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35 CAN SENTINEL LYMPH NODE BIOPSY PREDICT PARAMETRIAL INVOLVEMENT IN EARLY-STAGE CERVICAL CANCER?

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Objectives The purpose of this study was to identify patients with low-risk of parametrial involvement (PI) in early-stage cervical cancer potentially eligible for less radical surgery based on sentinel lymph node (SLN) status.

Methods We performed an ancillary analysis of data from two prospective trials on sentinel node biopsy for cervical cancer (SENTICOL I & II). Patients with FIGO IA-IIA cervical cancer treated with radical surgery and lymph node dissection, including SLN biopsy, were identified between 2005 and 2012 from 25 French oncologic centers. Patients who did not undergo radical surgery and patients who had preoperative brachytherapy were excluded.

Results Of 211 patients who fulfilled inclusion criteria, 11 patients (5.2%) had a pathological PI and 29 patients (13.7%) had positive SLN. The mean age was 43.2 years [22 – 85]. 160 patients had a radical hysterectomy (75.8%) and 59 a radical trachelectomy (24.2%). 86.1% of patients had stage IB1 disease. There were 68.9% epidermoid carcinomas and 28.6% adenocarcinomas. On multivariate analysis, PI was significantly associated with tumor size ≥ 20 mm at preoperative MRI (ORa = 5.75, 95%IC = [1.17–28.32], $p = 0.03$) and positive sentinel lymph node (ORa = 9.59, 95%IC = [1.13–41.43], $p = 0.02$). Of 114 patients with tumor smaller than 2 cm at preoperative MRI and negative SLN, only one had parametrial involvement (0.9%).

Conclusions Patients at low-risk of parametrial involvement may be safely selected with simple criteria. Less radical surgery associated with SLN biopsy may be a promising option for patients with tumor smaller than 2 cm and negative SLN.

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36 OUTCOMES OF INCIDENTALLY DETECTED OVARIAN CANCERS DIAGNOSED AT TIME OF RISK-REDUCING SALPINGO-OOPHORECTOMY IN BRCA MUTATION CARRIERS

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Objectives It has been suggested that women with BRCA mutation and incidentally detected occult invasive ovarian cancer (OOC) diagnosed at the time of risk-reducing salpingo-oophorectomy (RRSO) have poorer prognosis than would be

expected per stage. We sought to evaluate the prevalence and clinical outcomes of BRCA-mutated patients with OOC undergoing RRSO in a tertiary referral center.

Methods Patients with a BRCA mutation who underwent RRSO from 01/2005–05/2017 were identified, and records reviewed. Women with preoperative suspicion for malignancy (e.g. adnexal mass or elevated CA125) were excluded.

Results 532 patients with BRCA mutation undergoing RRSO were identified. 26 (4.8%) had OOC. Median age was 55 years (range 42–75). 15 (58%) patients had BRCA1, 9 (34%) BRCA2, and 2 (8%) had a mutation in both genes. All OOCs were high-grade serous: 10 (38%) Stage I, 8 (31%) Stage II, 8 (31%) Stage III. 24 (92%) patients received adjuvant platinum/taxane therapy. Of Stage III patients, 4 (50%) had microscopic disease only, 4 (50%) had suspicious intraoperative findings. At a median follow-up of 53.6 mos (7–164) no Stage I patients have recurred; 1 (13%) Stage II patient and 5 (63%) Stage III patients have recurred. Five-year PFS was 74% (95% CI 44–87.7%); median PFS for the cohort was 129 months (35.9–not estimable). Five-year DSS was 96.2% (95%CI 73.9–99.4%), median DSS not reached.

Conclusions Consistent with prior reports, almost 5% of patients had OOC detected at time of RRSO. In contrast to prior data, the majority had early-stage disease with excellent PFS and DSS outcomes as would be expected per stage.

IGCS19-0392

37 REDUCING OVERTREATMENT OF EARLY STAGE OVARIAN CANCER: STRATEGIES IMPLEMENTATION BY A MIRNA-DRIVEN PROGNOSTIC ASSESSMENT

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Objectives About 30% of Epithelial Ovarian Cancer (EOC) patients present with early-stage disease (FIGO stage I–II). However, in spite of the generally favourable prognosis, eEOC have heterogeneous risk of relapse, ranging from 13% to over 40% in various reports. We previously identified 35 miRNAs that predicted risk of progression or relapse in advanced EOC and used them to create a prognostic model, the 35-miRNA-based predictor of Risk of Ovarian Cancer Relapse or progression (MiROvaR). The aim of the current study is to test MiROvaR performance to predict risk of progression or relapse in patients with eEOC.

Methods Patients with eEOC who underwent primary surgery at our Institution between 1994 and 2014 were included. The primary endpoint was progression-free survival. In particular, it was assessed the ability of MiROvaR to predict progression-free survival with Kaplan-Meier curves and the log-rank test.

Results A total of 80 patients were included in the study with a median follow-up time of 68.2 months (CI: 61.3–80.7).

Abstract 37 Figure 1 Kaplan-Meier curves of PFS in eEOC cohort according to MiROVaR classification

MiROVaR classified 37 patients (46.3%) at high-risk (14 events, *median PFS: 117 months, 95%CI: 62-nyr*) and 43 patients (53.7%) at low-risk of relapse (2 events, *median PFS time: nyr; 95%CI:nyr*). Kaplan-Meier curves confirmed the significantly different PFS time (figure 1) for the two groups with HR=10.13 (95%CI: 2.3–4.4, $p=0.00015$) for the high-risk patients.

Conclusions MiROVaR confirmed as a potential predictor of EOC progression and has prognostic value independent of relevant clinical covariates also in patients with eEOC. MiROVaR warrants further investigation for the development of a clinical-grade prognostic assay.

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PHASE II STUDY OF ENZALUTAMIDE IN ANDROGEN RECEPTOR POSITIVE (AR+) RECURRENT OVARIAN CANCER: FINAL RESULTS

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Objectives This was a single institution, phase II, Simon 2-stage with safety lead-in study of the oral androgen-receptor antagonist, enzalutamide, in patients with recurrent AR+ ovarian cancer with measurable disease and 1–3 prior lines of chemotherapy. The primary objective was to determine the proportion of patients surviving progression free for 6 months (PFS₆) and overall response rate by RECIST 1.1 Criteria; with 7/58 responses or PFS₆ of 13 being considered a positive study.

Methods Following consent, archival tissue was screened for AR+ by IHC with $\geq 5\%$ considered positive. Enrolled patients were treated with enzalutamide 160mg po daily until progression of disease or treatment discontinuation. A cycle was 28 days. Adverse events were graded by CTCAE V 4.0.

Results Between 11/2013–7/2018 160 patients were screened and 59 patients [45 high grade serous(HGS), 14 low grade serous(LGS)] consented to treatment on the study (1 patient was replaced; efficacy cohort=58, safety cohort=59). There was 1 confirmed and 1 unconfirmed partial response (PR), PFS₆ was 22% (90% CI: 15.1–100%) with PFS₆ for those with HGS 19.8% (90% CI: 12.7–100%) and for LGS 38.5% (21.7%–100%). Median PFS was 3.5 months. There were no toxicities $>$ grade 3 related to study drug. Related grade 3 toxicities occurred in 6 patients [fatigue (1), rash (2), hypertension (1), anemia (1), and transaminase elevation (1)].

Conclusions The study met its primary endpoint, with 13 patients (22%) remaining progression free at 6 months, however the response rate was low. Enzalutamide was well tolerated and may offer a good treatment option in select patients.

IGCS19-0345

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INTERIM ANALYSIS OF OVARIAN CANCER BY THE US NATIONAL CANCER MOONSHOT'S TRI-FEDERAL (DOD/NCI/VA) APPLIED PROTEOGENOMIC ORGANIZATIONAL LEARNING AND OUTCOMES (APOLLO) RESEARCH NETWORK

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Objectives Although studies including TCGA have selected for pure tumors to enhance detection of cancer-related biomarkers, many impure tumors are associated with poor prognosis raising concerns over historical selection bias. Enrichment techniques to prep tumor micro-compartments was aligned with comprehensive proteogenomic analysis in an advanced stage high grade serous ovarian cancer (HGSOc) patient cohort to detect novel, clinically-relevant alterations.