

Box S1: Variable descriptions

| Variables | Descriptions |
|---------------------------------|--|
| Patient demographics | |
| Age at diagnosis | Defined at time of filling in questionnaire shortly after diagnosis |
| Educational level at diagnosis | Defined as low: primary or secondary education or less, medium: vocational education, and high: university or higher education. |
| Parity at diagnosis | Yes / no |
| Smoking status at diagnosis | Classified as never smoker, former smoker, and current smoker |
| Family history of cancer | Yes / no |
| Frailty at diagnosis | Evaluated by Groningen Frailty Index (GFI). Defined as < 4: non-frail, > 4: frail. |
| Clinical data | |
| Histology at diagnosis | Classified as high-grade serous, low-grade serous, mucinous, endometrioid, clear cell, carcinosarcoma, adenocarcinoma NOS |
| FIGO stage at diagnosis | Classified as I, II, III, IV. |
| Performance status at diagnosis | Evaluated according to WHO/ECOG criteria. Defined as 0: fully active, 1: restricted in physical strenuous activity, 2: ambulatory and capable of selfcare but unable to carry out any other work activities, in bed <50% of waking hours, 3: capable of only limited selfcare, in bed >50% of waking hours, 4: completely disabled, totally confined to bed or chair, 5: dead. |
| BRCA1/2 tests | |
| Tumor test performed | Yes / no |
| Germline test performed | Yes / no |
| Date of tumor / germline test | Day / month / year |
| Tumor test result | Classified as: no tumor pathogenic variant, tumor pathogenic variant in <i>BRCA1</i> or tumor pathogenic variant in <i>BRCA2</i> |
| Germline test result | Classified as: no germline pathogenic variant, germline pathogenic variant in <i>BRCA1</i> or germline pathogenic variant in <i>BRCA2</i> |

Table S1: Known *BRCA1/2* germline pathogenic variant status by time since diagnosis

| Tested: known <i>BRCA1/2</i> GPV status | All EOC patients n=250 | | |
|---|---------------------------|------|--------|
| | n | % | Cum. % |
| Within 1 year | 159 | 63.6 | 63.6 |
| After 1 to 1.5 years | 24 | 9.6 | 73.2 |
| After 1.5 to 2 years | 8 | 3.2 | 76.4 |
| After 2 to 2.5 years | 4 | 1.6 | 78.0 |
| After 2.5 to 3 years | 2 | 0.8 | 78.8 |
| After 3 to 5 years | 4 | 1.6 | 80.4 |
| N/A, unknown <i>BRCA1/2</i> GPV status | 49 | 19.6 | 100.0 |

Abbreviations: Cum, cumulative; GPV, germline pathogenic variant.

Table S2: *BRCA1/2* pathogenic variants by histological subtype (HGSC versus non-HGSC) for all tested patients and by period of diagnosis (period I and period II)

| | All tested patients n=201 | | Tested patients diagnosed in period I ^a n=137 | | Tested patients diagnosed in period II ^a n=64 | |
|----------------------------------|------------------------------|-------|---|-------|---|-------|
| | n | % | n | % | n | % |
| <i>BRCA1/2</i> GPV | 15 | 7.5 | 11 | 8.0 | 4 | 6.3 |
| <i>HGSC</i> | 15 | 100.0 | 11 | 100.0 | 4 | 100.0 |
| Non- <i>HGSC</i> | - | - | - | - | - | - |
| Somatic <i>BRCA1/2</i> PV | 9 | 4.5 | 4 | 2.9 | 5 | 7.8 |
| <i>HGSC</i> | 9 | 100.0 | 4 | 100.0 | 5 | 100.0 |
| Non- <i>HGSC</i> | - | - | - | - | - | - |

Abbreviations: GPV, germline pathogenic variant; *HGSC*, high-grade serous carcinoma; PV, pathogenic variant. ^a Period I: January 1, 2016, until July 1, 2018. Period II: July 1, 2018, until January 1, 2020.

Table S3: Potential predictors of receiving *BRCA1/2* testing (multivariable logistic regression)

| Variables | OR (95% CI) | P value |
|-------------------------------|--------------------|----------------|
| Age at diagnosis | 0.96 (0.93-0.99) | 0.012 |
| Histology at diagnosis | | |
| HGSC (ref.) | 1.00 | - |
| Non-HGSC | 0.23 (0.11-0.46) | <0.001 |
| Adenocarcinoma NOS | 0.29 (0.04-1.89) | 0.195 |
| Period of diagnosis | 1.11 (0.54-2.28) | 0.777 |

Abbreviations: OR, odds ratio; CI, confidence interval; HGSC, high-grade serous carcinoma; ref, reference; NOS, not otherwise specified.