#824 THE CORRELATION BETWEEN MACROSCOPIC SURGICAL ASSESSMENT, HISTOLOGICAL AND MOLECULAR SUBTYPES OF HIGH-GRADE SEROUS CANCER OF THE FEMALE GENITAL TRACT, OVARIAN, TUBAL AND PERITONEAL ORIGIN- THE FOOTPRINT STUDY

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Introduction/Background High Grade Serous Carcinoma (HGSC) of the female genital tract can be divided into Four molecular subtypes (C1, C2, C4 and C5) by RNA sequencing. In addition to distinct expression profiles, the molecular subtypes also display distinct clinical features. To date, there is also no published data that relates to molecular subtype and tumour macroscopic appearance at the time of primary surgery as described by the surgical team.

Aims-
1. To explore the possible correlation between the macroscopic appearance of HGSC at the time of primary surgery and molecular subtype.
2. Evaluate pre-surgical MRI scans to determine if there are subtype-specific characteristics that can be observed.
3. To validate the histopathologic classification criteria of molecular subtyping for HGSC.

Methodology Prospective, exploratory pilot study of patients undergoing primary surgery for HGSC. Pre-operative MRI was assessed for PCI scores and lesions characteristics by a dedicated radiologist. Intra-operatively- cases underwent surgical assessment including PCI & Fagotti scores, lesions characterisation and operative findings. Tumour samples were collected and sent to molecular subtyping using the RNA-seq platform, as well as Histopathological assessment to predict the molecular subtype, by a dedicated blinded pathologist.

Abstract #824 Figure 1

Results Eighteen cases of HGSC were included in this study, with 48 samples. All molecular subtypes were represented in our patient population. Intra-operative photos show distinct features of the different subtypes (to be presented at the talk).

Conclusion This pilot study suggests that different molecular subtypes of HGSC have different lesion appearance and disease spread, and potentially be predicted by the surgeon to guide clinical management.

#850 FIRST EXPERIENCE WITH INTRA-ABDOMINAL 224RADIUM-LABELLED MICROPARTICLES (RADSPHERIN) AFTER CYTOREDUCTIVE SURGERY FOR PERITONEAL METASTASIS IN RECURRENT EPITHELIAL OVARIAN CANCER (PHASE 1 STUDY)

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Introduction/Background Recurrent disease after secondary cytoreductive surgery for ovarian cancer (OC) is frequent. RadspHERIN is a novel alpha-emitting therapy. Alpha particles have high linear energy transfer and a radiation range < 100 μm (3–10 cell diameters), generating highly effective radiation with non-repairable double-strand DNA breaks in affected cells, killing micrometastasis and free-floating tumour cells after surgical resection, and reduced risk of toxicity compared with beta or gamma radiation.

Methodology Here we report on the phase 1 study (NCT03732768) evaluating the recommended dose and safety of RadspHERIN in patients with a secondary R0 resection of platinum-sensitive recurrent epithelial OC. RadspHERIN is injected intraperitoneally two days after surgery. Dose escalation was performed at 1–2–4–7-MBq. Safety interim analysis after completion of the dose-limiting toxicity (DLT) period is presented here.

Results 14 patients were enrolled in the dose escalation cohort. Median age was 66 (56–77). Median peritoneal cancer index was 7 (3–16). The 7MBq dose was selected as recommended dose as no DLT was observed. A total of 91 adverse events (AEs) were reported, where 98% were grade 1 or 2 and only 2 were grade 3. Three grade 1 AEs in two patients were reported as possibly related to both RadspHERIN and CRS (night sweats, fatigue (1)). Five serious AEs (SAEs) were reported (compression fracture, ileus, paralytic ileus, small intestinal obstruction, intestinal obstruction), according to the investigator not related to RadspHERIN, but three were related to surgery. One grade 2 event of procedural complication (leakage during administration) was reported as SAE because being medically important. No complications have been identified during follow-up of the patient.

Conclusion All dose levels were well tolerated, DLT was not reached and the highest dose of 7MBq was selected for the expansion cohort. No deaths occurred and only one SAE related to RadspHERIN administration was reported.

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#869
NIRAPARIB MAINTENANCE THERAPY IN PATIENTS AGED 75 YEARS AND OLDER WITH PLATINUM-SENSITIVE RECURRENT OVARIAN CANCER: A SUBGROUP ASSESSMENT OF THE GEICO-88R STUDY

Introduction/Background
An initial publication of the GEICO-88R study (NCT04546373) evaluated niraparib as maintenance therapy in patients (pts) with platinum-sensitive recurrent high-grade ovarian cancer (OC), within an expanded access programme developed in Spain. A subgroup assessment of pts ≥75 years of age has now been performed.

Methodology
GEICO conducted a retrospective study in which 40 Spanish hospitals registered OC patients, 75 years or older, who received maintenance niraparib at fixed (FSD, 300 mg/day) or individualised starting dose (ISD) according to weight and platelet count. Toxicity, dose management, patient characteristics, and effectiveness were assessed using source data from medical records.

Results
Forty-two pts were enrolled with the characteristics shown in table 1. Of the 37 pts who underwent surgery at diagnosis, 48.6% and 51.4% had a primary and interval debulking surgery respectively, achieving R0 in 67.6%. At recurrence 4 pts (9.5%) underwent surgery (R0 in 3). Niraparib was started at FSD in 11 pts and at ISD in 31 (all at 200 mg/day). Median treatment duration was 4.8 months (median dose 200 mg). 52.3% of pts required ≥1 interruptions, and the same percentage ≥1 reductions. Three pts were still on treatment at the time of analysis and 39 had discontinued (87.2% progression, 5.1% toxicity, 5.1% physician/pts decision). The most common all-grade treatment-related adverse events were: thrombocytopenia (40.5%), asthenia (38.1%), anaemia (23.8%), nausea (21.4%), and hypertension (14.3%). For 39 evaluable pts, the median progression free survival (mPFS), PFS2 and overall survival were 4.4 (95% CI 3.1–7.2), 13 (10.3–16.6) and 23 (95% CI 18.1–26.2) months, respectively.

Conclusion
In the GEICO-88R study, OC pts with 75 years or older present the expected age-related comorbidities and are treated similarly to the general OC population. Maintenance niraparib is well tolerated in this age group. This sub-analysis provides valuable information on a subpopulation of OC with few published data.

#872
MALIGNANT OVARIAN GERM CELL TUMOURS: AN INTERNATIONAL MULTICENTRE STUDY TO IDENTIFY NEW PROGNOSTIC RISK FACTORS

Introduction/Background
Malignant ovarian germ cell tumours (MOGCTs) are rare and aggressive malignancies mainly affecting young women. Unlike testicular GCTs, prognostic factors are poorly understood, but small series have most consistently suggested that advanced stage best predicts worse outcomes.