (6%)	1 (7%)	7 (4%)
<b>Surgical outcome</b>	<b>Pts (%)</b>	<b>Pts (%)</b>	<b>Pts (%)</b>	<b>Pts (%)</b>
30 days mortality	0	0	0	0
90 days mortality	0	0	0	0
<b>Incomplete resection</b>				
- Residual disease > 10 mm	3 (5%)	12 (12%)	4 (27%)	19 (11%)
- Residual disease 1-10 mm	6 (10%)	12 (12%)	2 (13%)	20 (11%)
- missing	1 (2%)	5 (5%)	1 (7%)	7 (4%)
Macroscopic complete resection rate	48 (83%)	74 (72%)	8 (53%)	130 (74%)

## Conclusion

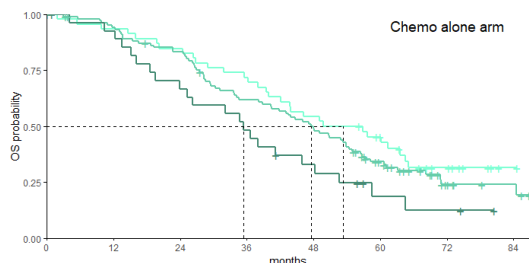
CA 125 levels at the time of relapse are associated with overall survival independent of treatment strategy.

In this AGO score preselected population, the benefit from complete resection is independent from CA125.

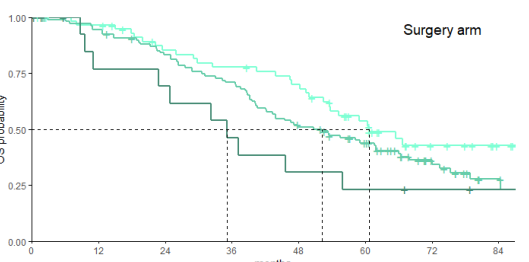
OS by CA125 Groups A vs B vs C



A	107	98	84	74	61	40	18	5
B	217	197	171	136	102	67	28	12
C	48	35	27	19	12	6	4	1

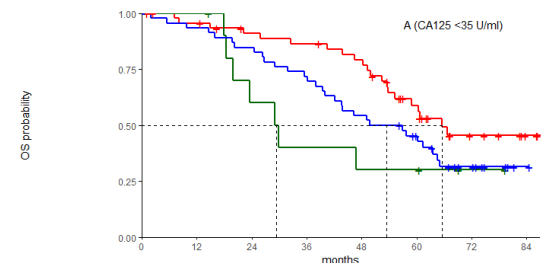


A	47	43	39	33	25	17	8	1
B	106	95	83	61	49	27	9	5
C	28	25	18	13	8	2	2	0

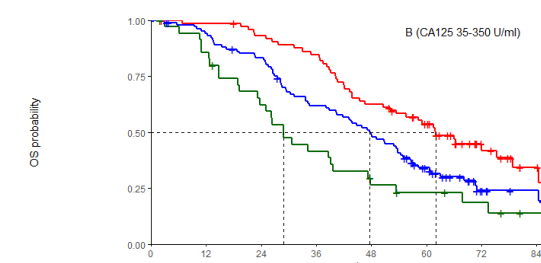


A	60	55	45	41	36	23	10	4
B	111	102	86	75	53	40	19	7
C	18	10	9	6	4	3	2	1

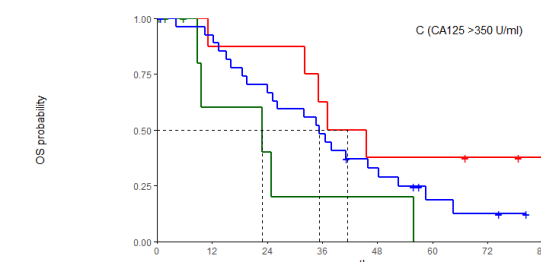
OS by surgical outcome



surg. arm, no residuals	48	44	39	37	33	20	9	4
surg. arm, with residuals	12	11	6	4	3	3	1	0
chemo alone arm	47	43	39	33	25	17	8	1



surg. arm, no residuals	74	72	67	61	45	34	15	6
surg. arm, with residuals	12	11	6	4	3	3	1	0
chemo alone arm	106	95	83	61	49	27	9	5



surg. arm, no residuals	8	7	7	5	3	3	2	1
surg. arm, with residuals	10	3	2	1	1	0	0	0
chemo alone arm	28	25	18	13	8	3	2	0



## Reference

Harter et al. *N Engl J Med* 2021;385:2123-31

## Contact Information

Poster presentation at European Society of Medical Oncology, Paris  
Corresponding Author: Fabrice Lecuru [fabrice.lecuru@curie.fr](mailto:fabrice.lecuru@curie.fr)

