Real world retrospective study of patients with epithelial ovarian cancer: an international collaboration

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Introduction

- An international collaboration of 6 major treatment centres across Europe and South Korea was established to review real world evidence for patients with epithelial ovarian cancer (EOC - including fallopian tube and primary peritoneal cancers of Műllerian origin).
- Each centre has built a dataset following a Common Data Model (CDM) with analysis based on a shared "R" package developed in house.

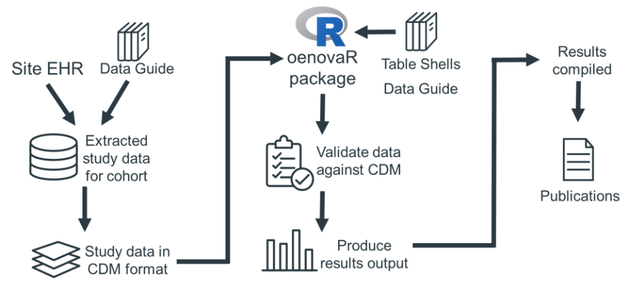

Figure 1. The project workflow, demonstrating analysis alignment through the CDM and common R scripts.

- This network is able to answer diverse research questions around the management and outcomes of patients diagnosed with EOC.
- This first study reports a preliminary dataset of demographics, clinical characteristics (including overall survival) to demonstrate baseline similarities and differences across the network.

Results

Table 1. Study site cohort sizes, BRCA status and breast cancer (BC) diagnosis[1].

Study	Total patients	Germline BRCA1 result available	Germline Pathogenic BRCA1 mutation	Germline BRCA2 result available	Germline Pathogenic BRCA2 mutation	Patients diagnosed with BC	Of patients diagnosed with BC: BC diagnosed before EOC	Of patients diagnosed with BC: BC diagnosed after EOC
Yonsei Severance, (South Korea)	957	474 (50%)	72 (8%)	474 (50%)	55 (5%)	26 (3%)	20 (77%)	3 (23%)
Leeds, (UK)	515	230 (44%)	24 (5%)	298 (58%)	19 (4%)	37 (7%)	34 (92%)	<6
ICO, (France)	698	353 (51%)	51 (7%)	338 (49%)	15 (2%)	62 (9%)	52 (84%)	10 (16%)
Frankfurt, (Germany)	139	*Not reported*						
Cluj, (Romania)	446	72 (16%)	24 (5%)	72 (16%)	4 (1%)	19 (4%)	17 (89%)	2 (11%)
Institut Curie, (France)	466	*Not available at time of publication*						

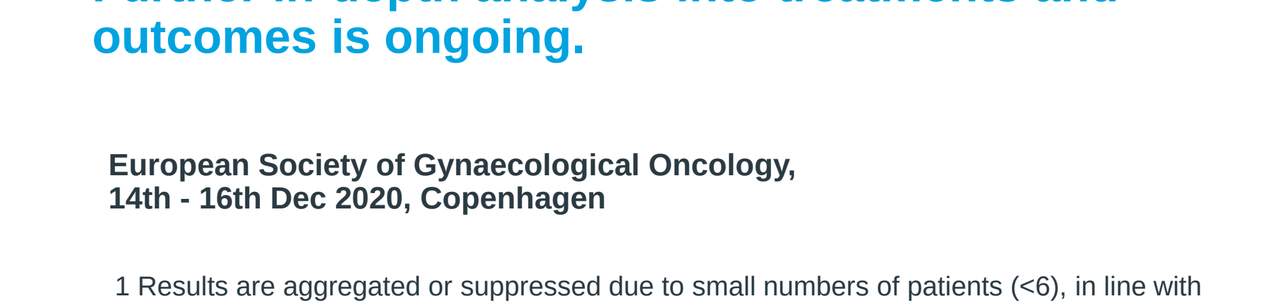

Figure 2. Patient age at diagnosis.

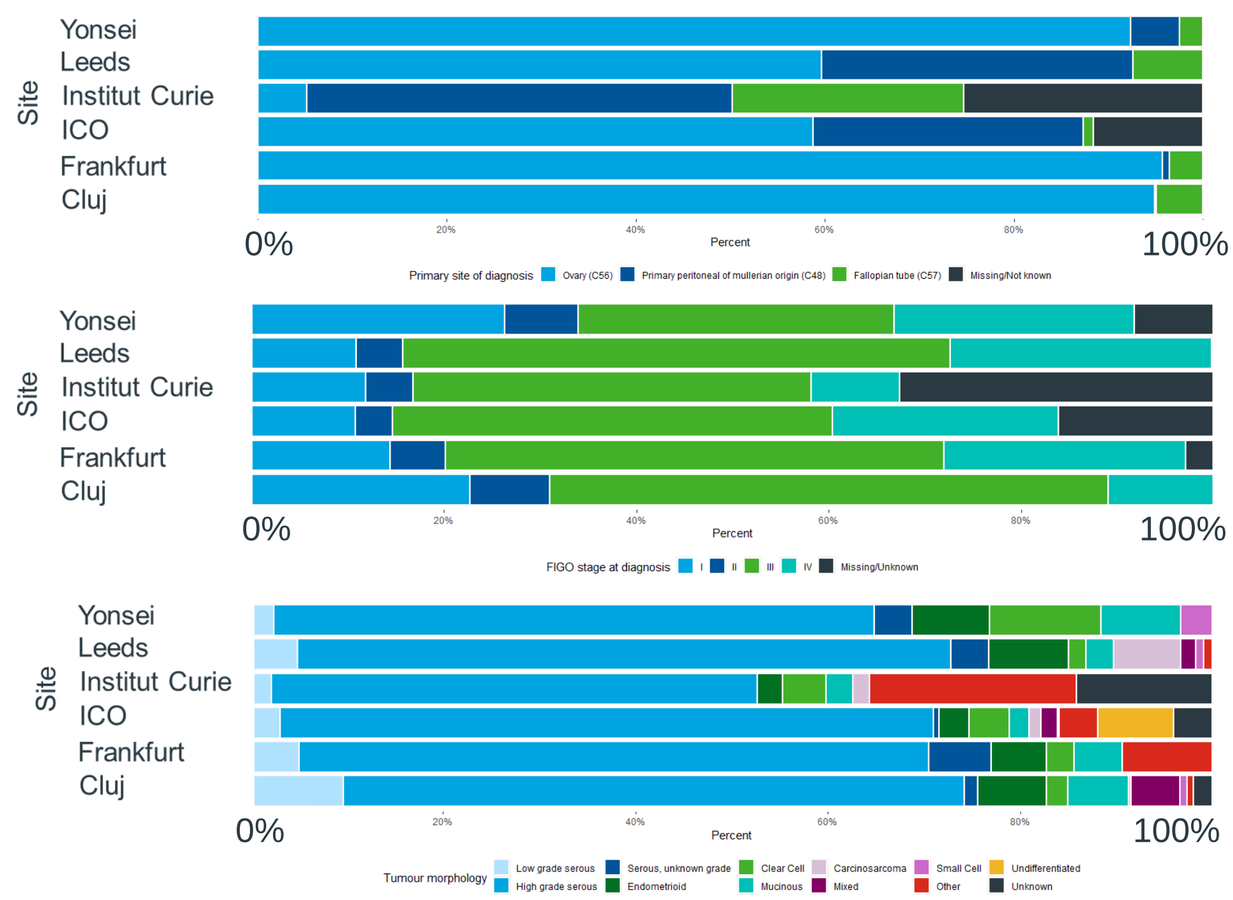

Figure 3. Clinical characteristics of EOC diagnosis. Top to bottom: primary diagnosis site, FIGO Stage, Morphology.

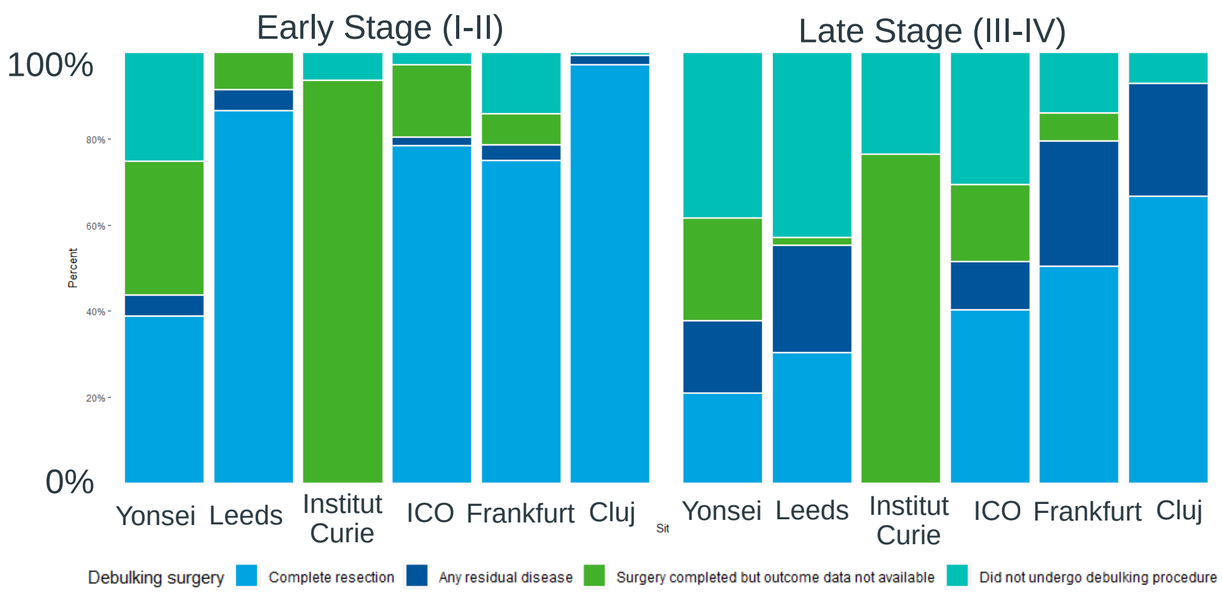

Figure 4. Outcome of debulking surgery, by site and early/late stage.

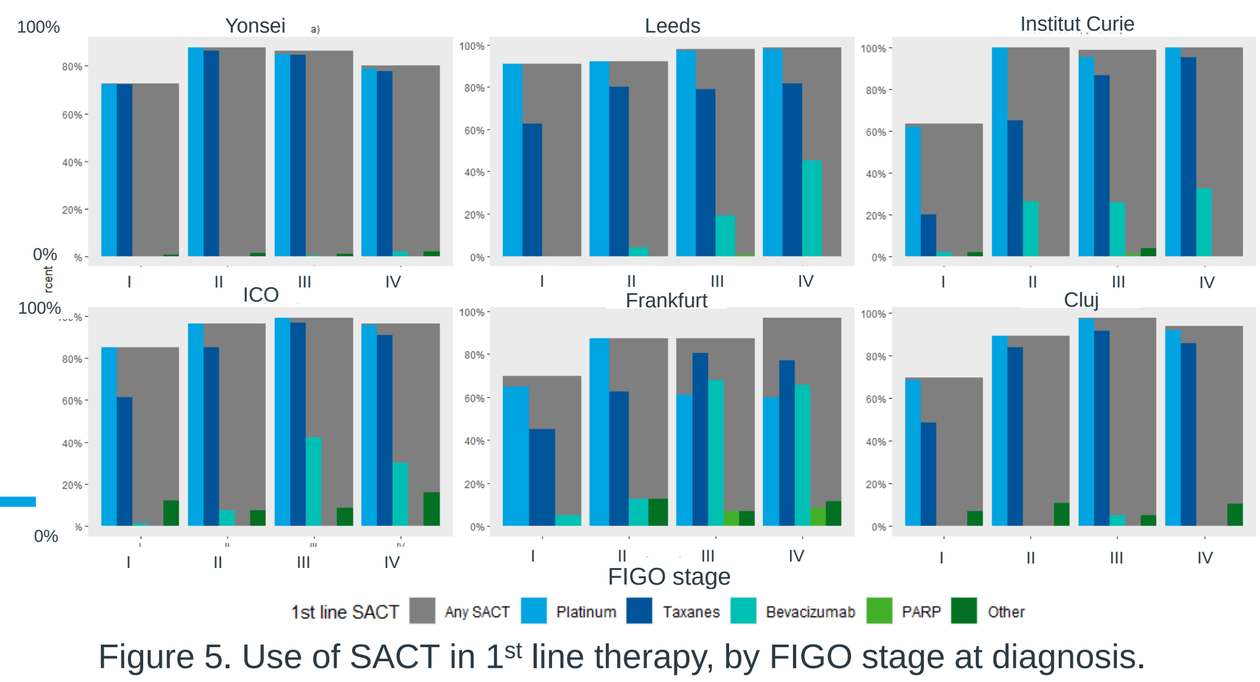

Figure 5. Use of SACT in 1st line therapy, by FIGO stage at diagnosis.

Conclusions

The use of a common data model provides a unique opportunity for international comparison of treatments and outcomes in cancer patients

International variation in patient demographics, therapies and outcomes has been identified.

Further in-depth analysis into treatments and outcomes is ongoing.

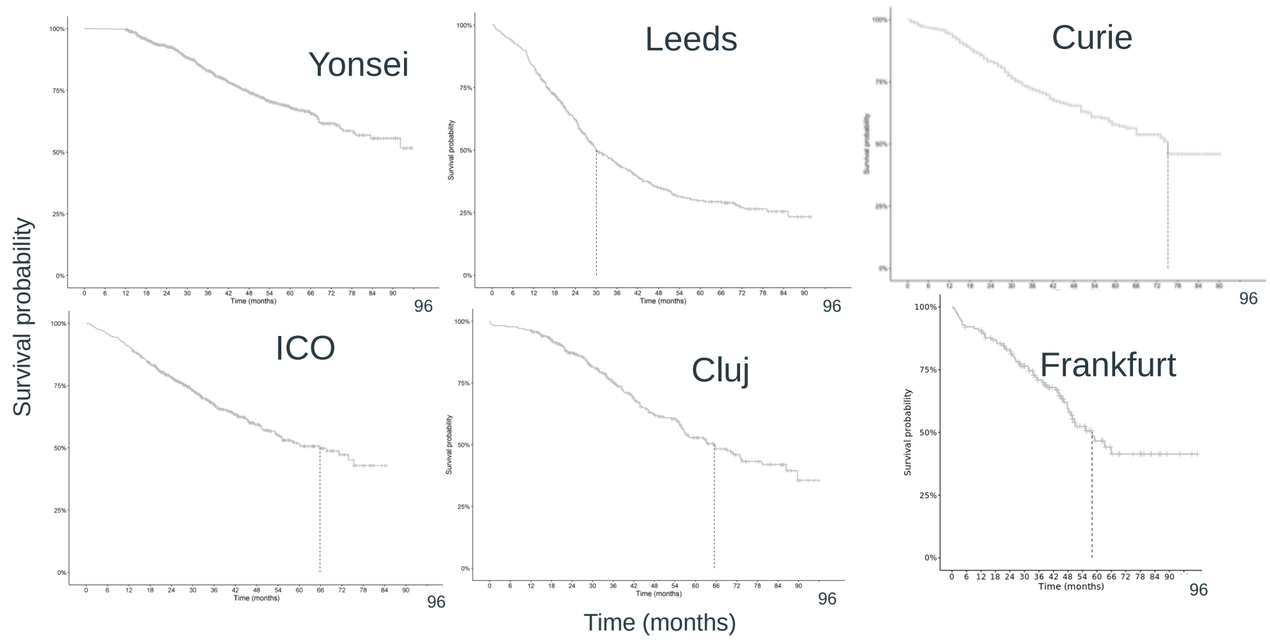

Figure 6. Overall all cause survival. The dotted line shows median survival.

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1 Results are aggregated or suppressed due to small numbers of patients (<6), in line with local information governance policies.