

S1 Table. Description of obtained samples from ten epithelial ovarian cancer patients

| Patient ID | Samples | Sample ID | Time from P0 | Clinical data | Recurrence from P0 | CA125 (U/mL) (normal range ≤ 35 U/mL) | Histopathologic diagnosis | Total depth (x) | Mean depth (x) | | |
|------------|--|--------------|--------------|--|-------------------------|---|---|-----------------|----------------|-------|-------|
| EOC1 | Plasma_pre-operation | EOC1_C_P0 | 0 | Debulking surgery and 9 cycles of carboplatin-paclitaxel CTx | No recurrence for 33 mo | 1,050.0 | Ovary ca IVB (high-grade serous carcinoma) | 8,295 | 3,365 | | |
| | Plasma_post-operation | EOC1_C_P1 | 5 days | | | - | | 536.0 | - | 7,510 | 4,601 |
| | Ascites | EOC1_A | - | | | - | | - | - | 6,754 | 3,820 |
| | Ovarian tissue | EOC1_T | - | | | - | | - | - | 3,540 | 1,297 |
| EOC2 | Plasma_pre-operation | EOC2_C_P0 | 0 | Debulking surgery and 6 cycles of carboplatin-paclitaxel CTx | Recurrence after 10 mo | 546.1 | Ovary ca IIIC (high-grade serous carcinoma) | 6,762 | 4,046 | | |
| | Plasma_post-operation | EOC2_C_P1 | 4 days | | | - | | 73.0 | - | 7,200 | 4,104 |
| | Ascites | EOC2_A | - | | | - | | - | - | 7,080 | 2,543 |
| | Ovarian tissue | EOC2_T | - | | | - | | - | - | 3,594 | 1,785 |
| EOC3 | Plasma_pre-operation | EOC3_C_P0 | 0 | Debulking surgery and 6 cycles of carboplatin-paclitaxel CTx | - | 954.9 | Ovary ca IVB (high-grade serous carcinoma) | 7,154 | 4,159 | | |
| | Plasma_post-operation | EOC3_C_P1 | 4 days | | | - | | 184.3 | - | 7,383 | 5,018 |
| | Plasma_after 6 cycles of chemotherapy (=at progression) | EOC3_C_P2 | 5 mo | Progression → regimen change (9 cycles of avastin PLD) | Progression after 6 mo | 5.7 | - | 8,091 | 587 | | |
| | Plasma_after 9 cycles of chemotherapy | EOC3_C_P3 | 8 mo | | | - | | 5.4 | - | 7,420 | 438 |
| | Plasma_after 12 cycles of chemotherapy | EOC3_C_P4 | 11 mo | - | - | 10.9 | - | 7,547 | 595 | | |
| | Ascites | EOC3_A | - | - | - | - | - | 6,320 | 3,153 | | |
| | Ovarian tissue | EOC3_T | - | - | - | - | - | 3,394 | 1,652 | | |
| | Plasma_pre-operation (secondary debulking surgery) (=at progression) | EOC3_Re_C_P0 | 17 mo | Progression | Progression after 17 mo | 85.0 | - | 7,561 | 2,964 | | |
| | Plasma_post-operation (secondary debulking surgery) | EOC3_Re_C_P1 | 17 mo+6 days | Secondary debulking surgery | - | 65.2 | - | 4,855 | 3,081 | | |
| | Ascites (secondary) | EOC3_Re_C_A | - | - | - | - | - | 6,431 | 2,421 | | |

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|------|---|-------------|--------|---|----------------------------|---------|---|-------|-------|
| | debulking surgery) Metastatic tissue (secondary debulking surgery) | EOC3_Re_C_T | - | - | Expired after 22 mo | - | - | 8,906 | 3,153 |
| EOC4 | Plasma_pre-operation | EOC4_C_P0 | 0 | Debulking surgery and 6 cycles of carboplatin- paclitaxel CTx | - | 2,723.0 | Ovary ca IIIC (high-grade serous carcinoma) | 8,454 | 282 |
| | Plasma_post-operation | EOC4_C_P1 | 4 days | - | - | 119.8 | - | 7,564 | 297 |
| | Plasma_after 6 cycles of chemotherapy | EOC4_C_P2 | 5 mo | - | - | 4.2 | - | 7,670 | 181 |
| | Plasma_after 9 cycles of chemotherapy | EOC4_C_P3 | 10 mo | - | - | 5.3 | - | 7,712 | 1,292 |
| | Plasma_after 12 cycles of chemotherapy | EOC4_C_P4 | 12 mo | - | - | 25.9 | - | 7,583 | 2,301 |
| | Plasma_at disease recurrence | EOC4_C_P5 | 17 mo | Recurrence | Recurrence after 15 mo | 196.5 | - | 5,163 | 1,754 |
| | Ascites | EOC4_A | - | - | - | - | - | 7,552 | 513 |
| | Ovarian tissue | EOC4_T | - | - | - | - | - | 3,024 | 1,480 |
| EOC5 | Plasma_pre-operation | EOC5_C_P0 | 0 | Debulking surgery and 9 cycles of carboplatin- paclitaxel CTx | No recurrence for 27 mo | 378.6 | Ovary ca IIIC (high-grade serous carcinoma) | 8,013 | 352 |
| | Plasma_post-operation | EOC5_C_P1 | 5 days | - | - | 16.3 | - | 8,034 | 791 |
| | Plasma_after 6 cycles of chemotherapy | EOC5_C_P2 | 6 mo | - | - | 3.2 | - | 7,335 | 1,361 |
| | Ascites | EOC5_A | - | - | - | - | - | 7,317 | 610 |
| | Ovarian tissue | EOC5_T | - | - | - | - | - | 3,216 | 1,505 |
| EOC6 | Plasma_pre-operation | EOC6_C_P0 | 0 | Debulking surgery and 9 cycles of carboplatin- paclitaxel CTx | Recurrence after 12 mo | 4,220.0 | Ovary ca IIIC (high-grade serous carcinoma) | 4,002 | 2,463 |
| | Plasma_post-operation | EOC6_C_P1 | 4 days | - | - | 156.5 | - | 5,299 | 2,628 |
| | Ascites | EOC6_A | - | - | - | - | - | 4,838 | 2,733 |
| | Ovarian tissue | EOC6_T | - | - | - | - | - | 3,413 | 1,765 |
| EOC7 | Plasma_pre-operation | EOC7_C_P0 | 0 | Debulking surgery and 9 cycles of carboplatin- paclitaxel CTx | Recurrence after 10 mo | 476.3 | Ovary ca IIIC (clear cell carcinoma) | 7,993 | 353 |
| | Plasma_post-operation | EOC7_C_P1 | 4 days | - | - | 305.8 | - | 7,819 | 490 |
| | Plasma_after 6 cycles | EOC7_C_P2 | 5 mo | - | - | 18.9 | - | 8,013 | 1,013 |

| | | | | | | | | | |
|-------|---------------------------------------|------------|--------|--|---|---------|---|--------|-------|
| | of chemotherapy | | | | | | | | |
| | Plasma_after 9 cycles of chemotherapy | EOC7_C_P3 | 8 mo | - | - | 23.6 | - | 7,002 | 414 |
| | Ascites | EOC7_A | - | - | - | - | - | 7,205 | 590 |
| | Ovarian tissue | EOC7_T | - | - | - | - | - | 2,748 | 1,305 |
| EOC8 | Plasma_pre-operation | EOC8_C_P0 | 0 | Debulking surgery and 9 cycles of carboplatin-paclitaxel CTx | No recurrence for 7 mo | 1,902.2 | Ovary ca IIIC (high-grade serous carcinoma) | 7,388 | 550 |
| | Plasma_post-operation | EOC8_C_P1 | 4 days | - | - | 69.3 | - | 8,106 | 1,585 |
| | Plasma_after 6 cycles of chemotherapy | EOC8_C_P2 | 4 mo | - | - | 2.6 | - | 7,084 | 671 |
| | Ascites | EOC8_C_A | - | - | - | - | - | 7,855 | 2,177 |
| | Ovarian tissue | EOC8_C_T | - | - | - | - | - | 5,723 | 2,355 |
| EOC9 | Plasma_pre-operation | EOC9_C_P0 | 0 | Debulking surgery and 6 cycles of carboplatin-paclitaxel CTx | Expired after 3 mo of the debulking surgery due to septic shock | 2176.0 | Ovary ca IVA (high-grade serous carcinoma) | 6,782 | 3,740 |
| | Plasma_post-operation | EOC9_C_P1 | 4 days | - | - | 75.5 | - | 6,832 | 4,523 |
| | Ascites | EOC9_A | - | - | - | - | - | 6,435 | 3,156 |
| | Ovarian tissue | EOC9_T | - | - | - | - | - | 3,788 | 2,010 |
| EOC10 | Plasma_pre-operation | EOC10_C_P0 | 0 | Neoadjuvant chemotherapy then debulking surgery and 6 cycles of carboplatin-paclitaxel CTx | No recurrence after 7 mo | 85.2 | Ovary ca IIIC (high-grade serous carcinoma) | 6,965 | 2,939 |
| | Plasma_post-operation | EOC10_C_P1 | 5 days | - | - | 34.5 | - | 20,023 | 7,937 |
| | Ascites | EOC10_A | - | - | - | - | - | 6,279 | 2,758 |
| | Ovarian tissue | EOC10_T | - | - | - | - | - | 2,330 | 1,232 |

CA125, cancer antigen 125; Ca, cancer; EOC, epithelial ovarian cancer; CTx, chemotherapy; PLD, pegylated liposomal doxorubicin.