

**Topic:** AS01. Basic & Translational Science / AS01a. Pathology & Cytology

## **RAD51PREDIQC AS A FUNCTIONAL COMPLEMENT ASSAY TO GENOMIC HRD ASSESSMENT IN OVARIAN CANCER**

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**Introduction:** PARP inhibitors have improved outcomes in ovarian cancer, particularly in patients with homologous recombination deficiency (HRD), typically defined by genomic testing of tissue and circulating tumor DNA (ctDNA). However, genomic assays may not fully reflect functional DNA repair capacity. This study evaluates the RAD51PrediQc functional assay as a complementary approach to confirm HRD status and explore its relationship with PARPi response.

**Methods:** This retrospective study includes archival formalin-fixed paraffin-embedded (FFPE) tissue from patients treated at the Jewish General Hospital (2019-2025), with somatic HRD next-generation sequencing (NGS) data from tissue/plasma. Forty FFPE tumor blocks (and controls) are used to construct tissue microarrays (TMAs), with triplicate cores per case. Sections undergo immunohistochemistry to assess PARP1 expression, and dual immunofluorescence staining for RAD51/Geminin to quantify RAD51-foci formation. Loss of PARP1 expression predicts reduced PARPi benefit while low RAD51-foci levels are indicative of HRD. The results of tissue/plasma-based HRD status will be correlated with the functional assay, and with outcomes including response to PARPi and recurrence.

**Preliminary Data or Expected Results:** Of the 40 patients, thirty-two patients are HRD+ by genomic testing. Thirty-five received PARPi therapy (23 responders, 9 non-responders). Six completed planned treatment, 17 remain on therapy and 9 progressed while on PARPi. Immunostaining and quantitative analysis of PARP1 and RAD51 are ongoing, expected in July/2026.

**Significance and Impact:** This study evaluates the utility of functional assay as a complementary method to confirm genomic HRD status. Integrating functional and genomic HRD assessment may refine characterization of homologous recombination status and improve understanding of variability in PARPi response.

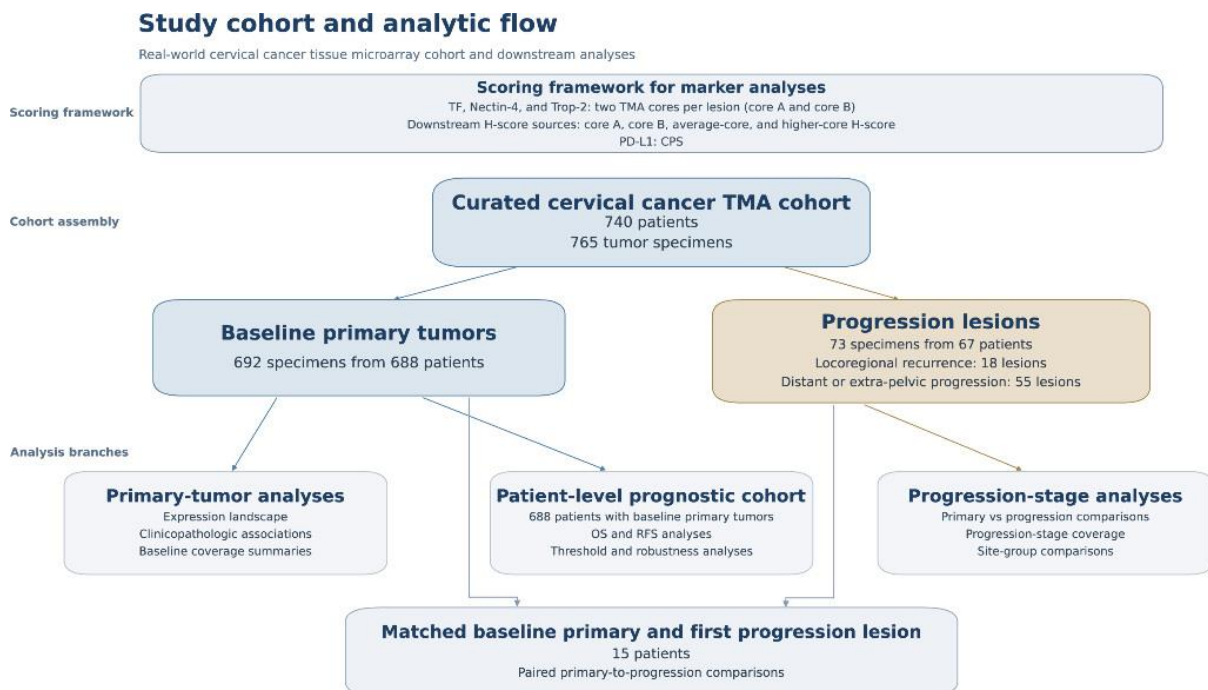
## COMPARATIVE EVALUATION OF TF, NECTIN-4, TROP-2, AND PD-L1 IN CERVICAL CANCER: PROGNOSTIC RELEVANCE, TARGET AVAILABILITY, AND INTER-CORE HETEROGENEITY

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**Introduction:** Antibody-drug conjugates (ADCs) are reshaping cervical cancer treatment, but comparative pathology evidence for ADC-related target prioritization across disease states and sampling contexts is limited.

### Methods:

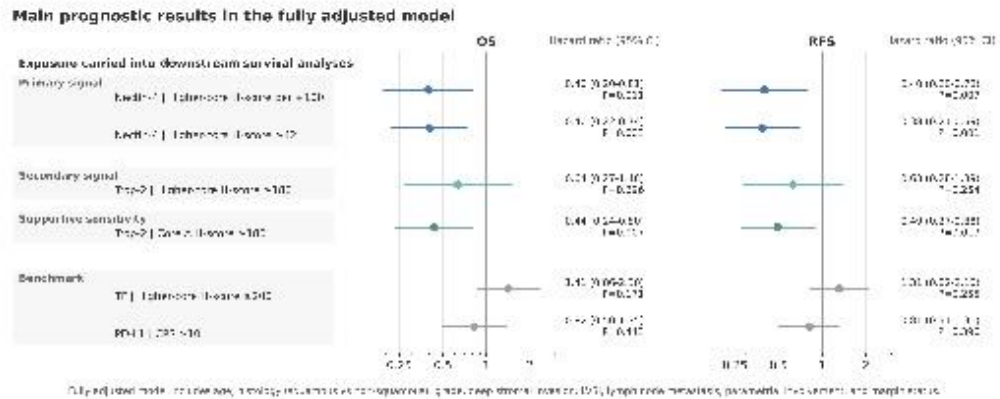


We analyzed a cervical cancer tissue microarray cohort of 740 patients and 765 specimens. Tissue factor, Nectin-4, and Trop-2 were scored by H-score on two cores per lesion; PD-L1 was scored by combined positive score. We evaluated expression, multivariable overall survival (OS), relapse-free survival (RFS), target coverage, and inter-core heterogeneity.

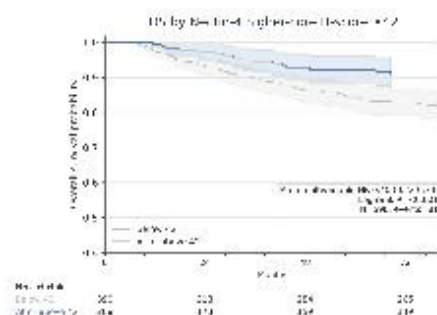
**Results:** Primary tumors comprised 692 specimens from 688 patients; progression lesions comprised 73 specimens from 67 patients, including 15 matched pairs. Histology was the dominant stratifier. Across disease states, tissue factor increased, Nectin-4 declined, Trop-2 was retained, and PD-L1 decreased. Nectin-4 higher-core H-score  $\geq 42$  was associated with improved OS (HR 0.40, 95% CI 0.22–0.74) and RFS (HR 0.38, 95% CI 0.21–0.69). Trop-2 core A H-score  $\geq 180$  provided secondary prognostic support for OS (HR 0.44, 95% CI 0.24–0.80) and RFS (HR 0.49, 95% CI 0.27–0.88). Union

ADC coverage, defined as tissue factor  $\geq 200$  or Nectin-4  $\geq 42$  or Trop-2  $\geq 180$ , was 76.6% in primary tumors and 71.2% in progression lesions, largely driven by squamous cancers. Top-quartile Nectin-4 inter-core heterogeneity independently predicted better OS and RFS.

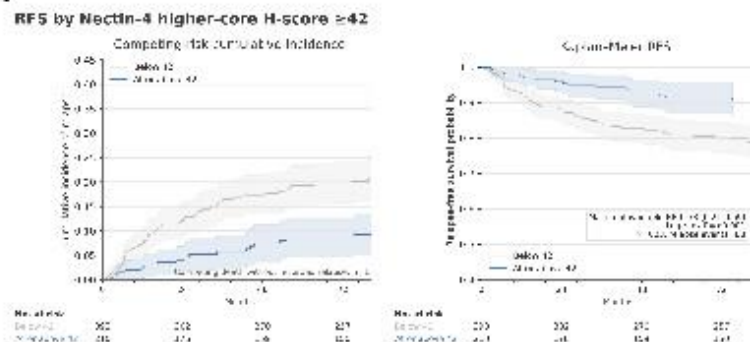
**A**



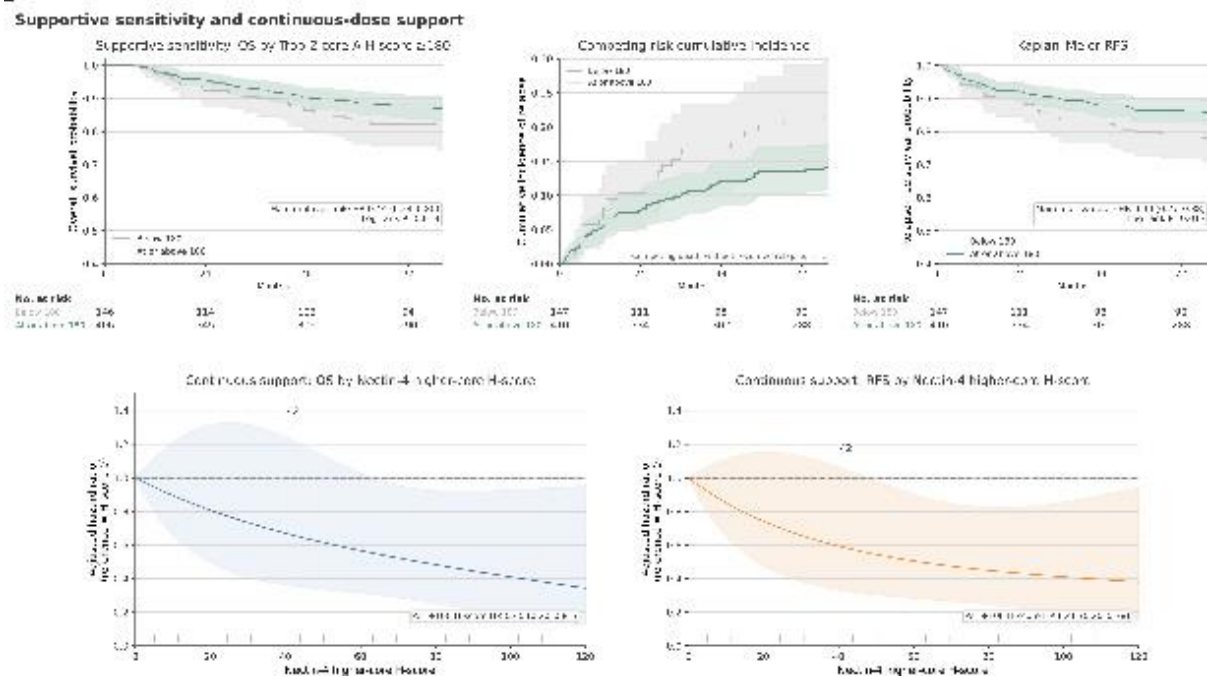
**B**



**C**



**D**



**Conclusion/Implications:** Cervical cancer shows a functionally stratified ADC-related biomarker landscape: Nectin-4 is the strongest prognostic axis, whereas Trop-2 provides the broadest lesion-level targeting backbone.

**Topic:** AS02. Clinical Disciplines / AS02c. Nursing & Allied Health Care

**IMPROVING PATIENT AWARENESS OF IMMUNE-RELATED ADVERSE EVENTS:  
DEVELOPMENT OF A PATIENT-FOCUSED EDUCATIONAL PAMPHLET FOR  
GYNECOLOGIC CANCER PATIENTS RECEIVING IMMUNOTHERAPY**

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**Introduction:** The introduction of immune checkpoint inhibitors (ICIs) as first-line treatment for gynecologic cancers has exposed a lack of patient-focused educational resources. ICIs have unique toxicity profiles, and early patient recognition of immune-related adverse events (irAEs) is critical for timely management and improved outcomes. To our knowledge, this is the first study evaluating a patient-centered educational tool to enhance safety in gynecologic oncology.

**Methods:** A gynecology-oncology team developed and distributed a patient-centered educational pamphlet on ICIs, highlighting mechanisms of action, potential side effects, and the importance of early recognition. A chart review compared the incidents and severity of irAEs to the historical data. Concurrently patient satisfaction was assessed using a 5-point Likert scale and the Patient Education Materials Assessment Tool.

**Results:** The analysis of medical charts showed that patients who received the educational pamphlet reported them at lower grades ( $\leq$  grade 2) and no patients were discontinued because of irAEs. The reporting of low-grade symptoms contributed to the early treatment and management of toxicities. The concurrent surveys indicate that 97% of patients found that the pamphlet was easy to understand, and helped patients recognize side effects early. 97% of patients were strongly satisfied with the knowledge gained.

|               | irAEs $\geq$ grade 3<br><b>Historically</b> | irAEs $\geq$ grade 3<br><b>With Pamphlet</b> |
|---------------|---------------------------------------------|----------------------------------------------|
| Pembrolizumab | 5-8.3%                                      | 0%                                           |
| Dostarlimab   | 13.2-19.5%                                  | 0%                                           |

**Conclusion/Implications:** Improving patient recognition and reporting of symptoms reduces the instances of high-grade irAEs thereby improving management and long-term tolerability. Patients are open and receptive to educational pamphlets as our satisfaction survey indicated that they were highly appreciated by patients. Educational

pamphlets are cost-efficient tools that institutions can easily implement to improve patient understanding of ICIs.

**Topic:** *AS02. Clinical Disciplines / AS02c. Nursing & Allied Health Care*

**BRACHYTHERAPY NURSE AND RADIATION THERAPIST LED APPLICATOR INSERTION AND DELIVERY FOR VAGINAL VAULT BRACHYTHERAPY**

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**Introduction:** At Christchurch hospital, Vaginal Vault brachytherapy (VVBT) using a linear vaginal applicator (LVA) has traditionally required direct radiation oncologist (RO) involvement for applicator application and treatment delivery at every fraction. Increasing VVBT workload and RO commitments resulted in scheduling constraints, reduced service flexibility, and inefficient workforce utilisation. Christchurch Oncology Research & Development Steering Group (RSDG) approved quality improvement project aimed to implement and evaluate a nurse and radiation therapist (RT) led model for LVA insertion and treatment delivery, while maintaining patient safety, clinical governance, and treatment quality.

**Methods:** A structured training and competency-based framework was developed to extend the scope of clinical nurse specialist (CNS) and brachytherapy RT. Under the revised model, RO supervision was required for the first applicator insertion, with trained CNS/RT staff independent performing subsequent insertions and treatment delivery. Training included supervised insertions, radiation safety, education, emergency procedure training and multidisciplinary oversight. An audit is planned following completion of the initial patient cohort.

**Results:** Twenty supervised VVBT insertions were completed, after which CNS/RT staff demonstrated competency for independent practice. Thus, revised pathway enabled appointment flexibility, reduced delays related to RO availability, and enhanced overall service efficiency.

**Conclusion/Implications:** A brachytherapy nurse and RT led model for VVBT insertion and delivery is feasible, safe, and sustainable within a multidisciplinary gynaecological oncology service. This approach supports efficient use of specialist expertise and may be transferable to other centres seeking service optimisation without compromising patient care.

**Topic:** AS05. Prevention & Early Detection / AS05b. Genetics

## **DISTINCT CLINICAL AND GENETIC CHARACTERISTICS AMONG ASIAN PATIENTS IN A MULTI-ETHNIC HEREDITARY BREAST AND GYNECOLOGICAL CANCER (HBGC) SYNDROME COHORT**

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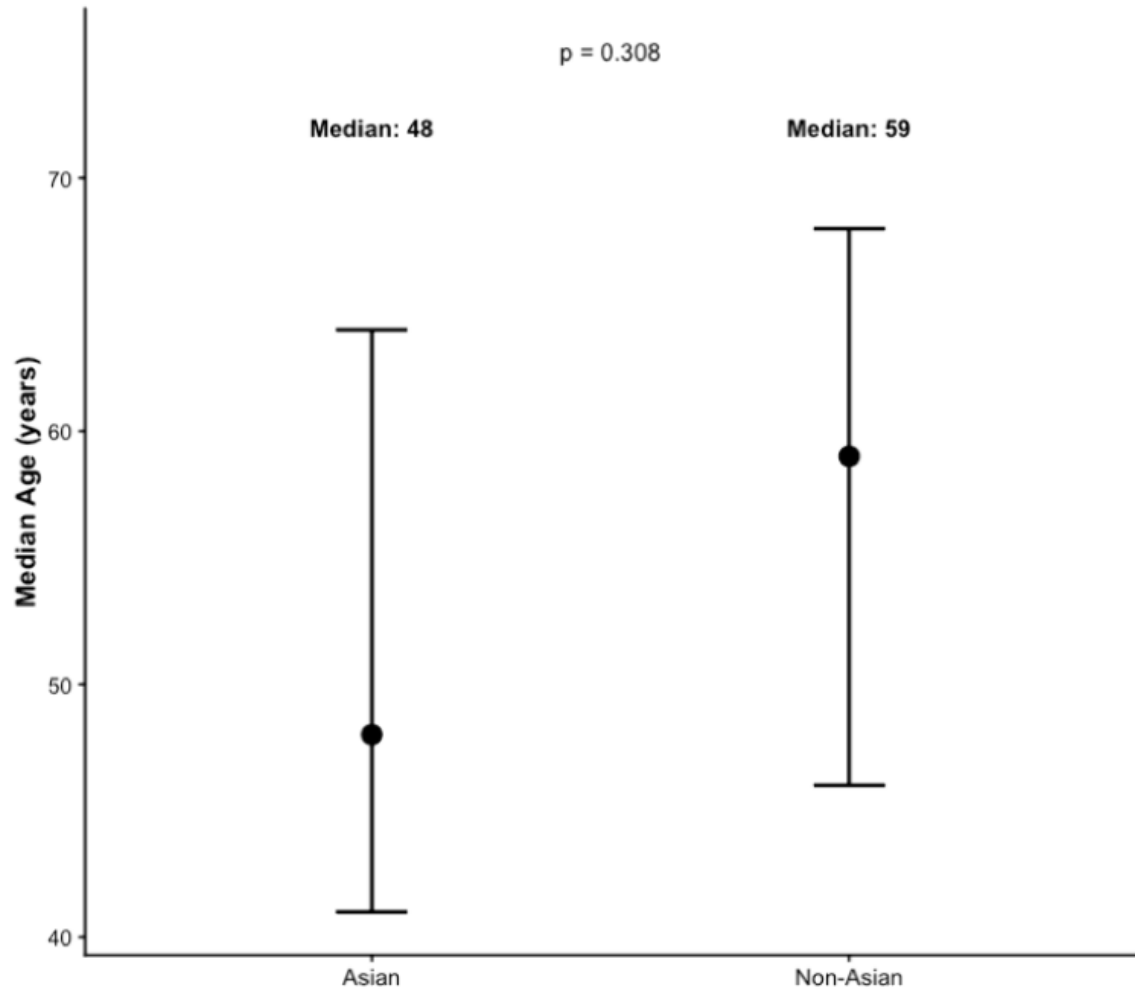
**Introduction:** Ancestry and population-specific biology composition influence cancer genomic outcome interpretability. Asians are often under-represented in U.S. clinical genetic research initiatives. We evaluated demographics and hereditary cancer outcomes in Asians compared to non-Asians within a large, diverse, tertiary-care cohort.

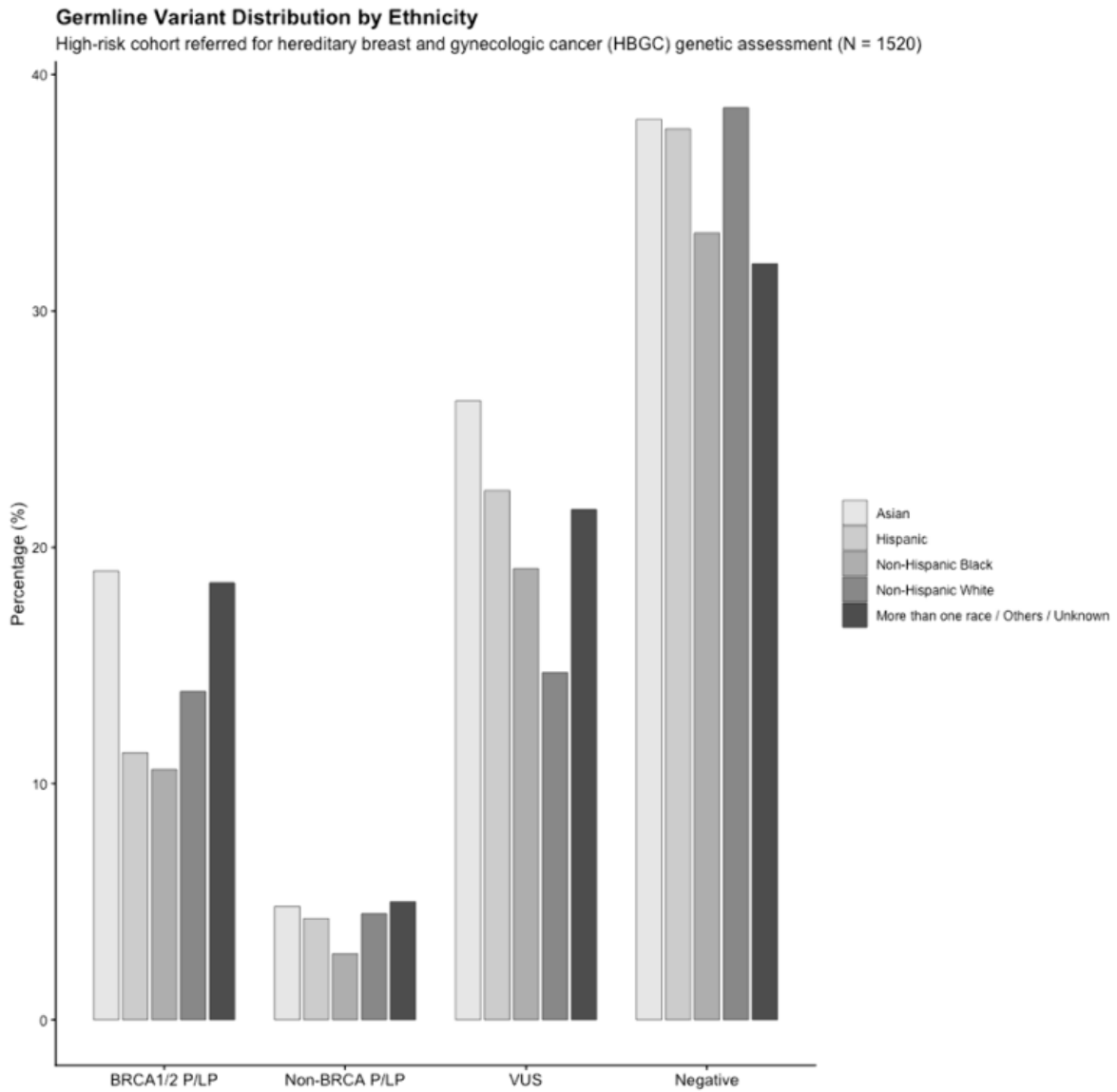
**Methods:** This retrospective cohort study analyzed 1520 high-risk individuals referred for HBGC genetic assessment (2019-2025). Among patients with cancer and known ethnicity (n=250), we compared age at diagnosis and germline variant profiles between Asians and non-Asians. Variants were classified according to American College of Medical Genetics (ACMG) criteria as *BRCA1/2* pathogenic/ likely pathogenic (P/LP), *non-BRCA* P/LP, VUS or negative. Variant distributions were assessed using chi-square testing and multivariable regression adjusting for clinical covariates.

**Results:** Asians comprised 5.5% (84/1520) of the cohort. Median age at first cancer diagnosis was earlier among Asians (48 years; IQR 41-64 vs. 59 years; IQR 46-68). Asians had higher *BRCA1* P/LP variants (14.3% vs. 8.1%; p=0.03), higher *BRCA1/2* P/LP variants (19.1 % vs. 12.7%; p=0.09) and VUS rates (26.2% vs. 17.8%; p=0.06), while *non-BRCA* P/LP prevalence remained similar (4.8% vs. 4.3%). Asians were more likely to present with a personal uterine cancer history (13.1% vs. 6.9%, p=0.02). On multivariable analysis, Asians showed a trend towards increased *BRCA1/2* P/LP detection (aRR=1.40, 95%CI: 0.90-2.19, p=0.101) and VUS (aRR=1.37, 95%CI: 0.94-1.99, p=0.136).

## Age at First Cancer Diagnosis by Ethnicity

Asian vs Non-Asian Comparison





**Conclusion/Implications:** Asians may experience earlier cancer onset, higher clinical risk with higher *BRCA1* P/LP and a consistent trend towards differences in germline variant distribution. These potential disparities in hereditary cancer presentation and variant interpretation require validation with more adequately powered studies.

**Topic:** AS05. Prevention & Early Detection / AS05b. Genetics

## **COSTS AND BENEFITS OF UNIVERSAL GERMLINE GENETIC TESTING IN BREAST CANCER FOR OVARIAN CANCER PREVENTION**

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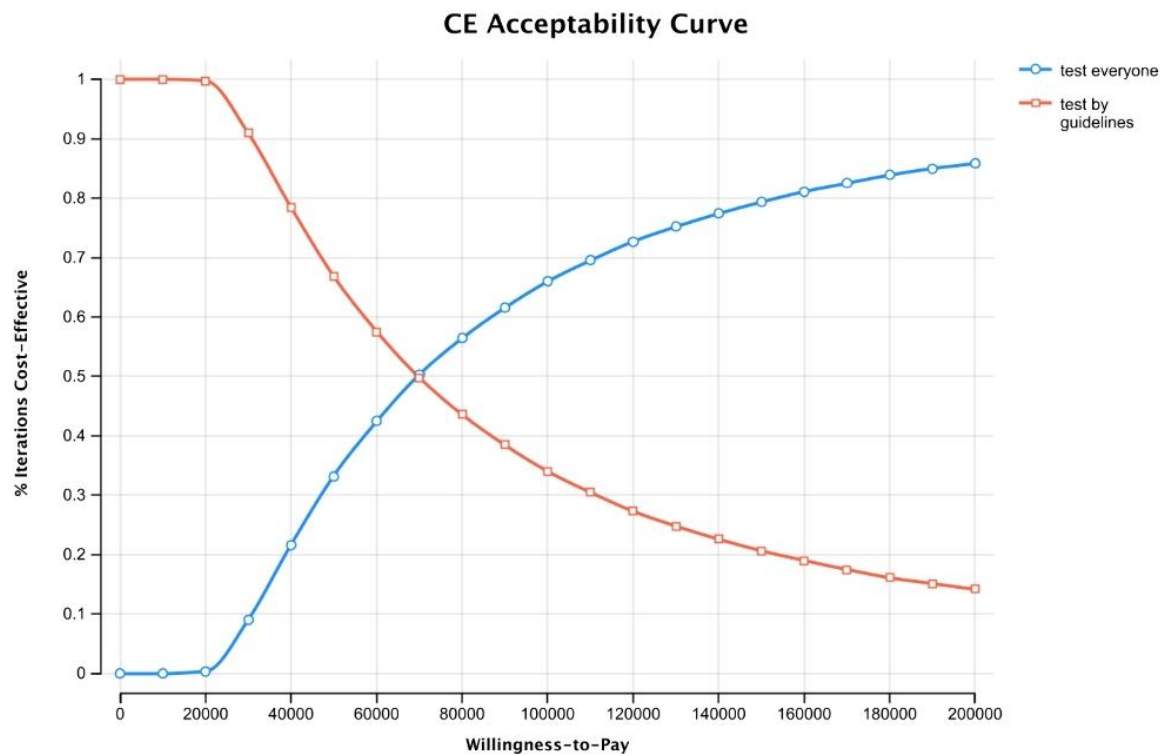
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**Introduction:** Current guidelines for germline genetic testing in breast cancer are based on tumor histology, ethnicity, and family history, potentially missing pathogenic variants associated with increased ovarian cancer risk. The objective was to conduct a cost-effectiveness analysis of universal germline testing in breast cancer patients in a Canadian context.

**Methods:** The Princess Margaret Cancer Centre “UNIFY” study offered genetic testing to breast cancer patients, irrespective of eligibility under current guidelines. From this study, a Markov Monte Carlo simulation model compared two testing strategies: (1) universal testing (everyone); (2) testing based on current guidelines. This analysis focused on genes associated with increased ovarian cancer risk (*BRCA1/2*, *RAD51C/D*, *BRIP1*, and *PALB2*). Health utilities and costs were derived from published Canadian sources. Sensitivity analyses were conducted for parameters of uncertainty. Monte Carlo simulation estimated numbers of new ovarian cancer diagnoses. The primary outcome measure was the incremental cost-effectiveness ratio (ICER).

**Results:** Among 1424 breast cancer patients who had genetic testing from September 2023-April 2025, only 769 (54.0%) were eligible according to current guidelines. Average age at diagnosis was 57.1 years (SD 12). Universal testing is cost-effective relative to guidelines with an ICER of \$69,635 per quality-adjusted life year gained. Monte Carlo simulation of 30,000 breast cancer patients diagnosed annually in Canada estimated fewer ovarian cancer diagnoses after universal testing compared to guideline-based testing (264 versus 301 cases,

respectively).



**Conclusion/Implications:** Universal germline genetic testing in breast cancer patients is cost-effective in the Canadian health care system by preventing ovarian cancer at acceptable cost.

**Topic:** AS06. Tumor Types / AS06f. Trophoblastic Disease

**PREGNANCY IN THE FIRST VERSUS SECOND YEAR OF FOLLOW-UP AFTER CHEMOTHERAPY FOR GESTATIONAL TROPHOBLASTIC NEOPLASIA: A REVIEW OF THE CHARING CROSS GESTATIONAL TROPHOBLASTIC DISEASE SERVICE.**

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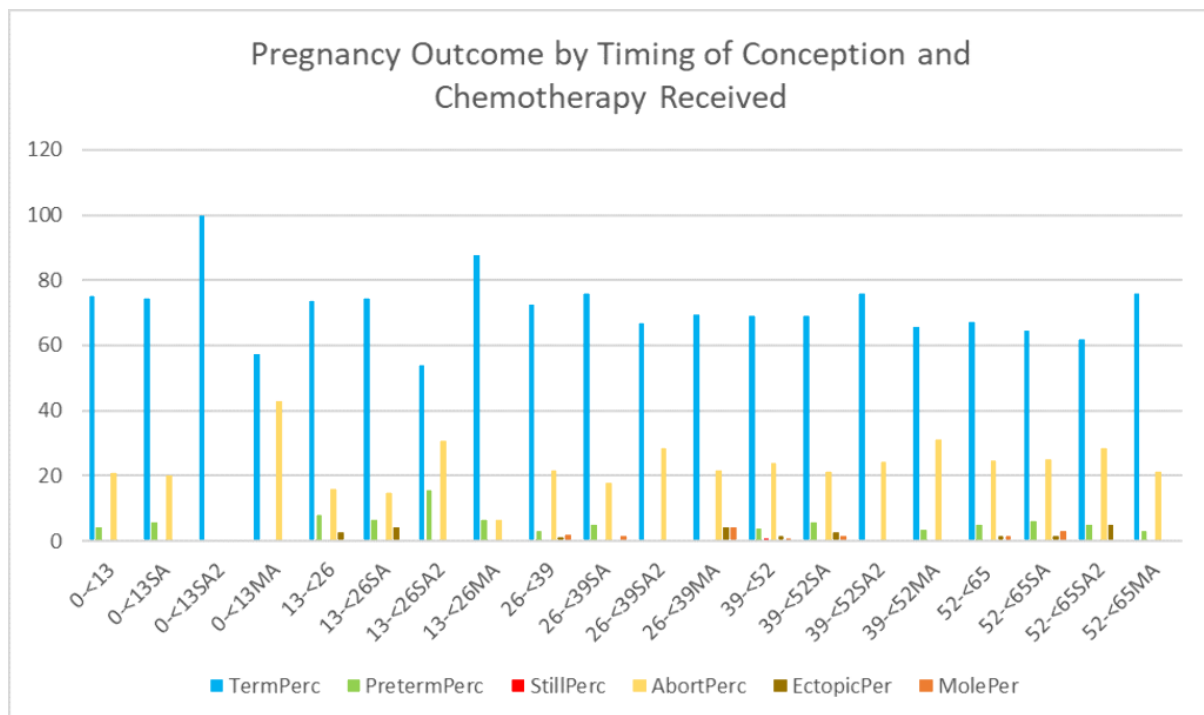
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**Introduction:** Following chemotherapy for gestational trophoblastic neoplasia (GTN), the recurrence risk is approximately 4–6%, with 75 – 85% of cases occurring within 12 months. Patients are therefore commonly advised to avoid pregnancy for at least 1 year to allow reliable surveillance using human chorionic gonadotropin (hCG). This study evaluates whether conception within the first year after chemotherapy is associated with increased risk of GTN recurrence or adverse outcomes.

**Methods:** We conducted a retrospective population-based cohort study of patients treated for GTN at the Charing Cross Gestational Trophoblastic Disease Service. Eligible patients conceived within 15 months of completing chemotherapy between January 2008 and January 2024.

**Results:** A total of 485 patients conceived within 15 months of treatment (363 within 12 months; 122 at 12–15 months). Most had low-risk disease (n=451). Pregnancy outcomes included 365 live births, one stillbirth, 97 miscarriages, 10 terminations, seven ectopic pregnancies, and five molar pregnancies. Five patients (1%) developed relapsed GTN; none were diagnosed during pregnancy, and no adverse obstetric outcomes were observed. All required multi-agent chemotherapy and two required hysterectomy. Conception occurred 4, 12, 35, 44, and 58 weeks after treatment, while all relapses were diagnosed more than 12 months after chemotherapy (range 13–48 months). All patients are currently in

remission.



**Conclusion/Implications:** Strikingly, conception within 12 months of completing chemotherapy for GTN was not associated with increased risk of adverse outcomes and may decrease risk of recurrence. These findings suggest that earlier pregnancy may be safe and support reconsideration of current recommendations delaying conception.

**FP008 / #176**

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**COMPARE TRIAL: CO-EXISTENT ENDOMETRIAL AND OVARIAN CARCINOMA:  
OPTIMIZATION OF TREATMENT THROUGH MOLECULAR AND PATHOLOGICAL  
REFINEMENT**

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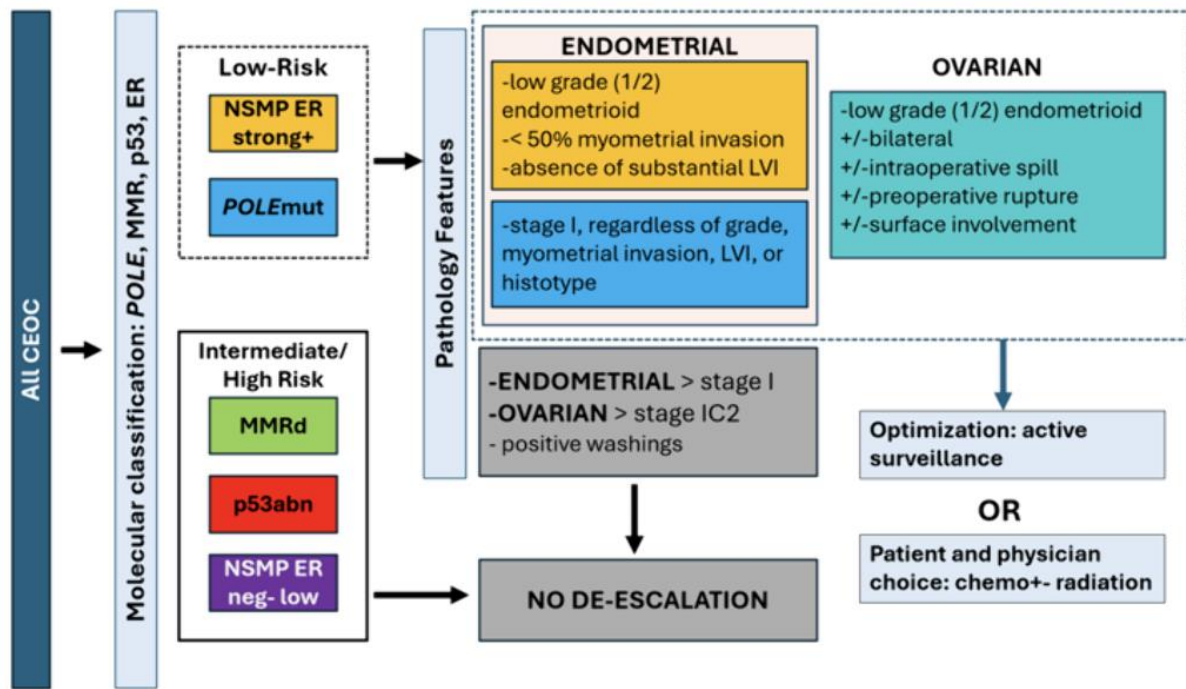
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**Introduction:** Co-existent endometrial and ovarian carcinomas (CEOC) are recognized as clonally related endometrial metastases, locally confined, with indolent clinical trajectories. New (2023) FIGO substage IA3 for CEOCs meeting specific pathological criteria supports de-escalated treatment, however clinical management varies widely. Recent publications demonstrate molecular stratification of CEOC identifies patients at low risk of recurrence.

**Objectives:** To determine if **molecular stratification** [favourable *POLE*mut and NSMP ER positive vs. intermediate-poor outcomes MMRd, p53abn, NSMP ER negative] **and pathology criteria** can identify CEOC patients at very low risk of recurrence who can safely be directed to treatment de-escalation. *Primary outcome:* 3-yr pelvic recurrence (PR). *Secondary outcomes:* 3-yr vaginal and distant recurrence, recurrence-free, cancer-specific, overall survival, patient reported outcomes, health economic impact.

**Trial**

**Design:**



Prospective, international, multi-centre phase II trial in molecularly and pathologically defined CEOCs at low risk of recurrence (**Figure 1**) with the option of receiving treatment de-escalation to active surveillance vs. patient/physician choice of adjuvant chemotherapy+/-radiation following surgery. N=68 patients recruited over 3-yrs, the upper limit of a one-sided 95% CI tolerated for 3-yr PR is 7% compared to the observed 3-year PR of 4%. Plan to enrol 90 patients as anticipate that ~75% of recruited patients will be directed to de-escalation.

**Feasibility and Implementation:** Engagement with GCIG and patient partners demonstrate international interest and feasibility of COMPARE, opening in Canada Q3 2026. Pragmatic molecular testing, imaging, and follow-up align with standard of care.

**Conclusion:** Prospective data from COMPARE will enable precision management of CEOCs by molecular and pathology criteria, reducing patient under- and over-treatment.

**FP009 / #1015**

**Topic:** AS06. *Tumor Types* / AS06b. *Endometrial & Uterine Corpus Cancers*

**FOCUSED PATHOLOGIC AND MOLECULAR TESTING ON ENDOMETRIAL BIOPSIES IDENTIFIES A SUBSET OF PATIENTS AT VERY LOW RISK OF RECURRENCE AND DEATH FROM ENDOMETRIAL CARCINOMA**

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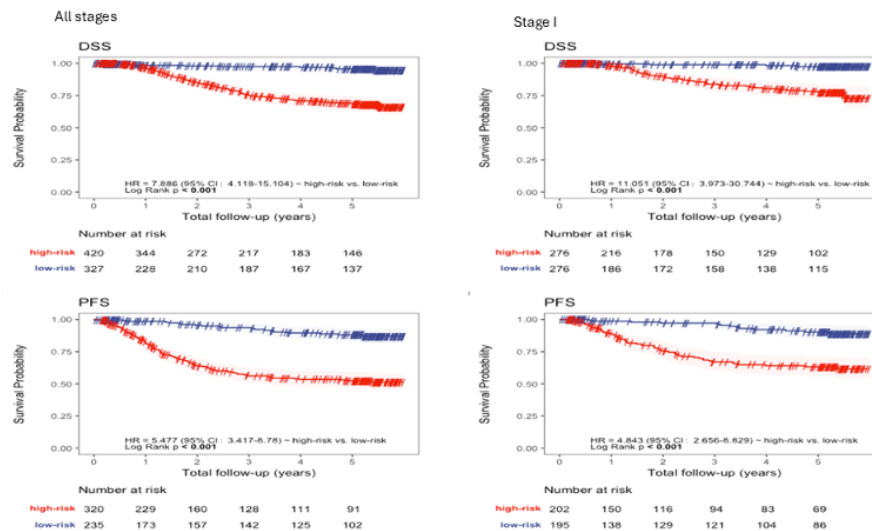
<sup>1</sup>University of British Columbia, Division Of Gynecologic Oncology, Department Of Gynecology And Obstetrics, Vancouver, Canada, <sup>2</sup>University of British Columbia, Department Of Molecular Oncology, Vancouver, Canada, <sup>3</sup>University of British Columbia, Department Of Pathology, Vancouver, Canada

**Introduction:** Access to NGS for *POLE* testing and endometrial cancer (EC) molecular classification is not universal and can be cost-prohibitive. Our objective was to validate a system using features available on diagnostic biopsy (grade, MMR, p53, ER) to identify patients at ultralow-risk ( $\leq 2\%$ ) of disease-specific death who may not need *POLE* testing and may be candidates for de-escalation

**Methods:** ECs diagnosed regionally 2018-2020 underwent data extraction for clinico/molecular pathology, and outcomes. ‘Low-risk’ (defined as grade 1/2, MMR-proficient, p53wt, ER-positive (3 thresholds;  $\geq 1\%$ ,  $\geq 10\%$ , or strong positive  $\geq 67\%$ ) versus ‘High-risk’ (any combination of grade 3 +/-MMRd+/-p53abn+/-ER-negative) cohorts were compared.

## Results:

Figure 1. Kaplan-Meier analysis demonstrating superior DSS and PFS for Low-vs. High-risk cohorts as assessed by preoperative parameters of grade, MMR, p53 and ER status (positive defined as  $\geq 10\%$  ER threshold shown) assessed across all patients/all stages (left) and within stage I (right) ( $p < 0.001$  for all)



Of 728 patients, 306 (42%) met Low-risk criteria, with marked differences in progression-free and disease-specific survival in Low- versus High-risk (58%) cohorts across all stages and within stage I (Figure 1). Although  $p < 0.001$  for survival analyses assessing 3 ER thresholds ( $\geq 1\%$ ,  $\geq 10\%$  or diffusely strong  $\geq 67\%$ ), the lowest disease-specific death rate (2%) was observed in patients with grade 1/2, MMRp, p53wt, strong ER+ positive tumors. Interrogation post risk-stratification revealed equal proportions of *POLE*mut ECs (7.7% and 8.2%) in Low- and High-risk subsets demonstrating *POLE*mut ECs were not driving differences in outcomes. LVI and stage assigned post-hysterectomy/staging did differ (10.8% vs. 28.3% positive; 88% vs. 67% Stage I) between cohorts but was not required for successful risk stratification.

**Conclusion/Implications:** Preoperative evaluation to identify grade 1/2, MMRp, p53wt, ER+ ECs identifies a Low-risk cohort of  $>40\%$  of ECs with markedly low recurrence and death rates. For patients who are Stage I post-surgery *POLE* testing may not be needed and de-escalation considered.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**REAL-WORLD MOLECULAR PROFILES, TREATMENT AND OUTCOMES BY HER2 IMMUNOHISTOCHEMISTRY SCORE IN PATIENTS WITH ADVANCED ENDOMETRIAL CANCER IN THE UNITED STATES**

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**Introduction:** HER2 overexpression is an important prognostic and predictive biomarker in endometrial cancer (EC). HER2-targeted therapies have shown efficacy in patients with HER2-expressing advanced EC (aEC), but testing rates remain low. To examine the clinical relevance of HER2 expression, we describe a large real-world population with aEC by immunohistochemistry (IHC) score.

**Methods:** This retrospective, observational cohort study used data from the Tempus AI multi-modal real-world oncology database to identify US adults diagnosed with aEC (stage III/IV, recurrent and newly diagnosed) who were mismatch repair (MMR) tested and initiated first-line treatment between January 1, 2018 to May 31, 2024. Patient characteristics, treatment patterns, real-world progression-free survival (rwPFS) and overall survival (rwOS) are reported for the subgroup with documented HER2 IHC results (N=300, 26.8%), representing a large real-world HER2-characterized aEC cohort.

**Results:** Serous adenocarcinoma was the most common histology across all HER2 IHC scores. The prevalence of p53-abnormality increased with higher HER2 IHC scores. No *POLE*-mutated tumors were identified among those tested (**Table 1**). Chemotherapy alone was the most common first-line treatment in IHC 0, 1+ and 2+ subgroups. For IHC 3+, approximately 75% received HER2-targeted therapy plus chemotherapy (without additional agents), and median rwPFS from start of first-line was longer, and 12-month rwOS higher, than in IHC 0–2+ (**Table 2**).

**Table 1:** Patient characteristics

|                                      | IHC 0<br>N=131      | IHC 1+<br>N=62      | IHC 2+<br>N=75      | IHC 3+<br>N=32      |
|--------------------------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Age at index, years</b>           |                     |                     |                     |                     |
| Median (Q1–Q3)                       | 65.8<br>(60.6–69.8) | 67.5<br>(62.5–70.8) | 68.4<br>(63.5–73.7) | 66.6<br>(64.3–70.9) |
| <b>Race, n (%)</b>                   |                     |                     |                     |                     |
| White                                | 66 (50.4)           | 30 (48.4)           | 40 (53.3)           | 17 (53.1)           |
| Black                                | 22 (16.8)           | 13 (21.0)           | 8 (10.7)            | 7 (21.9)            |
| Asian                                | 4 (3.1)             | 4 (6.5)             | 0                   | 0                   |
| Other                                | 5 (3.8)             | 1 (1.6)             | 3 (4.0)             | 1 (3.1)             |
| Unknown                              | 34 (26.0)           | 14 (22.6)           | 24 (32.0)           | 7 (21.9)            |
| <b>Status, n (%)</b>                 |                     |                     |                     |                     |
| Newly diagnosed                      | 121 (92.4)          | 60 (96.8)           | 71 (94.7)           | 31 (96.9)           |
| <b>Histology, n (%)</b>              |                     |                     |                     |                     |
| Serous adenocarcinoma                | 51 (38.9)           | 32 (51.6)           | 39 (52.0)           | 25 (78.1)           |
| Endometrioid carcinoma               | 42 (32.1)           | 12 (19.4)           | 12 (16.0)           | 2 (6.2)             |
| Carcinosarcoma                       | 19 (14.5)           | 6 (9.7)             | 8 (10.7)            | 2 (6.2)             |
| Adenocarcinoma                       | 6 (4.6)             | 6 (9.7)             | 5 (6.7)             | 1 (3.1)             |
| Clear cell adenocarcinoma            | 5 (3.8)             | 1 (1.6)             | 6 (8.0)             | 1 (3.1)             |
| Carcinoma, undifferentiated          | 5 (3.8)             | 0                   | 0                   | 0                   |
| Carcinoma                            | 3 (2.3)             | 2 (3.2)             | 1 (1.3)             | 0                   |
| Other                                | 0                   | 3 (4.8)             | 4 (5.3)             | 1 (3.1)             |
| <b>ProMisE classification, n (%)</b> |                     |                     |                     |                     |
| dMMR                                 | 15 (11.5)           | 2 (3.2)             | 5 (6.7)             | 2 (6.2)             |
| POLEmut                              | 0                   | 0                   | 0                   | 0                   |
| p53-abnormal                         | 60 (45.8)           | 33 (53.2)           | 44 (58.7)           | 21 (65.6)           |
| NSMP                                 | 22 (16.8)           | 12 (19.4)           | 7 (9.3)             | 0                   |
| Unknown (unclassifiable)             | 34 (26.0)           | 15 (24.2)           | 19 (25.3)           | 9 (28.1)            |

“Other” refers to races not otherwise categorized and multi-racial entries not disaggregated into separate standard categories. “Unknown” means race was not documented or the patient declined to provide. dMMR, mismatch repair deficient; IHC, immunohistochemistry; NSMP, no specific molecular profile; Q, quartile.

**Table 2:** Treatment patterns and outcomes by HER2 IHC score

|                                                                 | IHC 0<br>N=131      | IHC 1+<br>N=62      | IHC 2+<br>N=75      | IHC 3+<br>N=32      |
|-----------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Most common 1L treatments, %</b>                             | <b>N=131</b>        | <b>N=62</b>         | <b>N=75</b>         | <b>N=32</b>         |
| Chemotherapy alone                                              | 71.8                | 69.4                | 58.7                | 21.9                |
| Chemotherapy + ICI                                              | 19.1                | 21.0                | 13.3                | 0                   |
| Biologic + chemotherapy                                         | 5.3                 | 3.2                 | 22.7                | 75.0                |
| ICI + TKI                                                       | 1.5                 | 1.6                 | 2.7                 | 0                   |
| <b>Most common 2L treatments, %</b>                             | <b>N=71</b>         | <b>N=27</b>         | <b>N=39</b>         | <b>N=15</b>         |
| ICI + TKI                                                       | 39.4                | 51.9                | 30.8                | 26.7                |
| Chemotherapy alone                                              | 18.3                | 22.2                | 28.2                | 13.3                |
| ICI alone                                                       | 14.1                | 7.4                 | 5.1                 | 0                   |
| Chemotherapy + ICI                                              | 8.5                 | 3.7                 | 10.3                | 13.3                |
| Biologic + chemotherapy                                         | 5.6                 | 3.7                 | 15.4                | 6.7                 |
| <b>HER2-targeted therapy, %</b>                                 |                     |                     |                     |                     |
| Administered in 1L                                              | 0.8                 | 0                   | 20.0                | 78.1                |
| Administered in 2L*                                             | 0                   | 0                   | 7.7                 | 46.7                |
| <b>Outcomes assessed from start of 1L treatment</b>             |                     |                     |                     |                     |
| <b>Duration of follow-up from start of 1L treatment, months</b> |                     |                     |                     |                     |
| Median (Q1–Q3)                                                  | 12.6<br>(7.3–24.3)  | 14.5<br>(8.6–24.7)  | 11.9<br>(8.3–23.7)  | 17.5<br>(9.3–28.6)  |
| <b>rwPFS†</b>                                                   |                     |                     |                     |                     |
| Median, months (95% CI)                                         | 11.2<br>(9.9–13.4)  | 12.4<br>(9.8–14.7)  | 11.5<br>(10.2–13.3) | 17.0<br>(8.7–20.9)  |
| 12-month rwPFS rate, %<br>(95% CI)                              | 47.4<br>(38.0–56.3) | 53.4<br>(39.7–65.3) | 44.0<br>(32.0–55.4) | 58.3<br>(37.3–74.4) |
| <b>rwOS</b>                                                     |                     |                     |                     |                     |
| 12-month rwOS rate, %<br>(95% CI)                               | 88.3<br>(80.6–93.1) | 87.5<br>(75.5–93.9) | 86.3<br>(75.3–92.7) | 96.4<br>(77.2–99.5) |

\*Percentages are calculated among patients who received 2L therapy; †Defined as a death from any cause, evidence of new metastasis, evidence of recurrence, or evidence of progressive disease. rwPFS and rwOS were analyzed by Kaplan–Meier methodology. 1L, first-line; 2L, second-line; CI, confidence interval; ICI, immune checkpoint inhibitor; IHC, immunohistochemistry; Q, quartile; rwOS, real-world overall survival; rwPFS, real-world progression-free survival; TKI, tyrosine kinase inhibitor.

**Conclusion/Implications:** Treatment patterns and outcomes in aEC varied by HER2 IHC subgroup score and may reflect a benefit associated with HER2-targeted therapies. These findings reinforce the clinical relevance of routine HER2 testing and support further evaluation of HER2-directed strategies in earlier lines of therapy.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

## **CUMULATIVE INCIDENCE OF VENOUS THROMBOEMBOLISM IN PATIENTS WITH UTERINE CANCER**

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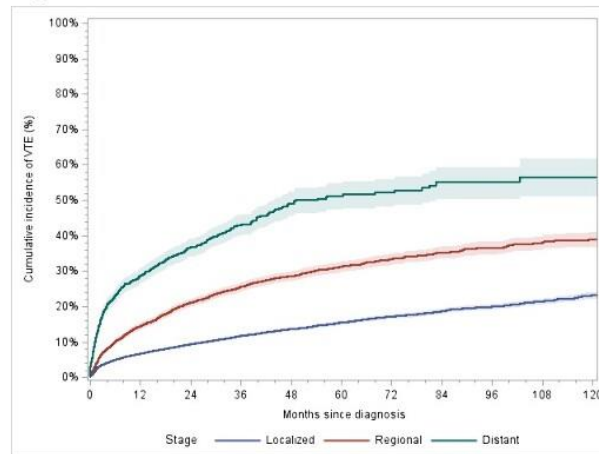
**Introduction:** Uterine cancer is associated with a 4–7-fold increased risk of venous thromboembolism (VTE). The stage-specific burden of VTE in uterine cancer is not well characterized. We aimed to estimate the cumulative incidence of VTE by stage at diagnosis.

**Methods:** We conducted a retrospective cohort study using the Surveillance, Epidemiology, and End Results (SEER)-Medicare database. Women aged ≥65 years diagnosed with uterine cancer from 2008–2017 were included and followed for up to 10 years. VTE events, including deep vein thrombosis or pulmonary embolism, were identified using Medicare claims. Patients with baseline VTE (defined as VTE within 6 months prior to cancer diagnosis) were excluded. Stage-specific cumulative incidence of VTE (localized, regional, distant) was estimated with 95% confidence intervals.

**Results:** Among 25,887 patients, 683 (2.6%) had baseline VTE and were excluded. Of the remaining 25,204 patients, 71.4% had localized disease, 21.2% regional disease, and 7.5% distant disease. Over 10 years, 4,907 patients (19.5%) developed VTE. At 1-year, cumulative incidence was 6.6% (95% CI, 6.2–7.0%) for localized disease, 14.4% (95% CI, 13.4–15.4%) for regional disease, and 28.5% (95% CI, 26.3–30.7%) for distant disease. At 5 years, incidence increased to 15.4%, 31.2%, and 51.1%, and by 10 years to 23.1%, 38.9%, and 56.5%,

respectively.

Figure 1



**Conclusion/Implications:** VTE is common across all stages of uterine cancer, with substantially higher incidence in patients with distant disease. Risk diverges early after diagnosis and remains persistently elevated over time, highlighting the need for improved risk stratification and preventive strategies, particularly during the initial treatment period.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**OUTCOMES OF FIRST-LINE IMMUNOTHERAPY PLUS CHEMOTHERAPY OR CHEMOTHERAPY ALONE BASED ON MISMATCH REPAIR STATUS: RESULTS FROM A US-BASED ADVANCED/RECURRENT ENDOMETRIAL CANCER POPULATION**

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**Introduction:** Although Phase III trials have shown substantial benefit of first-line (1L) immunotherapy (IO)+chemotherapy (chemo) versus chemo-alone for patients with mismatch repair-deficient (dMMR) advanced/recurrent endometrial cancer (aEC), results have been present (but less pronounced) in those with mismatch repair-proficient (pMMR)-disease. Additionally, acquired resistance to IO may reduce the effectiveness of approved 2L IO-based therapies (eg, IO+tyrosine kinase inhibitor) for pMMR-disease. Our analysis explores real-world clinical effectiveness of 1L IO+chemo versus chemo-alone for aEC.

**Methods:** Medical data in the Tempus (Chicago, IL, US) database was used to assess progression-free survival (PFS) and overall survival (OS) in patients with aEC who received 1L IO+chemo or chemo, stratified by MMR (immunohistochemistry)/microsatellite-stability (next-generation sequencing) status. Chemo for both cohorts was carboplatin+paclitaxel.

**Results:** Between 17/9/2019 and 31/8/2024, 290 patients received IO+chemo and 787 received chemo; characteristics were similar between groups (**Table-1**). Among the IO+chemo group, 76%/23%/1% received pembrolizumab/dostarlimab/durvalumab, respectively. PFS was longer in the IO+chemo group among all-comer patients (HR=0.771;p=0.0256) and the dMMR-cohort (HR=0.405;p=0.0008), but not the pMMR-cohort (HR=0.955;p=0.7227) (**Table-2**). OS favored IO+chemo among the dMMR-cohort (HR=0.516;p=0.0325) but not among all-comers (HR=0.962; p=0.7428) or the pMMR-cohort (HR=1.114;p=0.3913). PFS/OS trends were similar in the pMMR-cohort, irrespective of *TP53*-mutation status.

**Conclusion/Implications:** In this real-world analysis, 1L IO+chemo was not associated with improved PFS/OS among patients with pMMR aEC versus chemo-alone, raising questions about the benefit of adding IO to frontline chemotherapy for pMMR-disease/implications for treatment-sequencing. Given the limitations of retrospective real-world data, our findings should be interpreted with caution and do not support definitive conclusions; additional study is warranted.

**Table-1**

| Patient characteristic, n (%)                                | All patients           |                         |
|--------------------------------------------------------------|------------------------|-------------------------|
|                                                              | IO+chemo (n=290)       | Chemo (n=787)           |
| <b>Age group</b>                                             |                        |                         |
| <65 years                                                    | 162 (55.9)             | 382 (48.5)              |
| ≥65 years                                                    | 125 (43.1)             | 396 (50.3)              |
| Unknown                                                      | 3 (1.0)                | 9 (1.1)                 |
| <b>Histology</b>                                             |                        |                         |
| Endometrioid                                                 | 140 (48.3)             | 344 (43.7)              |
| Serous                                                       | 70 (24.1)              | 201 (25.5)              |
| Carcinosarcoma                                               | 29 (10.0)              | 74 (9.4)                |
| Clear cell adenocarcinoma                                    | 20 (6.9)               | 32 (4.1)                |
| Other                                                        | 31 (10.7)              | 136 (17.3)              |
| <b>Disease stage at initial diagnosis</b>                    |                        |                         |
| 1                                                            | 64 (22.1)              | 162 (20.6)              |
| 2                                                            | 9 (3.1)                | 22 (2.8)                |
| 3                                                            | 24 (8.3)               | 81 (10.3)               |
| 4                                                            | 193 (66.6)             | 522 (66.3)              |
| <b>Eastern Cooperative Oncology Group performance status</b> |                        |                         |
| 0                                                            | 115 (39.7)             | 214 (27.2)              |
| 1                                                            | 86 (29.7)              | 223 (28.3)              |
| ≥2                                                           | 19 (6.6)               | 78 (9.9)                |
| Unknown                                                      | 70 (24.1)              | 272 (34.6)              |
| <b>MMR status</b>                                            |                        |                         |
| dMMR/microsatellite instability-high                         | 68 (23.4)              | 131 (16.6)              |
| pMMR/non-microsatellite instability-high                     | 214 (73.8)             | 595 (75.6)              |
| Unknown                                                      | 8 (2.8)                | 61 (7.8)                |
| <b>TP53 status</b>                                           |                        |                         |
| Mutated                                                      | 144 (49.7)             | 423 (53.7)              |
| Wild type                                                    | 138 (47.6)             | 303 (38.5)              |
| Unknown                                                      | 8 (2.8)                | 61 (7.8)                |
| <b>Patients who received subsequent 2L therapy</b>           | 77 (26.6)              | 386 (49.0)              |
| Patients who received 2L lenvatinib + pembrolizumab          | 27 (35.1) <sup>a</sup> | 152 (39.4) <sup>a</sup> |

<sup>a</sup>Out of patients who received subsequent 2L therapy.

Table-2

|                                | All-comer patients  |             | dMMR patients <sup>a</sup> |            | pMMR patients <sup>a</sup> |             |                     |             |                     |             |
|--------------------------------|---------------------|-------------|----------------------------|------------|----------------------------|-------------|---------------------|-------------|---------------------|-------------|
|                                |                     |             |                            |            | All                        |             | TP53 mutated        |             | TP53 wild type      |             |
|                                | IO+chemo            | Chemo       | IO+chemo                   | Chemo      | IO+chemo                   | Chemo       | IO+chemo            | Chemo       | IO+chemo            | Chemo       |
| <b>Median PFS,<sup>b</sup></b> | n=166               | n=373       | n=48                       | n=68       | n=118                      | n=302       | n=69                | n=190       | n=49                | n=109       |
| Months                         | 9.7                 | 7.4         | 13.2                       | 5.0        | 9.3                        | 7.9         | 9.2                 | 7.2         | 9.4                 | 9.7         |
| (95% CI)                       | (8.3-12.5)          | (6.3-8.4)   | (9.7-NR)                   | (2.3-7.8)  | (6.8-11.0)                 | (6.5-9.3)   | (6.1-11.6)          | (5.8-8.6)   | (5.9-14.0)          | (6.5-12.8)  |
| HR (95% CI)                    | 0.771 (0.614-0.969) |             | 0.405 (0.239-0.686)        |            | 0.955 (0.741-1.231)        |             | 0.902 (0.657-1.239) |             | 1.109 (0.719-1.712) |             |
| P                              | 0.0256              |             | 0.0008                     |            | 0.7227                     |             | 0.5252              |             | 0.6395              |             |
| <b>Median OS,<sup>b</sup></b>  | n=213               | n=570       | n=53                       | n=103      | n=160                      | n=463       | n=99                | n=304       | n=61                | n=152       |
| Months                         | 17.3                | 16.1        | NR                         | 12.9       | 16.4                       | 16.5        | 15.9                | 14.7        | 18.7                | 22.1        |
| (95% CI)                       | (15.0-19.1)         | (14.4-19.1) | (13.7-NR)                  | (8.4-24.4) | (14.0-18.5)                | (14.6-19.2) | (13.2-17.4)         | (12.4-17.5) | (9.7-24.4)          | (15.9-27.7) |
| HR (95% CI)                    | 0.962 (0.766-1.210) |             | 0.516 (0.281-0.946)        |            | 1.114 (0.870-1.426)        |             | 1.101 (0.818-1.481) |             | 1.202 (0.766-1.887) |             |
| P                              | 0.7428              |             | 0.0325                     |            | 0.3913                     |             | 0.5269              |             | 0.4234              |             |

<sup>a</sup>Patients with missing MMR status were excluded; <sup>b</sup>analyses exclude patients who had events (PFS: disease progression/death; OS: death) before next generation sequencing was performed. For PFS, information on the frequency of tumor assessments were not available, and may have varied due to the real-world nature of these analyses. NR, not reached.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**REAL-WORLD OUTCOMES OF DOSTARLIMAB PLUS CHEMOTHERAPY IN PRIMARY ADVANCED OR RECURRENT ENDOMETRIAL CANCER BY MISMATCH REPAIR STATUS FROM THE FLATIRON DATABASE**

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**Introduction:** Dostarlimab plus carboplatin-paclitaxel (CP) demonstrated statistically significant and clinically meaningful improvements in PFS and OS in patients with primary advanced/recurrent endometrial cancer (pA/R EC) in RUBY (NCT03981796). This study evaluated the real-world effectiveness of dostarlimab plus chemotherapy in patients with pA/R EC, by mismatch repair (MMR) status.

**Methods:** This retrospective, observational study utilized data from the US Flatiron Health Database in adult ( $\geq 18$  yrs) patients who received first-line (1L) dostarlimab plus chemotherapy for pA/R EC between May 2023 and August 2025. Kaplan-Meier methods were used to assess time to next treatment (TTNT) and OS.

**Results:** Of 414 patients with confirmed biomarker status: 125 (30.2%) MMR deficient/high microsatellite instability (dMMR/MSI-H) and 289 (69.8%) MMR proficient/microsatellite stable (MMRp/MSS). Median follow-up was 10.4 and 7.7 months, respectively. Median age was 67 and 66 years in dMMR/MSI-H and MMRp/MSS subgroups, respectively; 62.4% and 47.8% were White; 70.4% and 76.4% had ECOG PS 0/1; 72.0% and 60.6% had stage III disease at diagnosis; and 78.4% and 34.3% had endometrioid carcinoma, 5.6% and 27.7% had carcinosarcoma. In dMMR/MSI-H patients, 12-month TTNT and OS rates were 80.6% and 88.3%, respectively (**Figure 1**). In MMRp/MSS patients, 12-month TTNT and OS rates were 70.0% and 82.6%, respectively (**Figure 2**). Updated data with additional follow-up will be presented upon availability.

**Conclusion/Implications:** This real-world study from a large, diverse US database of patients who received 1L dostarlimab plus CP for pA/C EC paralleled efficacy outcomes with those observed in RUBY, supporting use of this regimen in dMMR/MSI-H and MMRp/MSS populations.

Figure 1. Kaplan-Meier Curve for TTNT and OS in Patients With dMMR/MSI-H Status

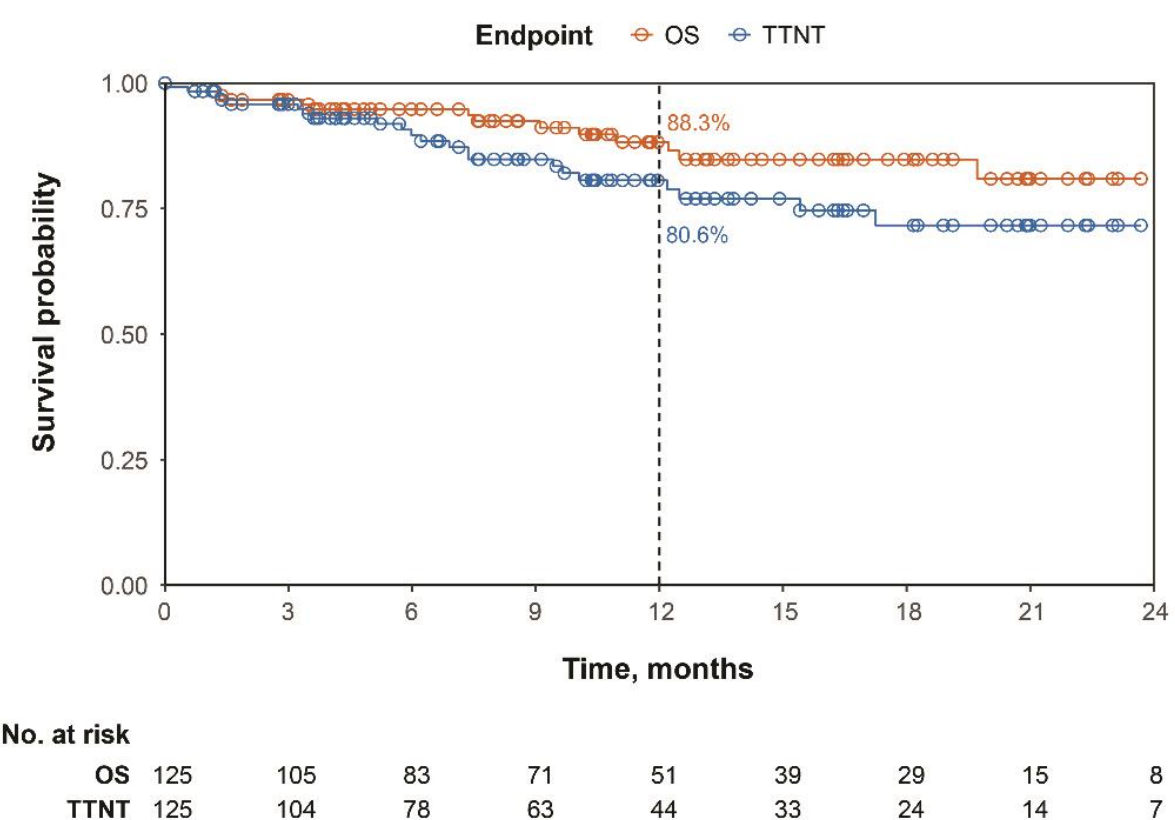
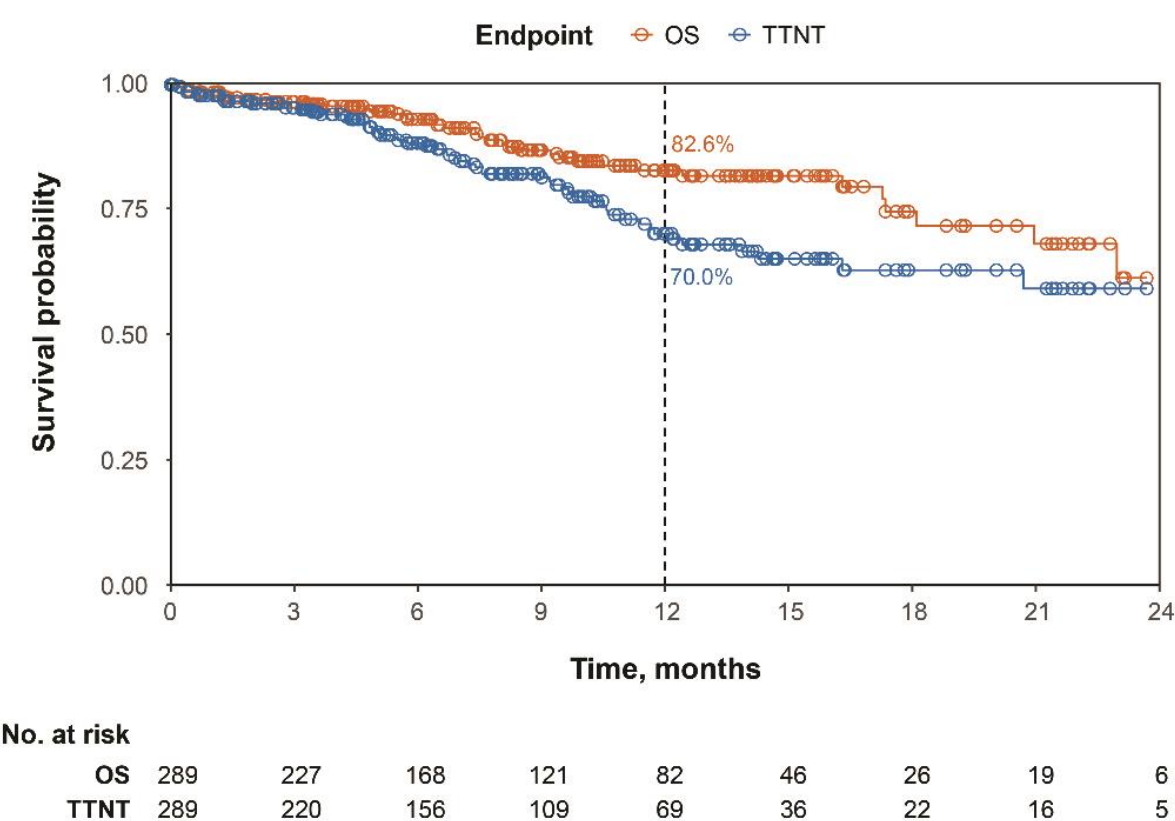


Figure 2. Kaplan-Meier Curve for TTNT and OS in Patients With MMRp/MSS Status



**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**EARLY-STAGE NO-SPECIFIC MOLECULAR PROFILE (NSMP) ENDOMETRIAL CANCER: CLINICOPATHOLOGICAL AND MOLECULAR PREDICTORS OF RECURRENCE**

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**Introduction:** No-specific molecular profile (NSMP) endometrial cancer (EC) represents the most heterogeneous molecular subgroup. Diverse biomarkers have been explored to better define its risk profile. The aim of this study was to characterize the NSMP-EC population and identify factors associated with recurrence.

**Methods:** Among all early-stage EC undergoing surgical staging and molecular classification at a tertiary-care referral center (04/2019–12/2025), early-stage (FIGO 2023 I-II) NSMP-ECs were identified. Molecular profiling included MMR-proteins, p53, L1CAM, and estrogen receptor (ER) immunohistochemistry, microsatellite instability evaluation, and Next Generation Sequencing of 96 cancer-related genes, including *POLE*, *TP53*, and *CTNNB1*. Patients were classified according to 2025 ESGO/ESTRO/ESP guidelines. Clinicopathological characteristics between recurrence groups were compared using Welch's t-test, Wilcoxon rank-sum test, and Fisher's exact test.

**Results:** Overall, 246/730 (33.7%) ECs were early-stage NSMP-ECs (Table 1). The majority were endometrioid (96.3%), low-grade (91.1%), FIGO stage IA (74.4%), with no/focal LVSI (98.0%), myometrial invasion <50% (76.4%), ER-positive (82.5%), and *CTNNB1* wild-type (65.9%). According to 2025 ESGO/ESTRO/ESP guidelines, 67.8% were classified as low-risk. Median follow-up was 38.0 months (IQR 21–59). Recurrence occurred in 21 patients (8.5%). The recurrence group showed significantly higher rates of myometrial invasion ≥50% (47.6% vs. 21.3%; p=0.013) and *CTNNB1* mutation (57.1% vs. 32.0%; p=0.029). ER status, LVSI, histotype, grade, and age did not differ significantly

between groups.

**Table 1.** Clinicopathologic characteristic of the NSMP endometrial cancer patients.

| Characteristic                           | Overall<br>N = 246 <sup>1</sup> | Recurrence Yes<br>N = 21 <sup>1</sup> | Recurrence No<br>N = 225 <sup>1</sup> | P-value <sup>2</sup> |
|------------------------------------------|---------------------------------|---------------------------------------|---------------------------------------|----------------------|
| <b>Age, mean (years) ± SD</b>            | 58.7 ± 12.8                     | 60.2 ± 12.8                           | 58.5 ± 12.8                           | 0.573                |
| <b>BMI, mean (kg/m<sup>2</sup>) ± SD</b> | 28.8 ± 7.7                      | 27.0 ± 9.1                            | 29.0 ± 7.6                            | 0.351                |
| <b>Histotype</b>                         |                                 |                                       |                                       | 0.558                |
| Endometrioid                             | 237 (96.3%)                     | 20 (95.2%)                            | 217 (96.4%)                           |                      |
| Other                                    | 9 (3.7%)                        | 1 (4.8%)                              | 8 (3.6%)                              |                      |
| <b>Grade</b>                             |                                 |                                       |                                       | 0.103                |
| Low grade (G1-2)                         | 224 (91.1%)                     | 17 (81.0%)                            | 207 (92.0%)                           |                      |
| High grade (G3)                          | 22 (8.9%)                       | 4 (19.0%)                             | 18 (8.0%)                             |                      |
| <b>FIGO stage (2023)</b>                 |                                 |                                       |                                       | 0.057                |
| IA1                                      | 68 (27.6%)                      | 2 (9.5%)                              | 66 (29.3%)                            |                      |
| IA2                                      | 102 (41.5%)                     | 7 (33.3%)                             | 95 (42.2%)                            |                      |
| IA3                                      | 0 (0.0%)                        | 0 (0.0%)                              | 0 (0.0%)                              |                      |
| IB                                       | 35 (14.2%)                      | 6 (28.6%)                             | 29 (12.9%)                            |                      |
| IC                                       | 4 (1.6%)                        | 0 (0.0%)                              | 4 (1.8%)                              |                      |
| IIA                                      | 14 (5.7%)                       | 2 (9.5%)                              | 12 (5.3%)                             |                      |
| IIB                                      | 4 (1.6%)                        | 0 (0.0%)                              | 4 (1.8%)                              |                      |
| IIC                                      | 19 (7.7%)                       | 4 (19.0%)                             | 15 (6.7%)                             |                      |
| <b>Myometrial invasion</b>               |                                 |                                       |                                       | 0.013                |
| <50%                                     | 188 (76.4%)                     | 11 (52.4%)                            | 177 (78.7%)                           |                      |
| ≥50%                                     | 58 (23.6%)                      | 10 (47.6%)                            | 48 (21.3%)                            |                      |
| <b>LVI</b>                               |                                 |                                       |                                       | >0.999               |
| None/focal                               | 241 (98.0%)                     | 21 (100.0%)                           | 220 (97.8%)                           |                      |
| Substantial                              | 5 (2.0%)                        | 0 (0.0%)                              | 5 (2.2%)                              |                      |
| <b>Estrogen receptor (ER)</b>            |                                 |                                       |                                       | 0.453                |
| Positive                                 | 203 (82.5%)                     | 16 (76.2%)                            | 187 (83.1%)                           |                      |
| Negative                                 | 13 (5.3%)                       | 2 (9.5%)                              | 11 (4.9%)                             |                      |
| Not done/Not feasible                    | 30 (12.2%)                      | 3 (14.3%)                             | 27 (12.0%)                            |                      |
| <b>CTNNB1</b>                            |                                 |                                       |                                       | 0.029                |
| Wild type                                | 162 (65.9%)                     | 9 (42.9%)                             | 153 (68.0%)                           |                      |
| Mutated                                  | 84 (34.1%)                      | 12 (57.1%)                            | 72 (32.0%)                            |                      |
| <b>ESGO/ESTRO/ESP 2025 risk class</b>    |                                 |                                       |                                       | 0.031                |
| Low                                      | 154 (67.8%)                     | 8 (42.1%)                             | 146 (70.2%)                           |                      |
| Intermediate                             | 38 (16.7%)                      | 6 (31.6%)                             | 32 (15.4%)                            |                      |
| High-Intermediate                        | 5 (2.2%)                        | 0 (0.0%)                              | 5 (2.4%)                              |                      |
| High                                     | 23 (10.1%)                      | 5 (26.3%)                             | 18 (8.7%)                             |                      |
| Advanced/metastatic                      | 0 (0.0%)                        | 0 (0.0%)                              | 0 (0.0%)                              |                      |
| Undetermined                             | 7 (3.1%)                        | 0 (0.0%)                              | 7 (3.4%)                              |                      |
| <b>Follow-up, median (months)</b>        | 38.0 (21.0-59.0)                | 67.0 (34.0-115.0)                     | 36.0 (18.0-56.0)                      | <0.001               |

Note: <sup>1</sup>Data reported as n (%) or median (IQR) unless otherwise indicated. <sup>2</sup>Welch two sample t-test; Fisher's exact test; Wilcoxon rank sum test. Immunohistochemical staining was done for ER and considered ER positive if ≥10%, CTNNB1 exon 3 mutations were assessed using DNA sequencing.

**Conclusion/Implications:** In this single-center cohort of early-stage NSMP-EC, the recurrences were significantly associated with deeper myometrial invasion and *CTNNB1* mutation. These findings support refined risk stratification within the NSMP subgroup.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**AZENOSERTIB MONOTHERAPY IN PATIENTS WITH RECURRENT OR PERSISTENT UTERINE SEROUS CARCINOMA: RESULTS FROM A PHASE 2 CLINICAL TRIAL**

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**Introduction:** Azenosertib is an investigational, potential best-in-class, highly selective, oral WEE1 inhibitor. We present results from a Phase 2 study of azenosertib monotherapy in recurrent/persistent uterine serous carcinoma (USC).

**Methods:** TETON (NCT04814108; GOG-3065) was a Phase 2 study, evaluating efficacy and safety of azenosertib in recurrent/persistent USC. Patients had histologically confirmed recurrent/persistent USC, ECOG PS 0-1, measurable disease per RECIST v1.1, received platinum-based chemotherapy and a PD-(L)1 inhibitor. In Part 1a, azenosertib 200 mg or 300 mg was administered once daily (QD) continuously. In Part 1b, azenosertib 400 mg was administered QD intermittently 5 days on, 2 days off (5:2). Primary objective was safety/tolerability; secondary objectives included anti-tumor activity by objective response rate (ORR) per RECIST v1.1.

**Preliminary Data or Expected Results:** As of 15 December 2025, 92 patients received azenosertib continuously (200 mg [n=10] or 300 mg [n=33]), or intermittently (400 mg 5:2 [n=49]). Overall, the most common treatment-related adverse events (TRAEs) were nausea (54.3%), fatigue (51.1%), and diarrhea (42.4%). TRAEs led to treatment interruption or reduction in 56.5% and discontinuation in 7.6% of patients. The median relative dose intensity was 92.1%. Among response-evaluable patients (n=87), ORR was 11.5% (95% CI, 5.7-20.1). By dose groups, ORR was 40.0% (95% CI, 12.2-73.8) at 200mg (n=10); 6.9% (95% CI, 0.8-22.8) at 300mg (n=29); 8.3% (95% CI, 2.3-20.0) at 400mg 5:2 (n=48), respectively.

**Significance and Impact:** Azenosertib demonstrated a manageable safety profile across doses. Overall, the ORR appeared similar to the historical response rates from standard-of-care chemotherapy in recurrent/persistent USC.

**Topic:** AS05. Prevention & Early Detection / AS05f. Screening & Early Detection

## **OPPORTUNITIES FOR OVARIAN CANCER PREVENTION AFTER TRIPLE-NEGATIVE BREAST CANCER**

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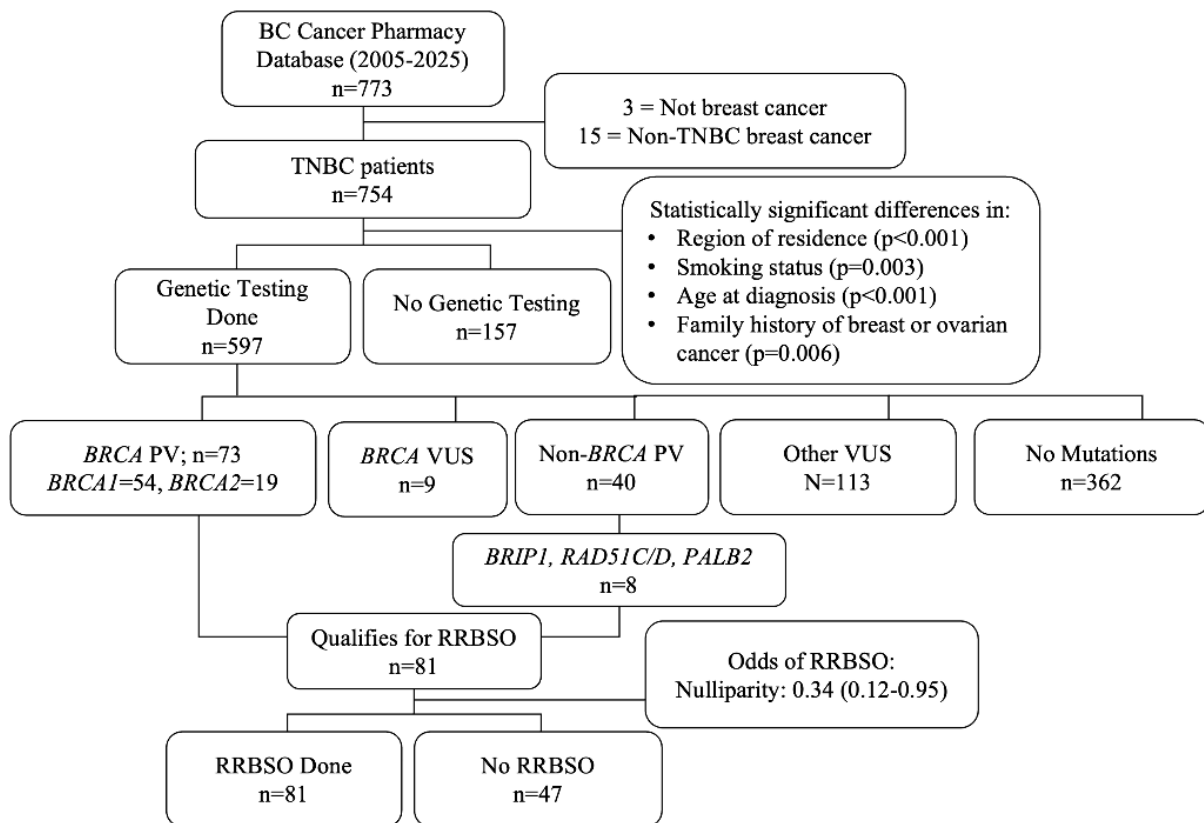
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**Introduction:** Individuals with triple negative breast cancer (TNBC) have a 15–25% chance of carrying a *BRCA1* or *BRCA2* (*BRCA1/2*) pathogenic variant (PV) and are eligible for genetic testing. The objective was to evaluate genetic testing rates in TNBC patients in British Columbia, prevalence of PV in *BRCA1/2* and other cancer predisposition genes (CPGs) and rates of risk-reducing bilateral salpingo-oophorectomy (RRBSO). Secondary objective was to evaluate variants of uncertain significance (VUS).

**Methods:** Retrospective population-based cohort study of TNBC patients from the BC Cancer Pharmacy Database (2005–2025). Covariates associated with genetic testing and RRBSO were evaluated by univariate then multivariable logistic regression models.

**Results:** There were 754 patients with TNBC, of whom 597/754 (79%) underwent genetic testing. Region of residence ( $p < 0.001$ ), non-smoking status ( $p = 0.003$ ), younger age at diagnosis ( $p < 0.001$ ) and family history of breast/ovarian cancer ( $p = 0.006$ ) were significantly associated with uptake of genetic testing. Of those tested, 73/597 (12.2%) and 8/597 (1.3%) had PV in *BRCA1/2* and other CPGs (*BRIP1*, *RAD51C/D*, *PALB2*), respectively. RRBSO was performed in 34/81 (42%) at a mean age of 45.7 (SD 9.2). Nulliparity was the only covariate with decreased odds (0.34; 95% CI 0.12-0.95). There were 125/597 (20.8%) with VUS in *BRCA1/2* and other CPGs, and 44% had at least one relative with breast/ovarian

cancer.



**Conclusion/Implications:** In this population-based cohort of TNBC patients, 13.6% had qualifying PVs for RRBSO, with only 42% undergoing RRBSO, indicating missed opportunities for ovarian cancer prevention. Another 20% had VUS, with almost half having a family history of breast/ovarian cancer, suggesting potential for further investigation.

**Topic:** AS05. Prevention & Early Detection / AS05f. Screening & Early Detection

## **ADAPTING AND PILOTING A COMMUNITY-BASED CANCER EDUCATION PROGRAMME (C-CARE) IN SOUTH AFRICA: A TWO-PHASE IMPLEMENTATION STUDY**

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**Introduction:** Evidence-based cancer education programmes exist, but direct transfer from high to low-income contexts often fails to account for linguistic diversity, pluralistic health systems, and uneven access to care. This study aimed to adapt the US-based Cancer–Community Awareness Access Research and Education (c-CARE) programme and evaluate its effectiveness in improving cancer awareness in South Africa.

**Methods:** A two-phase implementation study was conducted in Johannesburg and iLembe Districts between March 2022 and February 2025. Phase 1 applied Participatory Action Research and Card’s seven-step framework to adapt c-CARE through 38 structured stakeholder engagements focused on reviewing, contextualising, and refining programme materials. Phase 2 used a quasi-experimental pre–post design among traditional health practitioners, community health workers, outreach team leaders, and faith-based leaders (N=210). Paired statistical tests were used to assess pre–post differences.

**Results:** Adaptation produced a culturally and health system–aligned curriculum integrating cervical cancer, local epidemiology, referral pathways, and modules on mental health, spirituality, and palliative care. The pilot demonstrated statistically significant gains in cancer awareness: multiple myeloma (26.7%–96.7%,  $p<0.001$ ), prostate cancer (52.5%–98.3%,  $p<0.001$ ), lung cancer (74.3%–96.7%,  $p<0.001$ ), breast cancer (87.1%–95.7%,  $p=0.759$ ), and cervical cancer (74.8%–96.7%,  $p<0.001$ ). Improvements were observed across all participant groups, indicating a broad reach across diverse community-based cadres.

**Conclusion/Implications:** Context-sensitive, culturally grounded adaptation is not optional but foundational for transferring community-based interventions across health systems. Advancing early cancer detection in low-resource settings will require shifting from knowledge-focused models to approaches that explicitly engage behavioural and social drivers of care-seeking.

**Topic:** AS05. *Prevention & Early Detection* / AS05f. *Screening & Early Detection*

## **USE OF FILTER PAPER AS A STORAGE MEDIUM FOR SELF-COLLECTED VAGINAL SAMPLES FOR HPV DETECTION**

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**Introduction:** The present study aims to evaluate the acceptance and feasibility of HPV detection in self-collected vaginal samples stored on cellulose filter paper at different storage times.

**Methods:** A cross-sectional study was conducted in three different regions of Brazil (Southeast, Central-West, and North), involving six Barretos Cancer Prevention Units. For each participant, two samples were collected: one by self-collection from the vagina, stored on cellulose filter paper, and another collected by a health professional, stored in SurePath™ medium. Both samples were tested for HPV using the Cobas® 4800 HPV Test Platform. Agreement and diagnostic performance were evaluated using the Kappa coefficient, positive predictive value, negative predictive value, sensitivity, specificity, and accuracy of HPV detection using the ROC curve.

**Results:** A total of 1,209 samples were analyzed. The positivity rate for high-risk HPV (HR-HPV, any type) was 36.9% in self-collected vaginal samples stored on cellulose filter paper and 44.5% in cervical samples collected by healthcare professionals and stored in SurePath™. A positive predictive value of 97.2%, a negative predictive value of 86.4%, and a concordance rate of 90.4% ( $\kappa=0.802$ ;  $p < 0.001$ ) were observed between the methods. HPV detection in self-collected vaginal samples stored on cellulose filter paper was highly accurate, with a sensitivity of 80.7%, specificity of 98.1%, and AUC of 0.89 (95% CI: 0.88-0.91).

**Conclusion/Implications:** The results demonstrate that self-collection of vaginal samples stored on cellulose filter paper is a viable and effective strategy for HPV detection, with high diagnostic performance. This approach may expand women's participation in cervical cancer screening programs.

**Topic:** AS05. Prevention & Early Detection / AS05f. Screening & Early Detection

## **LONGITUDINAL SCREENING HISTORY IS THE STRONGEST SINGLE PREDICTOR IN AI-BASED CERVICAL CANCER DETECTION: A MULTI-MODAL STUDY OF 8,535 PATIENTS**

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**Introduction:** Most AI-based cervical screening tools rely on single-visit data, despite cervical disease being defined by its trajectory. We evaluated the contribution of longitudinal screening history to AI performance, and whether integration with deep learning-based cytology and HPV genotyping improves prediction of high-grade lesions.

**Methods:** Retrospective cohort of 8,535 referred Polish patients with  $\geq 2$  screening visits. All data were de-identified prior to analysis in accordance with institutional data protection standards. Cytology was graded using a Bethesda-based system: NILM/ASC-US (low-risk; 18.9%), LSIL/ASC-H (intermediate-risk; 72.9%), HSIL+ (high-risk; 8.1%), with dual validation by cytopathologists and gynecologists. A UNet (segmentation) + VGG (classification) pipeline extracted cytomorphological features from liquid-based cytology images. An XGBoost model fused image features, longitudinal HPV genotyping (HPV-16, HPV-18, other high-risk types), cytology trajectories, visit patterns, age, and patient-reported sexual, menstrual, hormonal, and medication history. Class imbalance was addressed via optimized class weighting; oversampling was avoided to preserve clinically informative missing-data patterns. Patient-level cross-validation was applied.

**Results:** Removing longitudinal history reduced HSIL+ recall from 40% to 3%, indicating it is the strongest single predictive signal. Adding HPV improved AUC-ROC from  $0.778 \pm 0.022$  to  $0.816 \pm 0.012$ , with selective HSIL+ gains (F1 +0.026). PPV 31.5% — a four-fold enrichment over baseline prevalence. Accuracy increased with visit count: 79.1% (2 visits) to 87.4% (5 visits). Tunable thresholds yielded triage (sensitivity 60.4%, specificity 82.3%) and screening (sensitivity 46.1%, specificity 90.9%) operating points.

**Conclusion/Implications:** Longitudinal data is critical for AI-based cervical screening. Future work: prospective multi-site validation, HPV self-sampling integration for low-resource settings, and recalibration for vaccinated populations.

**Topic:** AS05. Prevention & Early Detection / AS05f. Screening & Early Detection

**A RANDOMISED FEASIBILITY STUDY INVESTIGATING THE ACCEPTABILITY AND ACCURACY OF CERVICAL SCREENING AND SELF-SAMPLING IN WOMEN AT 6-WEEKS POSTNATAL (PINCS-2)**

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**Introduction:** HPV vaccination and cervical screening to eliminate cervical cancer is a WHO target, but uptake among younger women in England is at an all-time low, especially in women with children aged under 5 years. Current UK and international guidelines recommend delaying routine due in pregnancy until after 12-weeks postnatal. New mothers suggested offering cervical screening alongside the 6-week mother-and-baby check up to improve uptake, as previous studies demonstrated that the burden of prioritising their own care was a major barrier.

**Objectives:** PRIMARY OBJECTIVES: To evaluate the acceptability and feasibility of a randomised study design to evaluate: **Acceptability:** Whether women are willing to undergo cervical screening at 6-weeks postnatal with randomisation to screening at either 6- or 12-weeks postnatal **Feasibility:** How many women need to be approached for one to consent. SECONDARY OBJECTIVES: Evaluate acceptability of different sampling methods; quality of cervical samples; agreement in HR HPV status between sampling methods.

**Methods:** We will perform a study to assess acceptability and feasibility of an open label, individualised randomised trial design. Participants (adult females  $\geq 24/5$  years; within 6 weeks of giving birth) randomised to screening at 6- or 12-weeks postnatal. They will undergo clinician-taken cervical screening samples for HR-HPV testing and cytology, and HR-HPV testing using vaginal swabs/urine sampling. 95% confidence intervals (CIs) calculated with Wilson's method. Acceptability compared with Wilcoxon Signed Rank test; paired analysis using McNemar's test.

**Current Status & Future Directions:** We aim to recruit 100 participants within 9 months. Data will inform a future study to measure impact of change and inform health economic models.

**Topic:** AS05. Prevention & Early Detection / AS05f. Screening & Early Detection

## **PRECISION CERVICOGRAPHY: UTILIZATION OF MOBILE TELEOTIVA APPLICATION FOR CERVICAL PRECANCER SCREENING IN INDONESIAN WOMEN POPULATION**

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**Introduction:** Cervical cancer remains a major public health burden in Indonesia. The national action plan for cervical cancer control emphasizes expanding screening coverage, early detection, and timely treatment, alongside efforts to protect Indonesian women through improved prevention and access to care. However, implementation is limited by specialist shortages, geographic barriers, and the subjectivity of visual inspection with acetic acid interpretation. This study evaluated the feasibility of TeleOTIVA, a mobile artificial intelligence-supported cervicography system, for cervical precancer screening in primary healthcare settings.

**Methods:** This pilot study was conducted in 12 primary healthcare facilities in South Sumatra. TeleOTIVA captured cervical images, transmitted them to a cloud-based platform, provided automated interpretation of visual inspection findings, and enabled teleconsultation with gynecologic oncology specialists for referral recommendations. Screening volume, abnormal findings, processing time, and workflow usability were assessed.

**Results:** A total of 1,611 women were screened using TeleOTIVA. The system identified 35 women (2.2%) with abnormal cervical lesions requiring further evaluation and treatment. The average screening time was four minutes per participant. Healthcare providers reported that the application was easy to use and required minimal training, while teleconsultation enabled timely expert input. Agreement analysis between TeleOTIVA and subspecialist interpretation showed almost perfect agreement (Cohen's kappa = 0.838), indicating high reliability in screening interpretation.

**Conclusion/Implications:** TeleOTIVA is a rapid, user-friendly, and scalable tool that may strengthen national cervical cancer control strategies by improving screening access, reducing subjectivity, and accelerating referral and treatment, thereby contributing to the prevention of cervical cancer among Indonesian women.

**Topic:** AS05. Prevention & Early Detection / AS05f. Screening & Early Detection

## **HIGH BURDEN OF NON-16/18 HIGH-RISK HPV GENOTYPES IN COMMUNITY-BASED CERVICAL SCREENING: EXTENDED GENOTYPING INSIGHTS FROM SOUTH INDIA**

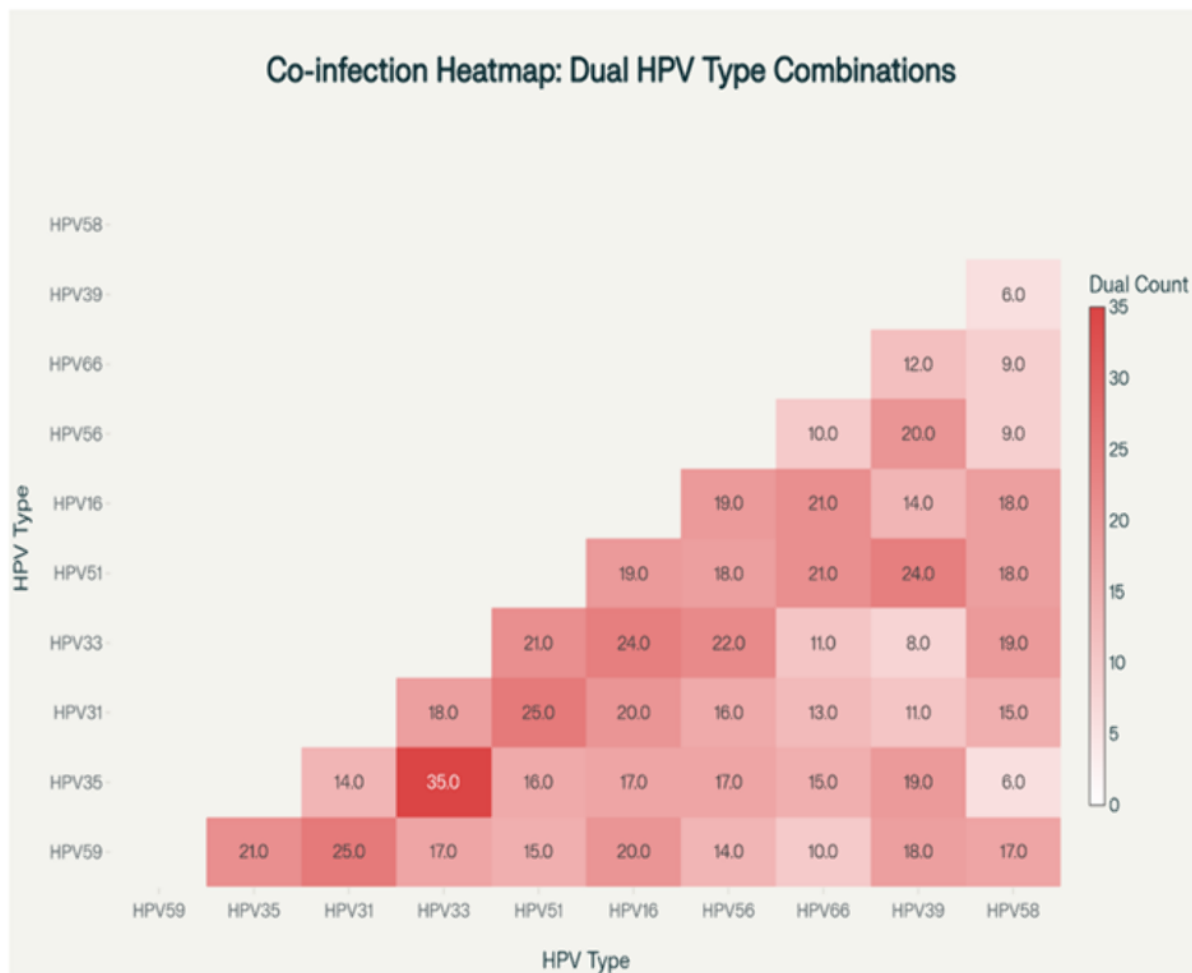
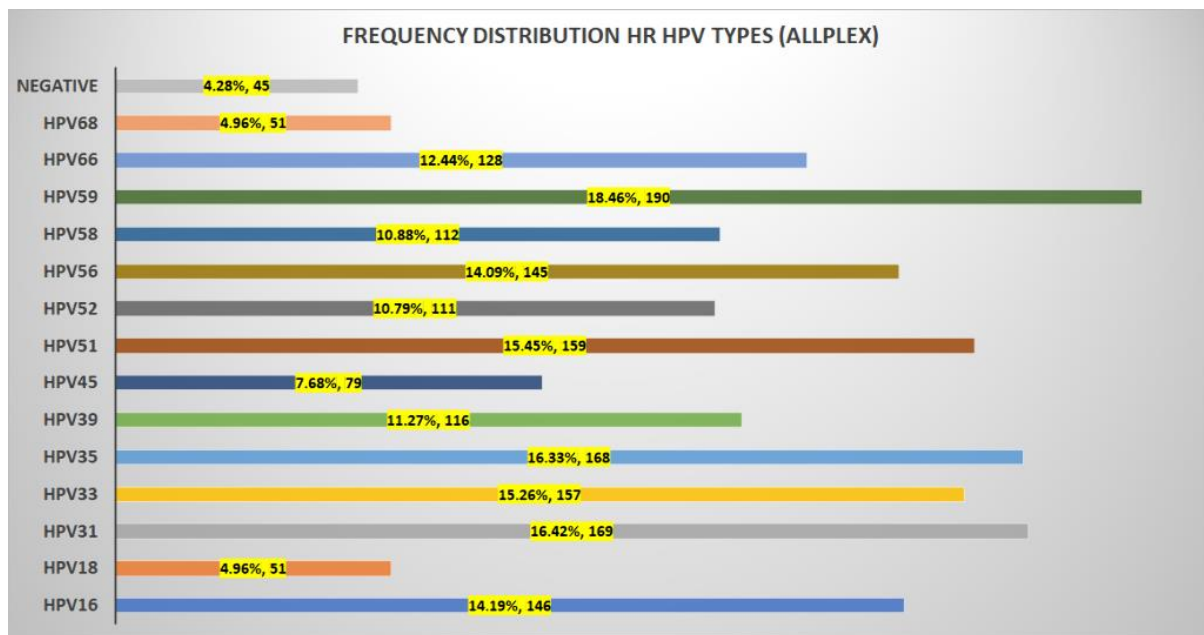
Vijayalakshmi Ramshankar<sup>1</sup>, Yasasve Madhavan<sup>1</sup>, Vaishnavi Muktineni<sup>1</sup>, Srinidhi Ramasubramanian<sup>1</sup>, David Raj Arockia Raj<sup>1</sup>, Soundharya Ravindran<sup>1</sup>, Latha Mahalingam<sup>1</sup>, Sathish Shanmugam<sup>1</sup>, Vedhamurthy Giri<sup>1</sup>, Latha Balasubramani<sup>2</sup>, Lalitha Subramanian<sup>3</sup>

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**Introduction:** Cervical cancer remains a major public health burden in India, contributing substantially to cancer-related morbidity and mortality among women. While HPV16 and HPV18 are the most recognized oncogenic types, emerging evidence indicates a significant role of other high-risk (OHR) HPV genotypes in disease progression, particularly in community-based populations.

**Methods:** Cervical exfoliated cell samples were collected from women participating in community screening programs across Coimbatore, Tuticorin, Tirunelveli, and Chennai. Primary HPV screening was performed using the Roche cobas® 4800 platform. Samples positive for OHR HPV and mixed infections underwent extended genotyping using the Allplex™ HPV assay. Cytology correlation, genotype distribution, and co-infection patterns were analyzed using chi-square statistics.

**Results:** Among 25,236 samples tested, 1,598 (6.3%) were HR-HPV positive. OHR HPV accounted for 902 (3.6%), while mixed infections were observed in 127 (0.65%). Extended genotyping was performed in 1,029 samples, revealing single-genotype infections in 474 (46.1%), dual infections in 301 (29.3%), and ≥3 genotypes in 253 (24.6%). The most prevalent genotypes were HPV59 (18.4%), HPV31 (16.4%), HPV35 (16.3%), HPV33 (15.2%), and HPV51 (15.4%), whereas HPV16 (14.1%) and HPV18 (4.9%) were less frequent. Common co-infections included HPV33+HPV35 (3.5%), HPV31+HPV51 (2.6%), and HPV31+HPV59 (2.4%). Abnormal cytology was identified in 175/1,029 (17.0%) cases, with non-16/18 HR-HPV types present in 145 (82.9%) of abnormal cases (p<0.001).



**Conclusion/Implications:** This study highlights a predominant burden of non-16/18 HR-HPV genotypes with frequent multi-genotype infections and strong association with

cytological abnormalities, underscoring the need for extended genotyping in screening programs.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**FINAL OVERALL SURVIVAL RESULTS FROM THE PHASE 3 ROSELLA TRIAL:  
RELACORILANT PLUS NAB-PACLITAXEL VS NAB-PACLITAXEL MONOTHERAPY IN  
PATIENTS WITH PLATINUM-RESISTANT OVARIAN CANCER**

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**Introduction:** Relacorilant is a selective glucocorticoid receptor antagonist that increases tumor sensitivity to chemotherapy-induced apoptosis. The phase 3 ROSELLA trial of relacorilant plus nab-paclitaxel in patients with PROC previously reported a significant PFS benefit (hazard ratio [HR] 0.70 (P=0.0076)); interim OS showed a HR of 0.69 and a median improvement of 4.5 months. The combination was well tolerated with a safety profile similar to nab-paclitaxel monotherapy.

**Methods:** Patients (n=381) were randomized 1:1 to relacorilant plus nab-paclitaxel or nab-paclitaxel alone. PFS by BICR and OS were dual primary endpoints. The final OS analysis occurred after 288 deaths (76% maturity) and was tested at a  $\alpha=0.0499$  significance level. Kaplan-Meier methods and stratified Cox models were used to estimate survival curves and HRs.

**Results:** At a median follow-up of 24.8 months, relacorilant plus nab-paclitaxel resulted in a 35% reduction in risk of death (HR 0.65; 95% CI, 0.51 to 0.83; P=0.0004). Median OS improved by 4.1 months (16.0 vs 11.9 months). OS favored the combination across all subgroups. Subsequent therapies were well balanced between groups. Safety results were consistent with previous reports. The most frequently reported adverse events were known nab-paclitaxel toxicities: anemia, neutropenia, fatigue, and nausea.

**Conclusion/Implications:** ROSELLA met both dual primary endpoints. Relacorilant plus nab-paclitaxel demonstrated a statistically and clinically significant OS benefit in patients with PROC compared with nab-paclitaxel monotherapy. The combination was well tolerated with a manageable safety profile. These findings support relacorilant plus nab-paclitaxel as a new standard treatment option without the need for biomarker selection.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**BORDERLINE OVARIAN TUMORS AND LOW-GRADE SEROUS CARCINOMA:  
CLINICOPATHOLOGIC FEATURES AND OUTCOMES FROM A MULTICENTER COHORT  
IN ARGENTINA AND URUGUAY**

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**Introduction:** Borderline Ovarian Tumors (BOT) and Low-Grade Serous Carcinoma (LGSC) are rare epithelial neoplasms with favorable prognosis, yet evidence from Latin America remains scarce and management heterogeneous. We describe clinicopathologic characteristics, treatment patterns, and outcomes in a large multicenter cohort from Argentina and Uruguay.

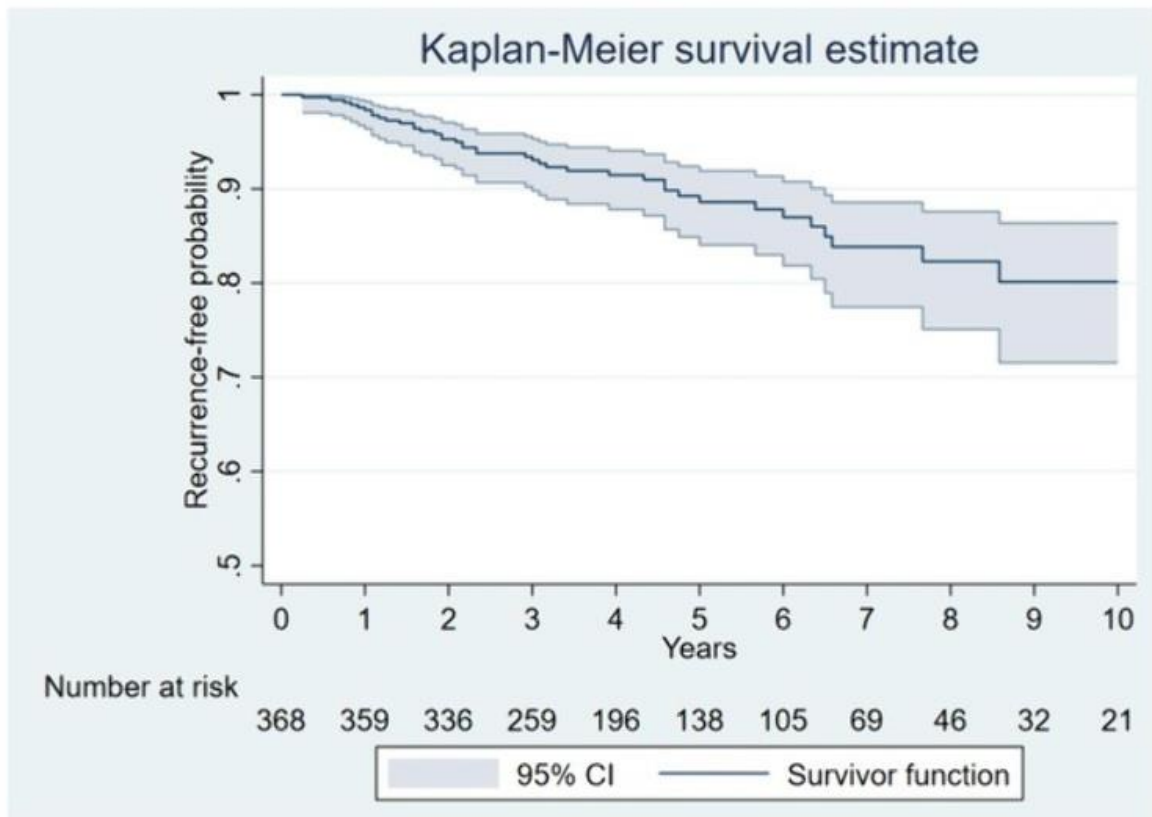
**Methods:** Multicenter retrospective study including 369 adults with BOT (all histologies) or LGSC treated between 2009 and 2020 in 19 hospitals in Argentina and 1 in Uruguay. Participating centers were invited through the Argentine Association of Gynecologic Oncology (AAGO). Clinical, surgical, pathological, adjuvant therapy, recurrence, and survival data were collected from medical records.

**Results:** Mean age at diagnosis was 43.7 years; 65% were of reproductive age. Most patients presented with early-stage disease (FIGO IA/IB: 82%). Serous BOT was the most frequent subtype (49%), followed by mucinous BOT (24.6%), seromucinous BOT (8.6%), and LGSC (7.5%). A minimally invasive approach was used in 62.1% (conversion 5.7%). Conservative surgery was performed in 75.1% overall and in 83.5% of premenopausal patients. Restaging surgery was undertaken in 44.4% (more often in premenopausal patients, 49.4% vs 35.6%). Adjuvant systemic therapy was uncommon. Overall survival was 98% at 5 years and 96% at 10 years; recurrence-free survival was 88.8% at 5 years and 79% at 10 years. In exploratory analyses, restaging and type of surgery were not associated with overall or recurrence-free survival.

**Table. Key surgical management features by menopausal status**

| Variable                                           | All (N=369) | Postmenopausal (N=132) | Premenopausal (N=237) | p-value |
|----------------------------------------------------|-------------|------------------------|-----------------------|---------|
| <b>Type of surgery</b>                             |             |                        |                       |         |
| Conservative surgery                               | 277 (75.1%) | 79 (59.8%)             | 198 (83.5%)           | <0.001  |
| Non-conservative surgery (adnexohysterectomy only) | 92 (24.9%)  | 53 (40.2%)             | 39 (16.5%)            |         |
| <b>Surgical approach</b>                           |             |                        |                       | 0.602   |
| Laparotomy                                         | 140 (37.9%) | 46 (34.8%)             | 94 (39.7%)            |         |
| Minimally invasive                                 | 208 (56.4%) | 79 (59.8%)             | 129 (54.4%)           |         |
| Minimally invasive with conversion                 | 21 (5.69%)  | 7 (5.30%)              | 14 (5.91%)            |         |
| Restaging surgery                                  | 164 (44.4%) | 47 (35.6%)             | 117 (49.4%)           | 0.015   |
| Peritoneal cytology                                | 216 (58.5%) | 82 (62.1%)             | 134 (56.5%)           | 0.351   |
| Multiple peritoneal biopsies                       | 141 (38.2%) | 50 (37.9%)             | 91 (38.4%)            | 0.990   |
| Microinvasion                                      | 44 (11.9%)  | 15 (11.4%)             | 29 (12.2%)            | 0.936   |
| Non-invasive implants                              | 26 (7.72%)  | 5 (4.13%)              | 21 (9.72%)            | 0.103   |
| Invasive implants                                  | 16 (4.75%)  | 4 (3.28%)              | 12 (5.58%)            | 0.491   |

**Graphic 1. Recurrence-free survival**



**Conclusion/Implications:** In this large multicenter BOT/LGSC cohort from Argentina and Uruguay, conservative surgery—often minimally invasive—was frequently used without compromise in long-term outcomes, supporting fertility preservation in appropriately selected patients.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**REAL-WORLD CHARACTERISTICS AND SURVIVAL OUTCOMES IN PATIENTS WITH PLATINUM-RESISTANT OVARIAN CANCER TREATED WITH MIRVETUXIMAB SORAVTANSINE MONOTHERAPY OR SINGLE-AGENT CHEMOTHERAPY**

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**Introduction:** In phase 3 MIRASOL, mirvetuximab soravtansine (MIRV) significantly improved median PFS (mPFS) and median OS (mOS) vs single-agent chemotherapy (CTx; topotecan, paclitaxel, or doxorubicin) in patients with FRa-positive platinum-resistant ovarian cancer (PROC) after 1-3 prior systemic lines of therapy. This study investigated patient characteristics and outcomes for MIRV monotherapy and CTx in real-world (RW) settings.

**Methods:** The US-based electronic health record-derived deidentified Flatiron Database (January 2011– December 2025) was used to identify patients with PROC who received MIRV monotherapy or CTx after November 2022. Baseline characteristics were recorded for all patients. RW mPFS and mOS were evaluated overall and by MIRASOL-like subgroups using Kaplan–Meier estimates. Scaled RW adverse event (AE) data were described.

**Results:** There were 164 patients in the MIRV and 153 patients in the CTx cohorts. Compared with MIRASOL, baseline characteristics in RW patients were more clinically diverse, including a higher proportion of patients who were older, more heavily pre-treated, and with higher ECOG score (Table 1). RW mPFS (95% CI) was 6.11 months (5.28-7.31) for MIRV and 3.38 months (2.76-4.56) for CTx (Table 2). RW mOS was 13.03 months (10.72-16.77) for MIRV and 5.57 months (4.40-7.82) for CTx. Scaled RW AEs were consistent with the established safety profile of MIRV.

**Conclusion/Implications:** In RW settings, MIRV monotherapy in patients with PROC showed clinical benefit consistent with that observed in MIRASOL. These findings support the generalizability of trial results to RW settings and clinically diverse patient populations, and are consistent with the established safety profile of MIRV.

Table 1: Baseline Characteristics of Patients with PROC Treated with MIRV or CTx in RW Settings Compared with Patients in the MIRASOL Trial

|                                              | RW Patient Data (Flatiron) |                   | MIRASOL Ph 3 Trial Primary Analysis <sup>b</sup> |             |
|----------------------------------------------|----------------------------|-------------------|--------------------------------------------------|-------------|
|                                              | MIRV (N=164)               | CTx (N=153)       | MIRV (N=227)                                     | CTx (N=226) |
| <b>Patient Characteristics</b>               |                            |                   |                                                  |             |
| Age, median [range], years                   | 68 [36-85]                 | 71 [40-85]        | 64 [32-88]                                       | 62 [29-87]  |
| Race, White, %                               | 65.9                       | 70.6              | 68.7                                             | 64.2        |
| Community setting, %                         | 71.3                       | 75.2              | N/A                                              | N/A         |
| Serous Histology, %                          | 86.6                       | 67.3              | 100                                              | 100         |
| Stage III/IV at diagnosis, %                 | 73.7                       | 76.5              | 93.8                                             | 93.9        |
| ECOG 0-1, %                                  | 68.9                       | 64                | 100                                              | 97.8        |
| 1-3 prior LOT, %                             | 68.9                       | 72.5              | 100                                              | 100         |
| Primary platinum-refractory, %               | 11.0 <sup>a</sup>          | 12.4 <sup>a</sup> | Excluded                                         | Excluded    |
| ≤12 months Primary Platinum-free interval, % | 65.9                       | 65.4              | 64.3                                             | 62.8        |
| Prior bevacizumab, %                         | 78.7                       | 74.5              | 60.8                                             | 63.3        |
| Prior PARPi, %                               | 55.5                       | 44.4              | 54.6                                             | 56.2        |

Abbreviations: CTx, single-agent chemotherapy; LOT, lines of therapy; MIRV, mirvetuximab soravtansine; PARPi, poly (ADP-ribose) polymerase inhibitor; Ph, phase; RW, real-world.

<sup>a</sup>Defined as disease that progressed during a platinum-based regimen or has progressed within 4 weeks of the last dose of first-line platinum-containing CTx.

<sup>b</sup>Moore et al., *N Engl J Med.* 2023;389(23):2162-2174.

Table 2: Clinical Outcomes of Patients with PROC Treated with MIRV or CTx in RW Settings Compared with Patients in the MIRASOL Trial

| Treatment                   | RW Patient Data (Flatiron) |                                           |                  |                                           | MIRASOL Ph 3 Trial Primary Analysis <sup>b,c</sup> |                     |
|-----------------------------|----------------------------|-------------------------------------------|------------------|-------------------------------------------|----------------------------------------------------|---------------------|
|                             | MIRV                       |                                           | CTx              |                                           | MIRV                                               | CTx                 |
| Patient Group               | Overall (N=164)            | MIRASOL-like subgroup <sup>a</sup> (n=98) | Overall (N=153)  | MIRASOL-like subgroup <sup>a</sup> (n=95) | ITT (N=227)                                        | ITT (N=226)         |
| Median OS, months (95% CI)  | 13.03 (10.72-16.77)        | 13.45 (11.69-22.62)                       | 5.57 (4.40-7.82) | 5.15 (3.95-7.82)                          | 16.46 (14.46-24.57)                                | 12.75 (10.91-14.36) |
| Median PFS, months (95% CI) | 6.11 (5.28-7.31)           | 6.28 (4.13-7.56)                          | 3.38 (2.76-4.56) | 3.52 (2.69-4.56)                          | 5.62 (4.34-5.95)                                   | 3.98 (2.86-4.47)    |

Abbreviations: CI, confidence interval; CTx, single-agent chemotherapy; ITT, intent-to-treat; MIRV, mirvetuximab soravtansine; OS, overall survival; PFS, progression-free survival; Ph, phase; RW, real-world.

<sup>a</sup>The MIRASOL-like subgroup is a subset of the overall RW cohort, defined by 1-3 lines of previous systemic anti-cancer therapies and no platinum-refractory during first line of treatment.

<sup>b</sup>Moore et al., *N Engl J Med.* 2023;389(23):2162-2174.

<sup>c</sup>Median follow-up 11.2 months (Coffman et al., *Ann Oncol.* 2024;35(suppl 2):S566. Abstract 746P).

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**UPDATED EFFICACY AND SAFETY DATA OF FIRST-LINE ANLOTINIB + CARBOPLATIN/PACLITAXEL INDUCTION FOLLOWED BY ANLOTINIB MAINTENANCE IN ADVANCED OVARIAN CANCER: PHASE II MULTICENTER TRIAL (ALTER-GO-010)**

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**Introduction:** ALTER-GO-010 is a phase II multicenter trial evaluating anlotinib combined with carboplatin/paclitaxel as first-line induction, followed by anlotinib maintenance in newly diagnosed advanced ovarian cancer.

**Methods:** Eligible patients with FIGO III–IV epithelial ovarian/fallopian tube/primary peritoneal cancer (ECOG 0–1) after debulking surgery received 6–8 cycles of paclitaxel/carboplatin plus anlotinib (12 mg d1–14 q3w; cycle 1 omitted). Anlotinib maintenance was administered until progression/toxicity. The primary endpoint is progression-free survival (PFS). Key secondary endpoints include overall survival (OS), and safety profile

**Results:** As of the data cutoff date of February 28, 2026, 53 patients were included in the analysis, with a median follow-up of 27.89 months (95% CI: 24.15–34.96). The median PFS was 27.43 months (95% CI: 13.73–NE), and the 24-month PFS rate was 50.29% (95% CI: 34.64–64.04). 43 patients proceeded to the anlotinib maintenance phase. Median PFS in the maintenance phase was 21.42 months (95% CI: 9.63–NE). The median OS was not reached. Grade ≥3 treatment-emergent adverse events occurred in 75.5% during induction and 25.58% during maintenance. The most common adverse events during maintenance were elevated thyroid-stimulating hormone (53%), diarrhea(37%), and decreased white blood cell count(30%). No treatment-related deaths were reported.

**Conclusion/Implications:** Adding anlotinib to carboplatin/paclitaxel induction followed by anlotinib maintenance in the first-line treatment for newly diagnosed advanced ovarian cancer could have a significant improvement on progression-free

survival with manageable safety profile, and should be considered as a new first-line therapy option.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

## **HIGH MUC16 EXPRESSION IS ASSOCIATED WITH POOR REAL-WORLD OVERALL SURVIVAL IN PATIENTS WITH HIGH-GRADE SEROUS OVARIAN CARCINOMA**

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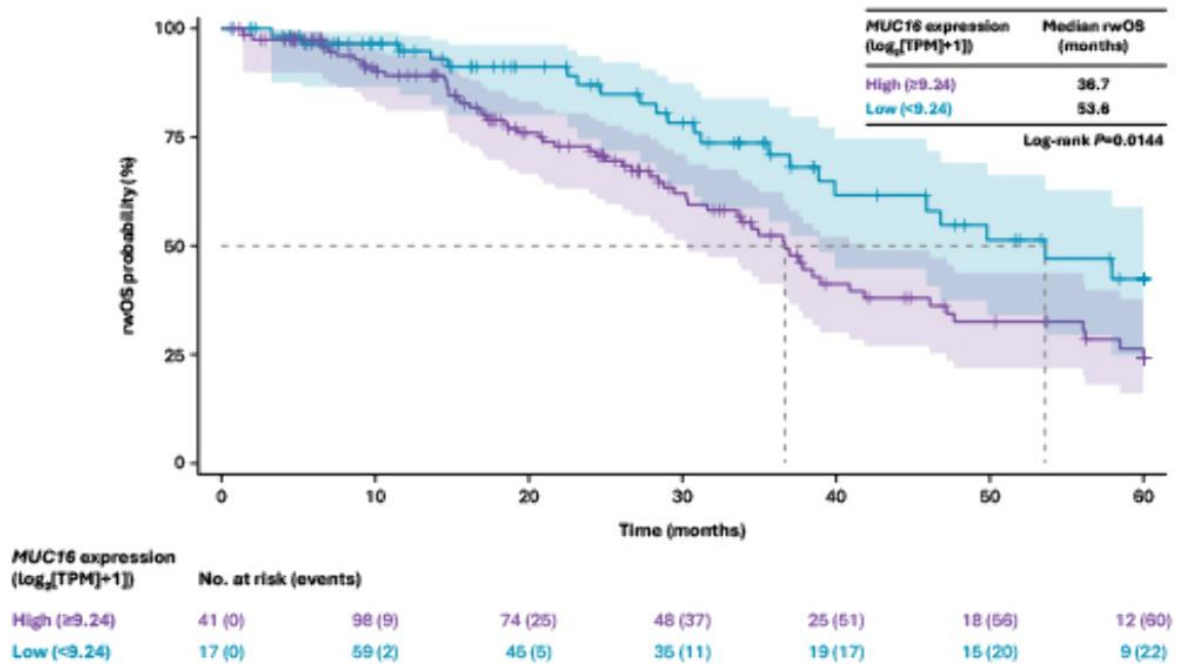
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**Introduction:** Mucin 16 (MUC16), a glycoprotein involved in tumor cell proliferation, metastasis, and immune evasion, is cleaved to form serum CA125. *MUC16* is overexpressed in ~80% of epithelial ovarian cancers (OC), making MUC16 a promising therapeutic target. We assessed the potential prognostic association between *MUC16* expression and real-world overall survival (rwOS) in patients with high-grade serous ovarian carcinoma (HGSOC).

**Methods:** Tumor *MUC16* expression ( $\log_2[\text{TPM}] + 1$ ) and serum/plasma CA125 from patients with HGSOC in a de-identified real-world database (Tempus AI, Inc.) were stratified by median *MUC16* expression (low versus high), and their association with rwOS was evaluated using a multivariate Cox proportional hazards model adjusted for prognostic variables.

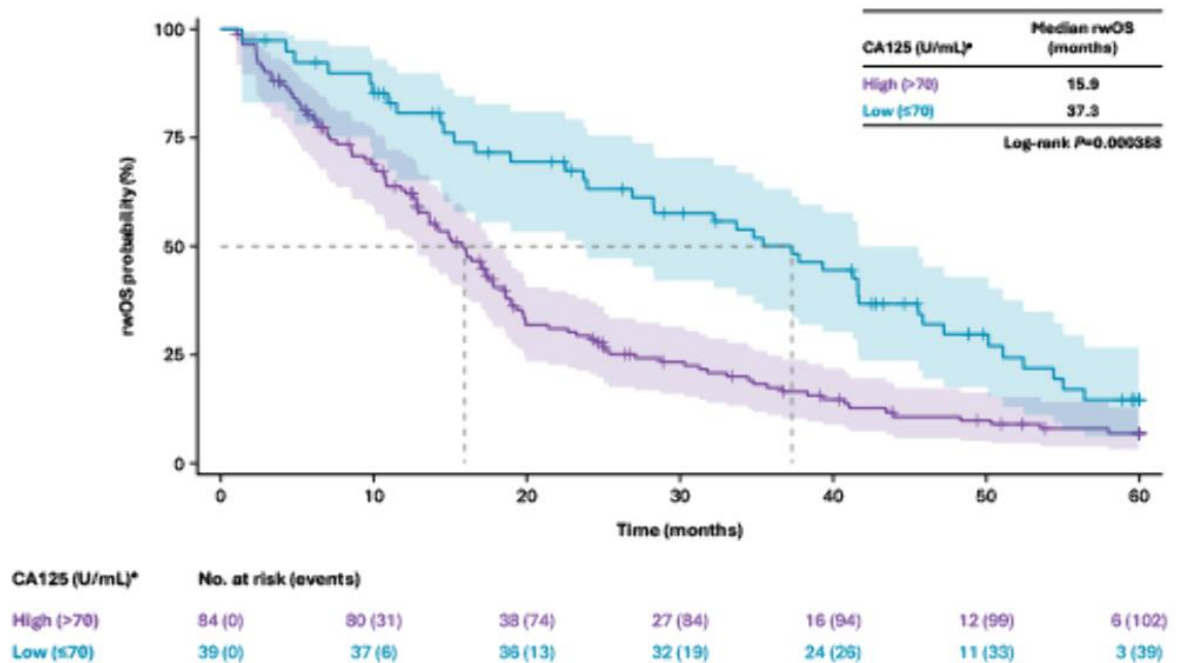
**Results:** Across 254 patients, median rwOS was significantly shorter with high ( $\geq 9.24$ ) versus low ( $< 9.24$ ) *MUC16* expression (log-rank  $P=0.0144$ ; **Figure 1**). Multivariate analysis showed high *MUC16* expression (HR 2.34;  $P=0.0014$ ), *BRCA* status (HR 0.24;  $P=0.007$ ), and HRD status (HR 0.43;  $P=0.01$ ) were independently associated with rwOS. Median rwOS was shorter with high versus low ( $>70$  vs  $\leq 70$  U/mL) CA125 in patients starting 1L ( $n=302$ ; log-rank  $P=0.0104$ ) or 2L+ ( $n=223$ ; log-rank  $P=0.00038$ ; **Figure 2**) treatment. Multivariate analysis confirmed high CA125 was associated with worse median rwOS in 1L (HR 2.15;  $P=0.0284$ ) and 2L+ (HR 1.83;  $P=0.00227$ ) cohorts.

Figure 1. Real-World OS by *MUC16* Expression in HGSOC, Indexed at the First Diagnosis of Metastatic Disease (N=254)<sup>a</sup>



<sup>a</sup>Includes n=159 in the high *MUC16* cohort and n=95 in the low *MUC16* cohort.  
HGSOC, high-grade serous ovarian carcinoma; *MUC16*, mucin 16; (rw)OS, (real-world) overall survival; TPM, transcripts per million.

Figure 2. Real-World OS by CA125 Level in HGSOC, Indexed at the Start of 2L+ Treatment (N=223)



<sup>a</sup>In patients with cancer, high CA125 is defined as 2 × ULN (>70 U/mL). Median CA125 was 276.0 U/mL in the high CA125 cohort (n=153) and 32.9 U/mL in the low CA125 cohort (n=70).  
2L+, second- or later-line; CA125, cancer antigen 125; HGSOC, high-grade serous ovarian carcinoma; (rw)OS, (real-world) overall survival; TPM, transcripts per million; ULN, upper limit of normal.

**Conclusion/Implications:** High *MUC16* expression is associated with poor rwOS in HGSOC, independent of *BRCA*/HRD status, identifying a population with high unmet need. HWK-016, a novel ADC targeting the non-shed *MUC16* extracellular domain, is

being evaluated in a phase 1 trial in patients with solid tumors, including OC (NCT07470853).

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**TROFUSE-022/ENGOT-OV84/GOG-3103 PART 2: PHASE 3 STUDY OF MAINTENANCE SACITUZUMAB TIRUMOTECAN±BEVACIZUMAB VS STANDARD OF CARE FOLLOWING SECOND-LINE PLATINUM-BASED DOUBLET CHEMOTHERAPY FOR PLATINUM-SENSITIVE RECURRENT OVARIAN CANCER**

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**Introduction:** Sacituzumab tirumotecan (sac-TMT) is a TROP2-directed antibody-drug conjugate with a unique, bifunctional linker that maximizes payload delivery to tumor

cells. TroFuse-022/ENGOT-ov84/GOG-3103 (NCT06824467) is evaluating maintenance sac-TMT±bevacizumab vs standard of care (SoC) following 2L platinum-based doublet chemotherapy in platinum-sensitive recurrent ovarian cancer (PSROC). We present the trial design for part 2.

**Objectives:** Primary endpoint is PFS per RECIST v1.1 by blinded independent central review. Secondary endpoints are OS, safety/tolerability, and patient-reported outcomes. PFS/OS will be assessed in participants with medium/high TROP2 expression tumors and all participants.

**Methods:** Participants are ≥18 years with histologically-confirmed epithelial ovarian, fallopian tube, or primary peritoneal carcinoma with PSROC (radiographic evidence of PD >180 days after 1L platinum-based doublet chemotherapy±bevacizumab); participants with *BRCA* mutation or HRD-positive status with no evidence of disease (NED)/CR/PR after 1L chemotherapy require prior PARPi as 1L maintenance. All participants must have received 6 cycles of 2L carboplatin-based doublet chemotherapy±bevacizumab and achieved NED/CR/PR/SD per investigator; participants with SD require prior bevacizumab with 2L chemotherapy and must be eligible to continue bevacizumab. Candidates for curative-intent surgery or radiotherapy are ineligible. Participants are randomized 1:1 to maintenance sac-TMT±bevacizumab (arm 1) or SoC (observation±bevacizumab; arm 2). Bevacizumab use is per investigator discretion for participants who received ≥2 doses of bevacizumab (with no dose reductions) with 2L chemotherapy; participants with SD after 2L chemotherapy must receive bevacizumab. Treatment continues until discontinuation criteria are met. Participants in arm 2 may not cross over to arm 1.

**Current Status & Future Directions:** Enrollment began in January 2026 and is planned across 213 sites in 30 countries.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**A COMPREHENSIVE ANALYSIS OF ULTRA-LONG PROGRESSION-FREE SURVIVAL IN ADVANCED HIGH-GRADE SEROUS OVARIAN CANCER: TREATMENT AND GENETIC INSIGHTS FROM A MEMORIAL SLOAN KETTERING CANCER CENTER TEAM OVARY STUDY**

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**Introduction:** Most patients with advanced high-grade serous ovarian cancer (HGSOC) recur within 2 years of diagnosis. However, a subset of patients experiences ultra-long progression-free survival (PFS) and may never recur. With advancements in treatment and genetics, a comprehensive analysis is needed to understand factors associated with ultra-long PFS.

**Methods:** We included patients diagnosed with advanced-stage HGSOC (III–IV) between 2015 and 2020 who underwent surgical treatment at a single tertiary academic institution. We defined ultra-long PFS as PFS  $\geq 5$  years and collected relevant clinical, tumor, treatment, and genetic variables. We constructed a multivariate logistic regression model using candidate variables ( $p < 0.1$ ) from univariate analyses.

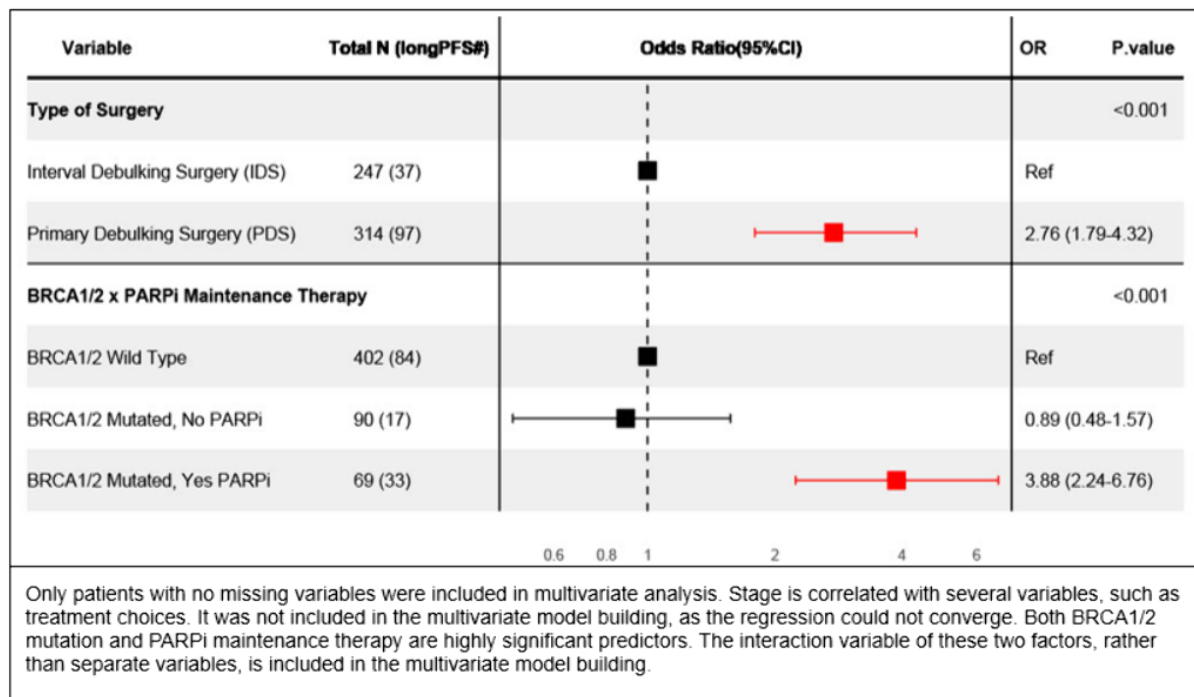
**Results:** Final analyses included 579 patients, with 142 (25%) experiencing ultra-long PFS. The multivariable logistic regression model (AUC, 0.657) suggested that primary debulking surgery (PDS) (OR, 2.76; 95% CI, 1.79–4.32) and BRCA1/2 mutation with PARPi maintenance (OR, 3.88; 95% CI, 2.24–6.76) were highly associated with ultra-long PFS (**Table 1, Figure 1**). Although a combined BRCA1/2 variable was used for multivariate analyses, univariate analyses showed only *BRCA2* mutation ( $p = 0.005$ ) and not *BRCA1* mutation was associated with higher odds. Although *RB1* mutation did not meet inclusion criteria after false discovery rate adjustment ( $p = 0.123$ ), it was associated with higher odds in unadjusted analysis (OR, 3.68;  $p = 0.009$ ).

**Table 1. Univariate logistic regression analyses for select variables (N = 579).**

| Variable                                   | N   | Ultra-long<br>PFS - n (%) | Odds Ratio | 95% CI     | <i>P</i> value   |
|--------------------------------------------|-----|---------------------------|------------|------------|------------------|
| <b>Stage</b>                               |     |                           |            |            | <b>0.032</b>     |
| III                                        | 318 | 89 (28.0)                 | 1.00       |            |                  |
| IV                                         | 261 | 53 (20.3)                 | 0.66       | 0.44, 0.96 |                  |
| <b>Type of Surgery</b>                     |     |                           |            |            | <b>&lt;0.001</b> |
| Interval Debulking Surgery (IDS)           | 254 | 39 (15.4)                 | 1.00       | —          |                  |
| Primary Debulking Surgery (PDS)            | 325 | 103 (31.7)                | 2.56       | 1.70, 3.90 |                  |
| <b>Complete Gross Resection</b>            |     |                           |            |            | 0.197            |
| No                                         | 101 | 19 (18.8)                 | 1.00       | —          |                  |
| Yes                                        | 453 | 112 (24.7)                | 1.42       | 0.84, 2.50 |                  |
| <b>BRCA1 (Germline or Somatic)</b>         |     |                           |            |            | 0.463            |
| Wild Type                                  | 460 | 107 (23.3)                | 1.00       | —          |                  |
| Mutated                                    | 101 | 27 (26.7)                 | 1.20       | 0.73, 1.95 |                  |
| <b>BRCA2 (Germline or Somatic)</b>         |     |                           |            |            | <b>0.005</b>     |
| Wild Type                                  | 503 | 111 (22.1)                | 1.00       | —          |                  |
| Mutated                                    | 58  | 23 (39.7)                 | 2.32       | 1.30, 4.07 |                  |
| <b>PARPi maintenance therapy</b>           |     |                           |            |            | <b>0.001</b>     |
| No                                         | 482 | 101 (21.0)                | 1.00       | —          |                  |
| Yes                                        | 97  | 41 (42.3)                 | 2.76       | 1.74, 4.36 |                  |
| <b>BRCA1/2 x PARPi maintenance therapy</b> |     |                           |            |            | <b>&lt;0.001</b> |
| BRCA1/2 Wild Type                          | 402 | 84 (20.9)                 | 1.00       | —          |                  |
| BRCA1/2 Mutated, No PARPi                  | 90  | 17 (18.9)                 | 0.88       | 0.48, 1.54 |                  |
| BRCA1/2 Mutated, Yes PARPi                 | 69  | 33 (47.8)                 | 3.47       | 2.04, 5.90 |                  |
| <b>RB1 mutation</b>                        |     |                           |            |            | 0.123*           |
| No                                         | 405 | 58 (14.3)                 | 1.00       |            |                  |
| Yes                                        | 21  | 8 (38.1)                  | 3.68       | 1.40, 9.13 |                  |

\**P* value for *RB1* mutation was 0.009 prior to false discovery rate adjustment for multiple comparisons. Bold *P* values indicate significance.

**Figure 1. Multivariate logistic regression analyses of factors associated with ultra-long PFS (N = 561).**



**Conclusion/Implications:** Ultra-long PFS in advanced-stage HGSOC is associated with PDS and BRCA1/2 mutation plus PARPi maintenance. Interestingly, *RB1* emerged as a possible predictor and warrants further investigation. Results may refine prognostication and guide counseling.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**A RANDOMIZED, OPEN-LABEL PHASE II/III TRIAL EVALUATING OLAPARIB PLUS LETROZOLE VERSUS OLAPARIB MONOTHERAPY AS FIRST-LINE MAINTENANCE THERAPY IN ER-POSITIVE, HRD-POSITIVE, BRCA-WILD-TYPE ADVANCED OVARIAN CANCER (OLA-LET STUDY)**

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**Introduction:** Patients with HRD-positive, BRCA-wild-type advanced ovarian cancer derive only intermediate benefit from PARP inhibitor maintenance, and progression within two years remains common. Preclinical data suggest that the combination of these agents may exert synergistic anti-tumor effects by targeting both DNA repair mechanisms and estrogen-driven pathways. OLA-LET evaluates an affordable, all-oral maintenance strategy using olaparib plus letrozole.

**Objectives:** The primary objective is to compare 24-month progression-free survival between olaparib monotherapy and olaparib plus letrozole in ER-positive, HRD-positive, BRCA-wild-type advanced ovarian cancer. Secondary objectives · Progression-free survival, · Overall survival, · Time to first subsequent therapy · Safety, · Health-related quality of life.

**Trial Design:** This is a multicenter, randomized, open-label, seamless phase II/III trial. Eligible patients with newly diagnosed FIGO stage III–IV high-grade serous or high-grade endometrioid ovarian, fallopian tube, or primary peritoneal cancer who achieve complete or partial response after first-line platinum-based chemotherapy will be randomized 1:1 to olaparib 300 mg twice daily or olaparib 300 mg twice daily plus letrozole 2.5 mg once daily for up to 24 months. The phase II component will assess for futility and early efficacy signals. If predefined criteria are met, the study will seamlessly expand into the phase III component without interrupting accrual. The phase III component will formally test superiority for 24-month progression-free survival. The

overall planned sample size is 262 patients.

### OLA-LET study design

Open-label, multicentre, randomised, phase II/III first-line maintenance trial in ER+, HRD+, BRCA-wt advanced ovarian cancer

- Stage III/IV high-grade serous or endometrioid ovarian, fallopian tube, or primary peritoneal cancer
- ER positive, HRD positive, BRCA1/2 wild type
- Completed surgery and 6–9 cycles of platinum-based chemotherapy
- Complete or partial response after first-line therapy
- ECOG PS 0–1; no prior PARP inhibitor, aromatase inhibitor, or bevacizumab

R  
1:1  
N=262

Olaparib 300 mg BID +  
Letrozole 2.5 mg QD  
all oral

- Maintenance started within 8 weeks after final platinum dose
- Treatment continued for up to 24 months or until progression / unacceptable toxicity
- Interim analysis for futility at 30% events

Olaparib 300 mg BID  
all oral

#### Primary endpoint

- PFS at 24 months

#### Key secondary endpoints

- Median PFS
- OS
- PFS2
- TFST
- Safety
- HRQoL

#### Stratification factors:

- Residual disease after surgery (none vs macroscopic)
- Timing of surgery (primary vs interval debulking)
- Best response to platinum chemotherapy (CR vs PR)

\*Eligible patients: ER positive (IHC ≥1% or Allred ≥3), HRD positive by validated assay, BRCA1/2 wild type.  
BID = twice daily; QD = once daily; CR = complete response; PR = partial response; PFS2 = time from randomisation to second progression or death; TFST = time to first subsequent therapy.

**Feasibility and Implementation:** The trial will be conducted across high volume tertiary oncology centres.

**Conclusion:** OLA-LET tests a scalable, low-cost, all-oral maintenance strategy that could improve real-world outcomes in this clinically important ovarian cancer subgroup.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**ONCOLOGIC SAFETY OF LAPAROSCOPIC FERTILITY-SPARING SURGERY IN YOUNG JAPANESE PATIENTS WITH STAGE I EPITHELIAL OVARIAN CANCER: A RETROSPECTIVE NATIONWIDE STUDY**

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**Introduction:** The incidence of epithelial ovarian cancer (EOC) among adolescent and young adult (AYA) women is increasing, highlighting the importance of fertility preservation. In this population, fertility-sparing surgery (FSS) is frequently considered. This nationwide study aimed to clarify real-world treatment patterns and oncologic outcomes of FSS in AYA patients with EOC.

**Methods:** We retrospectively analyzed AYA patients diagnosed with EOC who underwent FSS between 2009 and 2013 at Japanese Society of Obstetrics and Gynecology–accredited institutions.

**Results:** A total of 238 patients were included, with a median follow-up of 74 months. Most patients had stage I disease (93.3%, n=222). Among stage I patients, the 5-year progression-free survival (PFS) and overall survival (OS) rates were 84.8% and 94.5%. Multivariate analysis identified stage IC2/3 as an independent adverse prognostic factor for PFS and OS. Laparoscopic surgery was significantly associated with poorer OS compared with open surgery. After propensity score matching, no statistically significant differences in PFS or OS were observed between laparoscopic and open surgery. However, restricted mean survival time (RMST) analysis showed a trend toward increased recurrence in the laparoscopic group, with a 5-year RMST difference of –8.58 months.

**Conclusion/Implications:** This study demonstrates favorable oncologic outcomes of FSS in AYA patients with stage I epithelial ovarian cancer; however, stage IC2/3 remains a high-risk subgroup. Although survival differences between laparoscopic and open surgery were not statistically significant after matching, trends toward higher recurrence following laparoscopic FSS were observed. These findings suggest that laparoscopic FSS may require cautious application, and further investigation is warranted.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**UPDATED RESULTS AND BIOMARKER-RELATED EFFICACY FOR PHASE 1 DOSE ESCALATION OF TUB-040, A NOVEL NAPI2B-TARGETING EXATECAN ANTI-BODY DRUG CONJUGATE IN PATIENTS WITH PLATINUM-RESISTANT OVARIAN CANCER**

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**Introduction:** TUB-040 is a DAR8 ADC targeting NaPi2b, overexpressed in ovarian, endometrial and NSCLC, and comprising a humanized Fc-silenced IgG1 mAb conjugated to exatecan via a cleavable, cysteine-selective, stable, solubility-mediating P5 linker providing excellent stability and biophysical properties.

**Methods:** NAPISTAR 1-01 is a phase 1/2a study in biomarker-unselected pts with PROC. TUB-040 was administered Q3W in dose escalation (range 0.5-5.3 mg/kg) to pts with PROC until progression or unacceptable toxicity.

**Results:** As of April 5, 2026, 67 PROC pts received TUB-040 for a median of 12 cycles with 32 (48%) pts still ongoing. Median age 62 years (34-81), median 4 prior lines (1-7), prior treatment with BEV (84%), PARPi (76%), immunotherapy (24%), and mirvetuximab soravtansine (15%). The most common all grade TEAEs were nausea (76%), fatigue (60%), neutropenia (54%), anemia (48%), constipation (37%), diarrhea (31%), vomiting (31%), and alopecia (31%). Gr $\geq$ 3 neutropenia (42%) and anemia (27%) were observed. There were no fatal TEAEs or treatment discontinuations due to TEAEs. The uORR was 64% [95% CI 52,76] and cORR 58% [95% CI 46,70] with 2 CRs, the mDOR was not

reached [95% CI 8.5,NA] and mPFS was 11 mos [95% CI 7.5,NA). Updated DOR, PFS and biomarker data will be presented.

**Conclusion/Implications:** TUB-040 was well tolerated with meaningful clinical activity, delivering deep and durable responses with low  $\geq$  grade 3 hematological toxicity. Studies are ongoing to confirm TUB-040 as a new option with a favorable benefit–risk profile for the treatment of patients with ovarian cancer.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**QUALITY OF LIFE AFTER SENTINEL LYMPH NODE MAPPING VERSUS SENTINEL LYMPH NODE MAPPING WITH SYSTEMATIC LYMPHADENECTOMY IN ENDOMETRIAL CANCER: SECONDARY ENDPOINT RESULTS OF THE ALICE TRIAL (NCT03366051)**

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**Introduction:** The ALICE trial is a multicenter, open-label, non-inferiority randomised trial comparing sentinel lymph node (SLN) mapping alone versus SLN mapping with systematic pelvic and para-aortic lymphadenectomy in high-intermediate and high-risk endometrial cancer. Here we report the prespecified quality of life (QoL) secondary endpoint.

**Methods:** Patients with endometrioid G3, serous, clear cell, or carcinosarcoma histology, or endometrioid G1/G2 with myometrial invasion  $\geq 50\%$  or cervical invasion were randomised 1:1 to SLN only (n=89) or SLN plus systematic lymphadenectomy (SLN+L) (n=91); 178 were included in the QoL analysis. QoL was assessed preoperatively and at 1, 6, and 12 months using the EORTC QLQ-C30 and QLQ-CX24.

**Results:** Global Health Status was comparable at all timepoints (preoperative: 76.2 vs 80.7,  $p=0.139$ ; 12 months: 82.0 vs 79.8,  $p=0.522$ ). All QLQ-C30 functional scales — physical, role, emotional, cognitive, and social — were not different ( $p>0.05$ ). At 1 month, the SLN+L group reported significantly higher fatigue (25.5 vs 18.1,  $p=0.042$ ), pain (23.0 vs 16.5,  $p=0.011$ ), and constipation (30.5 vs 15.5,  $p=0.004$ ); all resolved by 6 months. QLQ-CX24 subscales for lymphoedema, peripheral neuropathy, menopausal symptoms, body image, and sexual function were not different from 1 month onwards ( $p>0.05$ ). A non-significant trend toward higher lymphedema was noted in the SLN+L arm at 12 months (23.8 vs 17.9,  $p=0.263$ ).

**Conclusion/Implications:** QoL was preserved in both arms throughout 12 months, with no clinically meaningful differences in global health status or disease-specific

outcomes. The SLN-only approach conferred a perioperative morbidity advantage reflected by lower fatigue, pain, and constipation.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

## **REAL-WORLD UPTAKE OF LYNCH SYNDROME TESTING AMONG PATIENTS WITH MISMATCH REPAIR-DEFICIENT ENDOMETRIAL CANCER IN QUÉBEC**

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**Introduction:** Lynch syndrome accounts for 5–10% of endometrial cancers, yet many cases remain undiagnosed. Universal immunohistochemical (IHC) screening for mismatch-repair deficiency (dMMR) is now routine. Evaluating real-world uptake of Lynch testing among dMMR patients can identify critical care gaps.

**Methods:** We conducted a retrospective study of consecutive patients with dMMR endometrial carcinoma who underwent surgical staging at a single center between 2014 and 2024. Pathology reports were screened for loss of MLH1, MSH2, MSH6, or PMS2 by IHC; MLH1 promoter methylation was recorded. Demographic and clinicopathologic data including age, BMI, FIGO stage, and histology were abstracted. Documentation of Lynch testing was categorized as positive, negative, or not tested/unknown.

**Results:** Among 226 dMMR patients, the median age was 68 years (IQR 58–74) and median BMI 31 kg/m<sup>2</sup> (IQR 26–37). Most had stage I disease (71%) and, histologically, endometrioid adenocarcinoma (86.8%), primarily grade 2 (40%) or grade 1 (33.2%). Mixed histology comprised 8.2% and carcinosarcoma 2.7%. Loss of MLH1/PMS2 was most frequent (65.9%), followed by isolated MSH6 (9.3%) or PMS2 (7.5%). MLH1 promoter methylation was present in 96.1% of MLH1-deficient tumors. Excluding methylated MLH1/PMS2 cases, 79 patients were eligible for genetic evaluation; 38 (48.1%) underwent Lynch testing, and four (5.1%) were pending counseling. Of those tested, 23 (60.5%) had pathogenic Lynch syndrome.

**Conclusion/Implications:** Our study demonstrates that, even within an dMMR cohort, methylation negative, nearly one half of patients lacked germline evaluation, underscoring a substantial implementation gap between IHC MMR screening and definitive Lynch testing.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**TRIAL IN PROGRESS: BLUESTAR-ENDOMETRIAL01 (BE01)/GOG-3110/ENGOT-EN28, A GLOBAL PHASE 3 RANDOMIZED TRIAL OF PUXITATUG SAMROTECAN (AZD8205) VERSUS CHEMOTHERAPY IN PATIENTS WITH B7-H4-SELECTED ADVANCED/METASTATIC ENDOMETRIAL CANCER**

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**Introduction:** B7-H4, a transmembrane glycoprotein highly expressed in endometrial cancer (EC), with limited expression in healthy tissue, represents an attractive antibody-drug conjugate (ADC) target. Puxitug samrotenecan (Puxi-Sam), a B7-H4-directed topoisomerase I inhibitor ADC, was assessed as monotherapy in the Phase 1/2a BLUESTAR trial in heavily pre-treated patients with advanced/recurrent EC who progressed after standard of care therapy (including chemotherapy and/or a programmed death [PD]-ligand [L]1 inhibitor). Results with Puxi-Sam 2.4mg/kg showed an objective response rate of 48% and a favorable safety profile, with manageable hematologic/gastrointestinal toxicities.<sup>1</sup>

**Objectives:** Bluestar-Endometrial01 (NCT07044336), a global, randomized, open-label, multicenter, Phase 3 trial, will investigate Puxi-Sam monotherapy versus physician's choice of chemotherapy in patients with B7-H4-selected advanced/metastatic EC who progressed after platinum-based chemotherapy and anti-PD-(L)1 therapy. Primary and secondary outcomes are listed in the Table. Safety and patient-reported outcomes will be assessed throughout.

**Methods:** Approximately 700 patients will be randomized 1:1 to receive either Arm A: Puxi-Sam (2.4mg/kg intravenous on Day 1 every 3 weeks [q3w]) or Arm B: either doxorubicin (60mg/m<sup>2</sup> intravenous on Day 1 q3w) or paclitaxel (80mg/m<sup>2</sup> intravenous on Days 1, 8, and 15 in 28-day cycles) until radiographic disease progression, unacceptable toxicity, patient withdrawal, or discontinuation criteria are met. Progression-free survival and overall survival (primary outcomes) will be analyzed using a log-rank test.

**Current Status & Future Directions:** First patient in date: August 1, 2025. Study completion: July 2029. Puxi-Sam represents a potential treatment option for hard-to-

treat, second-to-third-line advanced/metastatic EC. **Reference:** 1. Milesshkin LR, et al. J Clin Oncol 44, 2026 (suppl 16; abstr 5515).

**Table** Primary and secondary outcomes in the Bluestar-Endometrial01 Phase 3 trial

|                       | <b>Outcome</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dual primary outcomes | Progression-free survival (PFS)<br>Overall survival (OS)                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Secondary outcomes    | Objective response rate (ORR)<br>Duration of response (DoR)<br>Second progression-free survival (PFS2)<br>Time to first subsequent anticancer therapy (TFST) after discontinuation of the randomized treatment, or death<br>Time to second subsequent anticancer therapy (TSST) after discontinuation of the randomized treatment, or death<br>Time to discontinuation of treatment (TDT) for any reason, or death<br>Patient-reported outcomes (select European Organisation for Research and Treatment of Cancer [EORTC] outcomes) |

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**TREATMENT APPROACHES, RECURRENCE PATTERNS AND SURVIVAL OUTCOMES FOR EARLY MYO-INVASIVE ENDOMETRIAL CARCINOMA WITH AGGRESSIVE HISTOLOGIES (2023-FIGO STAGE IIC)**

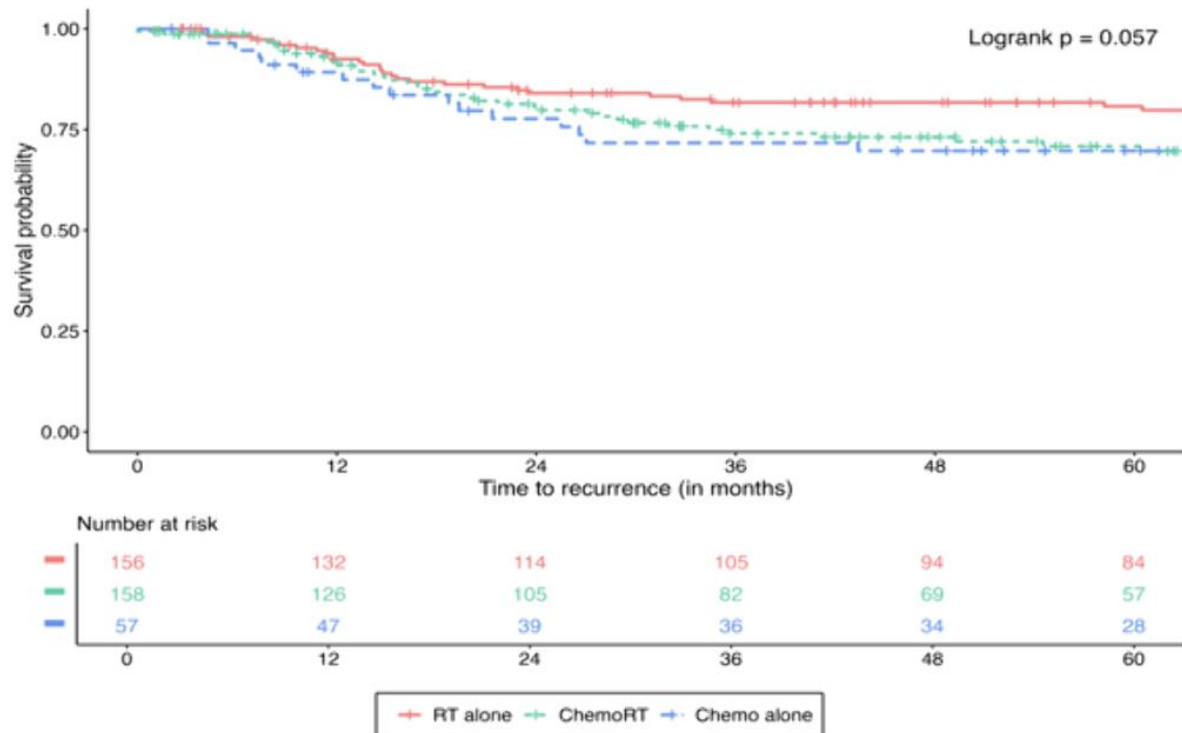
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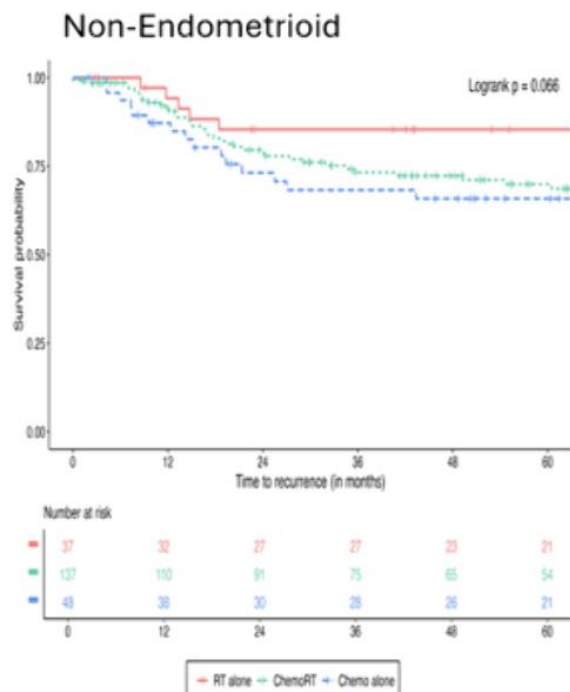
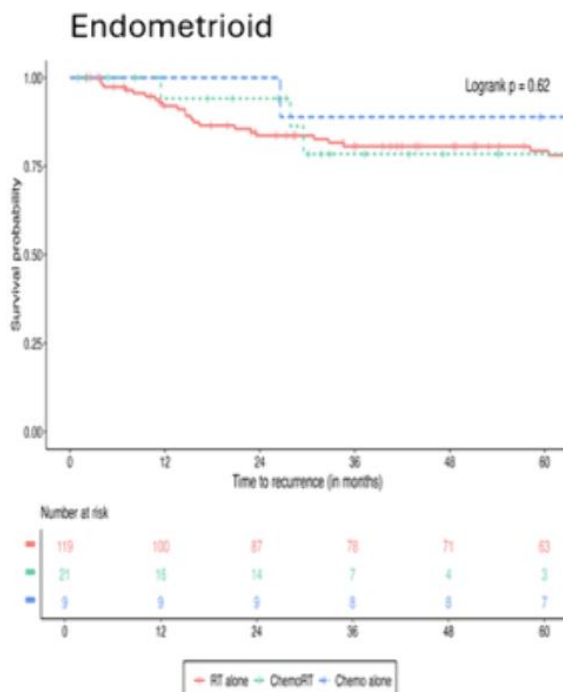
**Introduction:** We compared recurrence patterns and survival outcomes for early endometrial carcinoma (EC) with aggressive histologies receiving different adjuvant therapies (AT).

**Methods:** We identified 371 consecutive women with surgically-staged myo-invasive EC of aggressive histologies (FIGO-2023 stage-IIC), with pathologically negative lymph-nodes (LN), between 1995-2024. Post-hysterectomy, patients received adjuvant radiation-(156; 42%), chemo-therapy(57; 15%), or chemoradiation(158; 43%). We compared recurrence patterns, recurrence-free(RFS), disease-specific(DSS) and overall(OS) survival among AT-groups.

**Results:** Median (IQR) age was 66(60-72) years, LN examined 11(5-22); 60% were non-endometrioid, 21.9%/6.8% had focal/substantial-lymphovascular space invasion (LVSI), and 19% had cervical-stromal invasion (CSI). Non-endometrioid received significantly more chemotherapy(84.2%) and chemoradiation(86.7%), whereas high-grade endometrioid patients had more radiation-alone (76.35%;  $p<0.001$ ). After a median(IQR) follow-up of 125(98-142) months, 101(27.2%) had cancer-recurrence, with the most common initial site distant (82/101), of which only 7% were salvaged, and 9.9% are living with disease. Chemotherapy-alone had more isolated locoregional-recurrences (14%, 1.3%, 5.7%), and less isolated distant-recurrences (3.5%, 10.3%, 16.4%), versus radiation-alone, versus chemoradiation;  $p=0.005$ . Five-year RFS (Figure-1), DSS and OS were non-significant across AT-groups, and this persisted after histological sub-group analysis (Figure-2). On multivariate cox-regression analyses, carcinosarcoma was independently predictive for worse RFS and DSS; and positive cytology, CSI and substantial-LVSI were detrimental for all endpoints.



| RFS     | RT alone         | RT + CT          | CT alone         |
|---------|------------------|------------------|------------------|
| 5-years | 82.9 (76.8-89.6) | 72.7 (64.8-81.5) | 76.8 (66.1-89.3) |



**Conclusion/Implications:** For this heterogenous population, our results suggest that even though radiation lowered locoregional relapses, there were no significant differences in survival outcomes among different AT-groups. The high overall relapse rate, predominantly distant, along with the limited success of salvage therapies,

highlights the need for further optimization of adjuvant systemic therapies in this high-risk group of patients.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**CAN TUMOUR IMMUNE LANDSCAPE AND PATIENT FACTORS HELP DIRECT MANAGEMENT IN ADVANCED-STAGE POLEMUT ENDOMETRIAL CANCER?**

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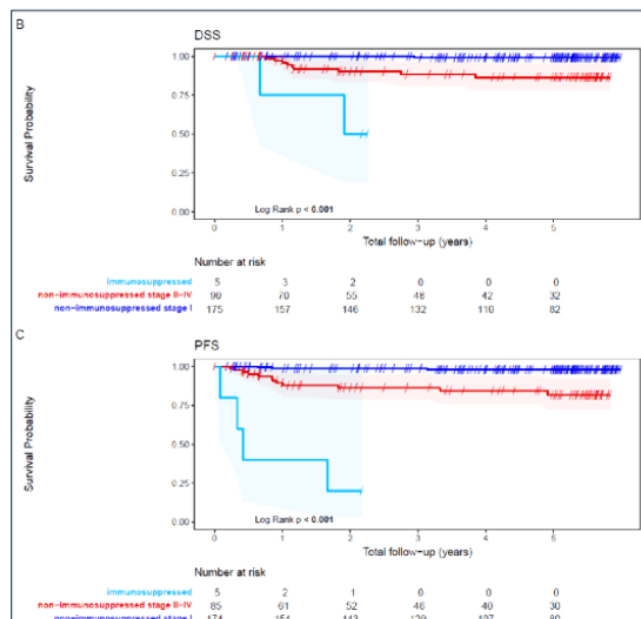
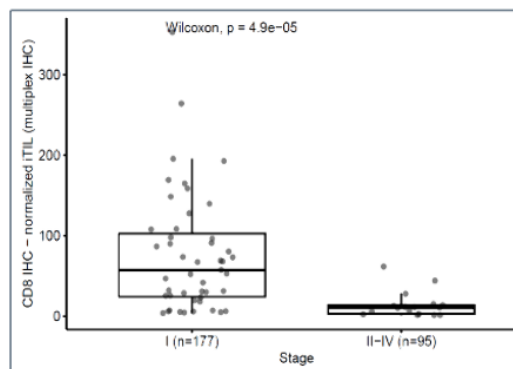
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**Introduction:** With increasing use of next generation sequencing and sentinel node procedures, advanced-stage *POLE*mut EC are increasingly encountered, however optimal management remains unclear. Our objective was to assess management of advanced-stage *POLE*mut ECs in an international cohort and possible tumor-or patient-specific stratification factors.

**Methods:** Clinicopathologic, molecular (NGS, IHC), treatment and outcome data were compared between patients with advanced-stage (II/III/IV) versus stage I *POLE*mut ECs.

## Results:

**Figure 1A:** Distribution of CD8+ tumor-infiltrating lymphocytes ascertained by IHC according to stage. **1B:** Kaplan-Meier disease-specific and progression-free survival comparing outcomes in patients with immunosuppression (light blue), non-immunosuppressed advanced-stage (red) and non-immunosuppressed stage I (dark blue) *POLE*mut ECs



95 advanced-stage (II(17%), III(65%), IV(18%)) *POLE*mut EC cases were identified across 15 centers (1992–2024). 29% received chemo-radiation, 41% chemo-alone (including 3% ICI), 15% radiation-alone and 14% no treatment. Comparison with 177 stage I *POLE*mut ECs demonstrated significant differences in histotype, grade, myoinvasion, lymphovascular invasion, treatment, and CD8-positive tumour-infiltrating lymphocytes (Figure1A) ( $p < 0.001$  for all). There were no differences in age, BMI, multiple-classifiers, or distribution of *POLE* hotspot mutations. Survival metrics were inferior in advanced versus stage I *POLE*mut ECs; 18% vs. 3.4% progression events, 11.7% vs. 1.7% death from disease. We identified a subset of severely immunocompromised patients who experienced rapid recurrences, 4/5 who presented with stage II-IV disease. Median time to recurrence/progression and death in immunosuppressed patients was 5.0 and 23.0 months respectively. Excluding this subset, stage II–IV *POLE*mut ECs were recorded in 13/85 (15.3%) patients with median time to recurrence/progression events and death much longer than the immunosuppressed cohort at 41.0 and 41.4 months (Figure 1B).

**Conclusion/Implications:** Wide variation in treatment and outcomes are observed in real-world practice in patients with advanced stage *POLE*mut ECs. Stratification by immune biomarkers and patient immunocompetence/compromise may direct future treatment strategies.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**PSEUDO-INDIVIDUAL PATIENT DATA META-ANALYSIS REVEALS ROBUST OVERALL SURVIVAL BENEFIT OF IMMUNE CHECKPOINT INHIBITORS IN MISMATCH REPAIR-PROFICIENT ADVANCED ENDOMETRIAL CANCER**

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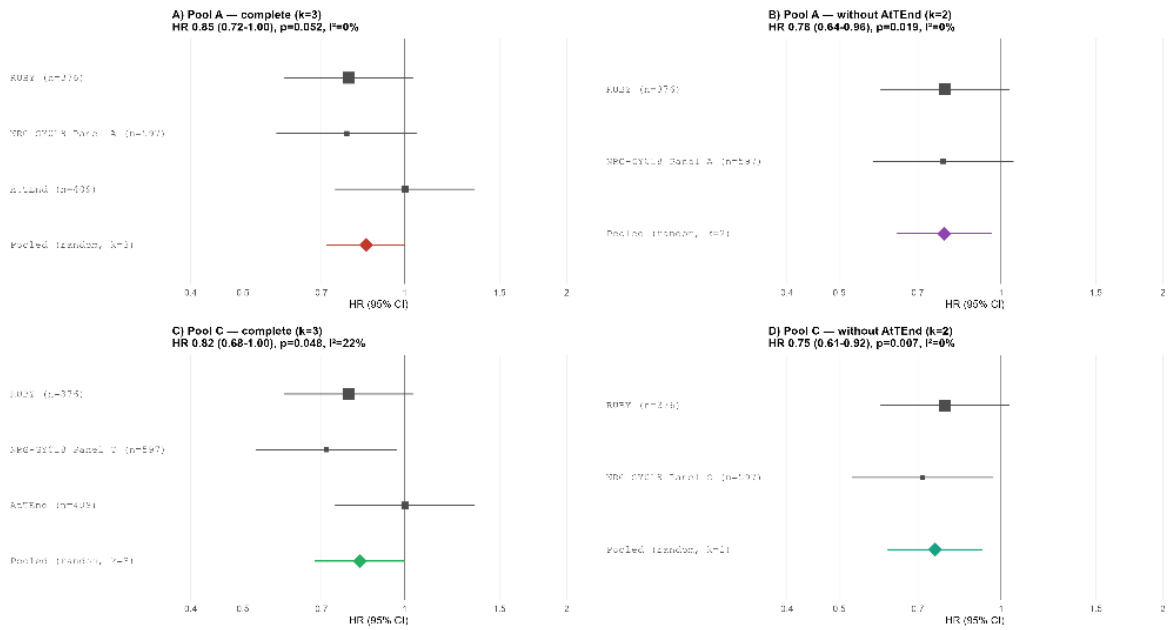
**Introduction:** Four phase III trials (RUBY, NRG-GY018, DUO-E, AtTEnd) tested immune checkpoint inhibitors (ICIs) plus carboplatin-paclitaxel in advanced endometrial cancer, with heterogeneous overall survival (OS) signals in the mismatch repair-proficient (pMMR) population. Aggregate-level meta-analyses cannot disentangle whether the borderline pMMR signal reflects true absence of benefit or dilution by trial-level heterogeneity and post-progression crossover, leaving uncertainty for clinical decisions in 70-80% of advanced endometrial cancer patients.

**Methods:** We reconstructed individual patient data (pseudo-IPD) from published Kaplan-Meier curves of pMMR OS in all four trials using the Guyot algorithm. Reconstructed hazard ratios (HRs) were validated against published estimates (deviation <0.5%). Random-effects meta-analyses pooled trial-level estimates; sensitivity analyses examined AtTEnd exclusion and crossover-censoring in NRG-GY018. Restricted mean survival time (RMST) differences were calculated at horizons of 24 and 36 months to detect delayed treatment effects.

**Results:** The reconstructed dataset (n=1,750 pMMR patients) reproduced published HRs within 0.1% absolute deviation, validating fidelity. Primary pooled OS HR (k=4) was 0.85 (95%CI 0.72–1.01; p=0.066; I<sup>2</sup>=0%). Excluding AtTEnd, pooled HR improved to 0.78 (95%CI 0.64–0.96; p=0.019; I<sup>2</sup>=0%); after additional crossover censoring of NRG-GY018, HR=0.75 (95%CI 0.61–0.92; p=0.0065). Pool C without AtTEnd showed RMST gain of +1.17 months at τ=24m (p=0.012) and +2.08 months at τ=36m (p=0.020), demonstrating delayed ICI effect emerging with mature follow-up.

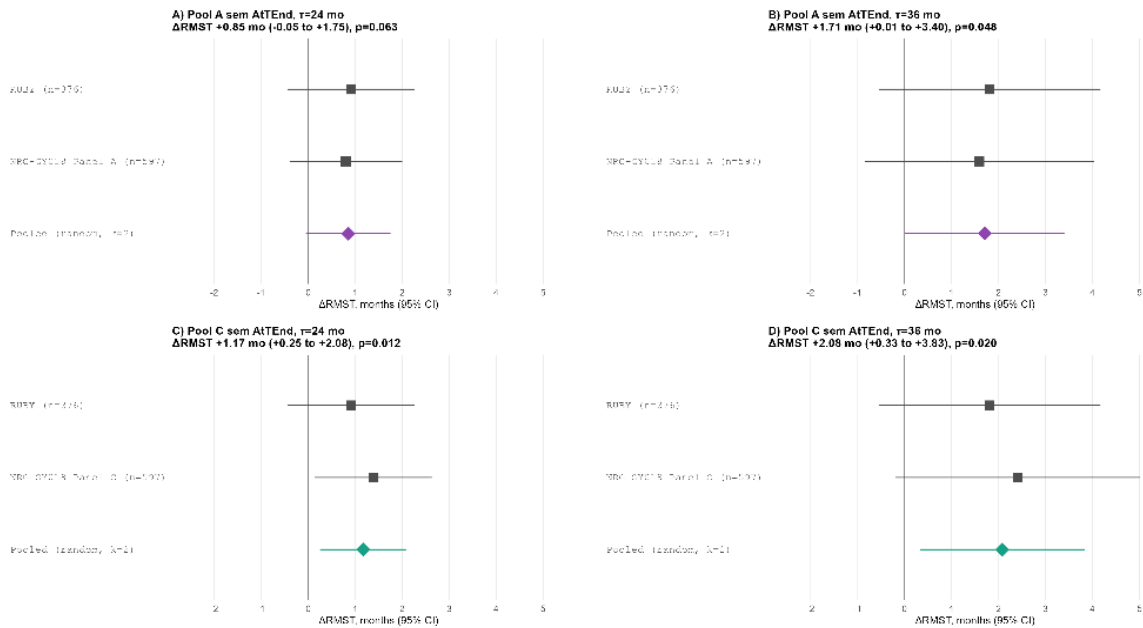
# Pooled pseudo-IPD meta-analysis of OS in pMMR endometrial cancer

Hazard Ratios (Cox random-effects, DerSimonian-Laird pooling)



## RMST pooled analysis sem AtTEnd

Pre-specified landmarks: t=24 mo (clinical standard) and t=36 mo (delayed ICI effect)



**Conclusion/Implications:** Pseudo-IPD reconstruction reveals the borderline pMMR OS signal is driven by AtTEnd outlier and crossover dilution. Robust statistically significant survival benefit emerges in sensitivity analyses, with delayed-effect signature on RMST refining evidence interpretation for pMMR clinical decision-making.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**REAL-WORLD MOLECULAR CLASSIFICATION, TREATMENT PATTERNS AND OUTCOMES BY RACE IN ADVANCED ENDOMETRIAL CANCER: A NEXT-GENERATION SEQUENCING LINKED DATABASE STUDY**

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**Introduction:** Targeted and immunotherapies have improved endometrial cancer (EC) outcomes. In clinical practice, management of advanced EC (aEC) may reflect racial differences in histology, molecular biomarkers and outcomes. This retrospective real-world study evaluated associations among molecular biomarker status, race, clinical characteristics and outcomes in aEC, focusing on White and Black patients, the two largest molecularly characterized subgroups.

**Methods:** Data were obtained from the Tempus AI multi-modal real-world oncology database and included US adult patients with aEC (stage III/IV). Patients had received non-investigational first-line treatment between January 1, 2018–May 31, 2024 and had documented MMR status.

**Results:** Among 1121 patients, 54.7% were White and 11.8% were Black. Compared with White patients, Black patients more frequently had p53-abnormal tumors (57.6% vs 27.7%) and less frequently had dMMR (11.4% vs 26.3%) and NSMP tumors (14.4% vs 23.3%) by ProMisE classification. Black patients also had lower ER (62.9% vs 76.1%) and PR (46.5% vs 67.4%) expression (**Table 1**). Chemotherapy alone was the most common first-line treatment in both subgroups. Black patients had shorter median rwPFS: 8.5 (95% CI, 7.4–10.7) vs 13.3 months (95% CI, 11.7–14.7) (**Table**

**Table 1:** Histology and molecular profile by race

|                                                 | White<br>N=613   | Black<br>N=132   |
|-------------------------------------------------|------------------|------------------|
| <b>Demographic and clinical characteristics</b> |                  |                  |
| <b>Age at index, years</b>                      |                  |                  |
| Median (Q1–Q3)                                  | 65.3 (59.2–71.0) | 65.0 (60.0–68.8) |
| <b>Histologies, n (%)</b>                       |                  |                  |
| Endometrioid carcinoma                          | 333 (54.3)       | 38 (28.8)        |
| Adenocarcinoma                                  | 36 (5.9)         | 5 (3.8)          |
| Serous adenocarcinoma                           | 132 (21.6)       | 54 (40.9)        |
| Carcinosarcoma                                  | 46 (7.5)         | 15 (11.4)        |
| Clear cell adenocarcinoma                       | 26 (4.2)         | 9 (6.8)          |
| Other                                           | 40 (6.5)         | 11 (8.3)         |
| <b>Molecular profile, %</b>                     |                  |                  |
| <b>ProMisE classification</b>                   |                  |                  |
| dMMR                                            | 26.3             | 11.4             |
| POLEmut                                         | 0.8              | 0                |
| p53-abnormal                                    | 27.7             | 57.6             |
| NSMP                                            | 23.3             | 14.4             |
| Unknown (unclassifiable)                        | 21.9             | 16.7             |
| <b>HER2 IHC score</b>                           | <b>N=154</b>     | <b>N=51</b>      |
| IHC 2+                                          | 26.0             | 15.7             |
| IHC 3+                                          | 11.0             | 13.7             |
| <b>PD-L1 status</b>                             | <b>N=278</b>     | <b>N=61</b>      |
| CPS ≥1%                                         | 55.8             | 63.9             |
| <b>TMB status</b>                               | <b>N=465</b>     | <b>N=111</b>     |
| TMB-H (≥10 mut/Mb)                              | 28.4             | 12.6             |
| <b>ER status</b>                                | <b>N=385</b>     | <b>N=89</b>      |
| Positive                                        | 76.1             | 62.9             |
| <b>PR status</b>                                | <b>N=270</b>     | <b>N=71</b>      |
| Positive                                        | 67.4             | 46.5             |
| <b>ARID1A status</b>                            | <b>N=439</b>     | <b>N=106</b>     |
| Positive                                        | 45.1             | 17.9             |
| <b>PTEN status</b>                              | <b>N=439</b>     | <b>N=106</b>     |
| Positive                                        | 55.4             | 28.3             |
| <b>KRAS status</b>                              | <b>N=439</b>     | <b>N=106</b>     |
| Positive                                        | 21.9             | 9.4              |

For each biomarker, N= the number of patients tested for that biomarker. The prevalence estimates for each biomarker are calculated among those tested. CPS, combined positive score; dMMR, mismatch repair deficient; ER, estrogen receptor; IHC, immunohistochemistry; NSMP, no specific molecular profile; PD-L1, programmed death-ligand 1; PR, progesterone receptor; Q, quartile; TMB, tumour mutational burden; TMB-H, tumor mutational burden-high.

2).

**Table 2:** Treatment patterns and outcomes by race

|                                                                 | White<br>N=613   | Black<br>N=132   |
|-----------------------------------------------------------------|------------------|------------------|
| <b>Number of lines of therapy received, n (%)</b>               |                  |                  |
| 1                                                               | 324 (52.9)       | 59 (44.7)        |
| 2+                                                              | 289 (47.1)       | 73 (55.3)        |
| <b>Most common first-line treatments, n (%)</b>                 |                  |                  |
| Chemotherapy alone                                              | 443 (72.3)       | 93 (70.5)        |
| Chemotherapy + ICI                                              | 89 (14.5)        | 18 (13.6)        |
| Biologic + chemotherapy                                         | 43 (7.0)         | 15 (11.4)        |
| ICI alone                                                       | 10 (1.6)         | 1 (0.8)          |
| ICI + TKI                                                       | 10 (1.6)         | 2 (1.5)          |
| <b>Outcomes assessed from the start of first-line treatment</b> |                  |                  |
| <b>Duration of follow-up, months</b>                            |                  |                  |
| Median (Q1–Q3)                                                  | 18.5 (9.0–32.1)  | 15.5 (8.5–27.5)  |
| <b>rwPFS*</b>                                                   |                  |                  |
| Median, months (95% CI)                                         | 13.3 (11.7–14.7) | 8.5 (7.4–10.7)   |
| 12-month rwPFS rate, % (95% CI)                                 | 54.1 (50.0–58.3) | 34.7 (27.0–44.2) |
| <b>rwOS</b>                                                     |                  |                  |
| 12-month rwOS rate, % (95% CI)                                  | 84.0 (80.6–86.8) | 76.6 (68.6–84.3) |

\*Disease progression or death is defined as a death from any cause, evidence of new metastasis, evidence of recurrence, or evidence of progressive disease. rwPFS and rwOS were analyzed by Kaplan–Meier methodology. CI, confidence interval; ICI, immune checkpoint inhibitor; Q, quartile; rwOS, real-world overall survival; rwPFS, real-world progression-free survival; TKI, tyrosine kinase inhibitor.

**Conclusion/Implications:** While the difference in histology prevalence among Black and White patients is well known, we describe variation in biomarker profiles between these patients. Black patients exhibited more aggressive disease profiles, fewer actionable biomarkers and poorer survival. These findings highlight the importance of integrating molecular profiling into clinical guidelines to inform personalized treatment strategies for high-risk patients. Further work to understand molecular profile disparities is warranted.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**RECURRENCE AND SURVIVAL OUTCOMES IN STAGE IA P53-ABNORMAL  
ENDOMETRIAL CANCER WITH AND WITHOUT MYOMETRIAL INVASION)**

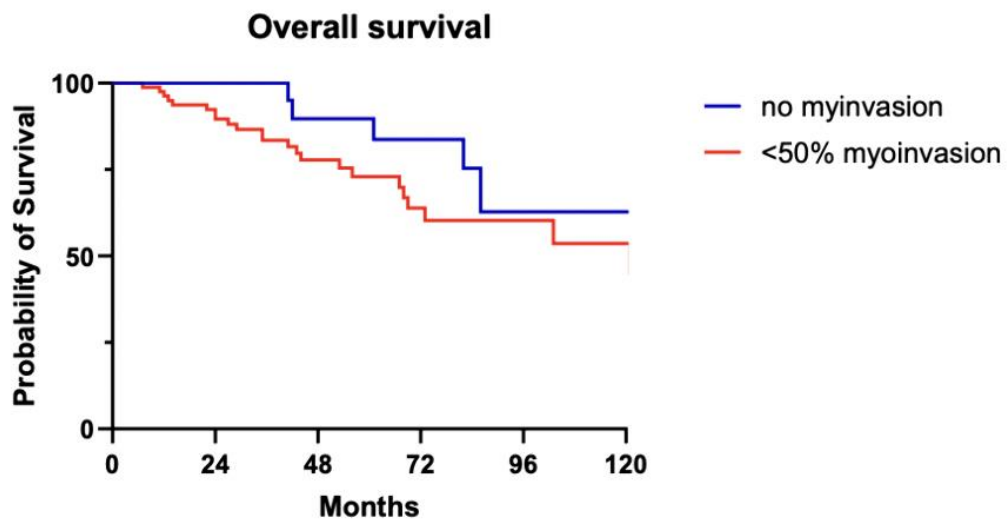
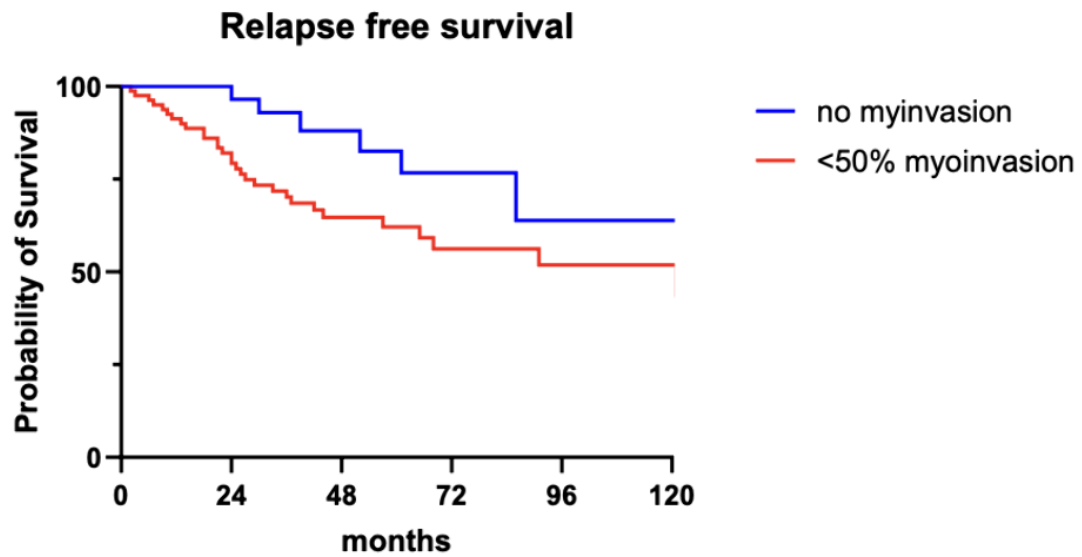
Juned Islam<sup>1</sup>, Haseeb Qureshi<sup>1</sup>, Kieran Palmer<sup>2</sup>, Naseef Kassim<sup>2</sup>, Andrei Corha<sup>3</sup>, Gemma Eminowicz<sup>2</sup>, Asma Sarwar<sup>2</sup>

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**Introduction:** Optimal management of International Federation of Gynaecology and Obstetrics (FIGO) Stage 1A p53-abnormal (p53abn) endometrial cancer (EC) without myoinvasion remains unclear. We evaluate clinicopathological features, recurrence patterns, and survival outcomes in Stage 1A p53abn EC with and without myoinvasion (<50%).

**Methods:** A retrospective review was conducted at our institution between 2014–2025. Patients were stratified into non-myoinvasive and <50% myoinvasive EC groups. Baseline demographics, molecular status, recurrence patterns and deaths were recorded. Recurrence-free survival (RFS) and overall survival (OS) were estimated using Kaplan-Meier methodology. Group comparisons were performed using Fisher's exact test and unpaired t-tests.

**Results:** A total of 115 patients were included; 34 had no myoinvasion and 81 had <50% myoinvasion. Median follow-up was 39 months. Median age was lower in the non-myoinvasive group (65 vs 72 years,  $p=0.0039$ ). Tumours were smaller (mean 22.8 vs 37.4 mm,  $p=0.013$ ) and LVSI was less frequent in the non-myoinvasive group ( $p=0.001$ ). MMR deficiency was rare (5/115) with no difference between groups. 5-year OS was 84% (non-myoinvasive) vs 73% (myoinvasive) with 5-year RFS 77% vs 62% respectively. Recurrence occurred in 22 patients (19%): 4/34 (12%) in the non-myoinvasive group (mainly pelvic) and 18/81 (22%) in the myoinvasive group (predominantly combined distant and pelvic). RFS (Figure 1) was poorer in the myoinvasive cohort (HR 0.40; 95% CI: 0.20 - 0.80;  $p=0.034$ ), while OS (Figure 2) did not differ (HR 0.45,  $p=0.0907$ ).



**Conclusion/Implications:** Stage IA p53abn EC carries notable recurrence risk even without myoinvasion, while myoinvasion predicts poorer RFS and distant relapse, highlighting the need for tailored adjuvant strategies.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

**SUSTAINED REMISSION AND LONG-TERM SURVIVAL OUTCOMES WITH DOSTARLIMAB PLUS CHEMOTHERAPY IN PATIENTS WITH MISMATCH REPAIR DEFICIENT/MICROSATELLITE INSTABILITY-HIGH PRIMARY ADVANCED/RECURRENT ENDOMETRIAL CANCER IN THE ENGOT-EN6-NSGO/GOG-3031/RUBY TRIAL**

Vladyslav Sukhin<sup>1</sup>, Thomas J. Herzog<sup>2</sup>, Lucy Gilbert<sup>3</sup>, Anthoula Koliadi<sup>4</sup>, Cara Mathews<sup>5</sup>, Sarah Gill<sup>6</sup>, Graziana Ronzino<sup>7</sup>, Iwona Podzielinski<sup>8</sup>, Stefan Kommos<sup>9</sup>, Mitchell I Edelson<sup>10</sup>, Anna Thijs<sup>11</sup>, Robert Holloway<sup>12</sup>, Bradley Monk<sup>13</sup>, Eirwen Miller<sup>14</sup>, Tashanna Myers<sup>15</sup>, John P. Diaz<sup>16</sup>, Bharat Patel<sup>17</sup>, Laura Austin<sup>18</sup>, Trine Nøttrup<sup>19</sup>, Matthew A. Powell<sup>20</sup>

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**Introduction:** Dostarlimab+carboplatin-paclitaxel (DOST+CP) demonstrated statistically significant PFS and clinically meaningful OS benefits in patients with dMMR/MSI-H primary advanced/recurrent endometrial cancer (pA/R EC) in Part 1 of the phase 3 RUBY trial (NCT03981796). Here, we report updated efficacy with 4 yrs of follow-up in patients with dMMR/MSI-H pA/R EC and characteristics of patients with long-term disease control.

**Methods:** Patients were randomized 1:1 to receive DOST+CP or placebo (PBO)+CP Q3W (6 cycles) followed by DOST or PBO monotherapy Q6W for up to 3 yrs or until disease progression. Descriptive analyses of PFS and OS were conducted. In this post hoc analysis, for patients on DOST+CP who achieved CR and those achieving long-term ( $\geq 3$ y) disease control, clinical characteristics, treatment duration, and investigator-assessed RECIST v1.1 responses (CR/PR/SD) were reported at 1y landmark intervals.

**Results:** Compared with PBO+CP, DOST+CP demonstrated sustained OS and PFS benefits (median follow-up 55.6 mo). Only 4 new progression events occurred with an additional 2.5 yrs of follow-up since the primary PFS analysis (23Sept2022). Thirty-two percent (17/53) of patients treated with DOST+CP achieved CR; 3/17 progressed later and one died. Of the 12 patients with CR at 1y, only 1 had progressed at the 4y landmark. Sustained long-term clinical benefit was observed across disease responses (Table).

**Conclusion/Implications:** At 4y, median PFS and OS were not reached with DOST+CP in the dMMR/MSI-H population. The high rate of durable remission suggests the potential for curative intent with DOST+CP. Long-term benefit was observed across all patients with disease control and was not restricted to those with CR

|                             | DOST + CP<br>(n=53) | PBO + CP<br>(n=65) |
|-----------------------------|---------------------|--------------------|
| OS, HR (95% CI)             | 0.34 (0.19–0.63)    |                    |
| 4y OS rate, % (95% CI)      | 72.8 (58.5–82.9)    | 40.3 (28.2–52.1)   |
| PFS, HR (95% CI)            | 0.30 (0.17–0.52)    |                    |
| 4y PFS rate, % (95% CI)     | 57.9 (42.3–70.6)    | 15.7 (7.2–27.0)    |
| <b>Confirmed BOR, n (%)</b> |                     |                    |
| CR                          | 17 (32.1)           | 11 (16.9)          |
| PR                          | 17 (32.1)           | 26 (40.0)          |
| SD                          | 10 (18.9)           | 12 (18.5)          |
| PD                          | 2 (3.8)             | 4 (6.2)            |

|                                      | Landmark<br>(n=30 <sup>a</sup> ) |           |           |           |
|--------------------------------------|----------------------------------|-----------|-----------|-----------|
| Overall response, n (%) <sup>b</sup> | 1 y                              | 2 y       | 3 y       | 4 y       |
| CR                                   | 12 (40.0)                        | 13 (43.3) | 13 (43.3) | 10 (33.3) |
| PR                                   | 11 (36.7)                        | 8 (26.7)  | 7 (23.3)  | 5 (16.7)  |
| SD                                   | 3 (10.0)                         | 3 (10.0)  | 1 (3.3)   | 1 (3.3)   |

<sup>a</sup>Percentage of patients in DOST arm alive and progression-free at 1 year (n=30)  
<sup>b</sup>Most recent response prior to landmark  
BOR, best overall response; CR, complete response; PD, progressive disease; PR, partial response; SD, stable disease.

Previously presented at ESMO Gynaecological Cancers Annual Congress 2026, FPN (Final Presentation Number): 71RO, Sukhin V, et al. Reused with permission.

**Topic:** AS01. Basic & Translational Science / AS01b. Translational Findings

**A PROSPECTIVE STUDY OF CIRCULATING TUMOR DNA IN PATIENTS WITH  
EPITHELIAL OVARIAN CANCER TREATED ON MAINTENANCE PARP INHIBITORS.**

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**Introduction:** We conducted a prospective study to assess the prognostic value of longitudinal circulating tumor DNA (ctDNA) in patients with epithelial ovarian cancers (EOC) treated with maintenance PARP inhibitors (PARPi).

**Methods:** Liquid biopsies, tumor samples, and clinical data were collected on a single site, prospective Biobanking for Longitudinal Monitoring of Ovarian Cancer protocol. The evaluable cohort included patients that had completed chemotherapy and initiated PARPi maintenance. Molecular residual disease (MRD) was assessed using an ultrasensitive ctDNA-based assay (Precise MRD).

**Results:** Twenty-seven patients with 93 plasma ctDNA samples were analyzed. All patients had stage III disease and 92.6% (25/27) had high-grade serous cancers. ctDNA was detected pre-PARPi in 44% (4/9) and during-PARPi in 63% (15/24) of patients. Of the 4 patients with pre-PARPi ctDNA positivity (ctDNA+), 3 had clinical progression after starting treatment. After initiating PARPi, 7 patients experienced at least 6 months of ctDNA negativity (ctDNA-), and none have progressed. In contrast, 4 of 6 patients not reaching prolonged ctDNA- progressed (p=0.004). At disease progression, MRD detection demonstrated superior sensitivity (100%, 10/10) compared to CA-125 elevation >35 U/mL (60%, 6/10). For 33 timepoints with ctDNA+, only 9 (27%) had elevated CA-125. Even with varied longitudinal sampling, ctDNA identified progression at least 3 months earlier than clinical progression in 22% (6/27) patients.

**Conclusion/Implications:** The findings suggest that ctDNA for patients on PARPi is prognostic for PFS and may be a stronger predictor of progression compared to CA-125. Moreover, sustained ctDNA clearance may serve as a biomarker to tailor PARPi maintenance duration allowing for a shorter course of therapy.

**Topic:** AS01. Basic & Translational Science / AS01b. Translational Findings

**TUMOR MIR-622 IS A PREDICTIVE BIOMARKER OF RESPONSE TO MAINTENANCE PARP INHIBITOR OLAPARIB AFTER PLATINUM-BASED CHEMOTHERAPY IN PATIENTS WITH ADVANCED/METASTATIC ENDOMETRIAL CANCER: ANCILLARY ANALYSIS OF UTOLA GINECO TRIAL.**

Nicolas Vigneron<sup>1,2</sup>, Francois Cherifi<sup>3,4,5</sup>, Raphaël Leman<sup>6,7</sup>, Alexia Laplanche<sup>8</sup>, Mégane Vernon-Contentin<sup>8</sup>, Sarah Burton<sup>8</sup>, François Christy<sup>2,9</sup>, Olivier Tredan<sup>4,10</sup>, Benoit You<sup>4,5,11</sup>, Manuel Rodriguez<sup>4,5,12</sup>, Sophie Abadie-Lacourtoisie<sup>4,13</sup>, Laurence Gladieff<sup>4,14</sup>, Pierre Fournel<sup>4,15</sup>, Guillaume Beinse<sup>4,5,16</sup>, Jérôme Alexandre<sup>4,16</sup>, Pierre-Alexandre Just<sup>4,17</sup>, Laurent Poulain<sup>8</sup>, Roman Rouzier<sup>2,18</sup>, Florence Joly<sup>2,4,9</sup>, Christophe Denoyelle<sup>8</sup>

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**Introduction:** UTOLA, a randomised phase IIb trial of maintenance olaparib versus placebo after platinum-based chemotherapy among patients with advanced/metastatic endometrial cancer (EC), did not demonstrate a PFS benefit in the overall population, but suggested differential efficacy across pre-specified subgroups, particularly among p53 abnormal (p53-abn) +/- chromosomal instability. We investigated whether tumour miR-622, able to restore HR pathway functionality in ovarian carcinoma, could identify patients most likely to benefit from PARPi, particularly within the p53-abn subgroup.

**Methods:** This ancillary study included UTOLA patients with available FFPE tumour tissue. MiR-622 expression was quantified by RT-qPCR with endogenous normalization. Patients were categorised as low/high miR-622 expression according to the median

value. PFS was compared between olaparib and placebo within miR-622 stratification using Cox proportional hazards models adjusted for relevant clinicopathological factors, with prespecified analyses in p53-abn and p53-wildtype (p53-wt) subgroups.

**Results:** Among 107 eligible patients with tumour samples, 47% were p53-abn. In the overall population, tumour miR-622 levels were not predictive. In the p53-abn subgroup, low miR-622 expression identified patients who benefited significantly from olaparib versus placebo (hazard ratio for PFS 0.30; 95% confidence interval 0.11-0.83;  $p=0.02$ ), while no benefit was observed in patients with high miR-622 expression. No predictive effect of miR-622 was noticed in p53-wt tumours

**Conclusion/Implications:** These findings support a predictive role for low miR-622 in p53-abn EC. Tumour miR-622 expression may serve as a predictive biomarker of maintenance olaparib efficacy in p53-abn advanced EC. These results warrant validation and could help to select the patients who may benefit of olaparib in advanced EC.

**Topic:** AS01. Basic & Translational Science / AS01b. Translational Findings

## **THE CHROMOSOME 19 MICRORNA CLUSTER (C19MC) IS REACTIVATED IN PRIMARY UTERINE CARCINOSARCOMA BUT LOST AT METASTASIS**

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**Introduction:** Uterine carcinosarcoma (UCS) is a rare biphasic malignancy with poor prognosis. While the chromosome 19 microRNA cluster (C19MC) is normally silenced in adult somatic tissues, its reactivation has been linked to stemness and aggressive features in non-gynaecological malignancies. We aim to describe C19MC expression dynamics across primary tumour components and metastatic UCS.

**Methods:** We collected 106 microdissected FFPE samples (36 'carcinomatous', 35 'sarcomatous', 35 metastases) from 36 UCS patients. Pathological and clinical data were collected. Illumina small RNA-seq was performed. Cluster-level effects were assessed by sign-tests on log2 fold changes. Correlations with canonical EMT miRNA axes (miR-200 family, miR-199/214 cluster) were evaluated.

**Results:** C19MC was reactivated in primary UCS, with 54 canonical mature miRNAs of the cluster quantifiable in our cohort. Expression was higher in the sarcomatous than carcinomatous component for 46 of 54 members ( $p=1.4 \times 10^{-7}$ ) and attenuated with stage progression. C19MC members were highly co-expressed (median Pearson  $r=0.70$ ), consistent with coordinated regulation. C19MC expression was not correlated with canonical EMT miRNA axes (miR-200 family  $r=0.01$ ; miR-199/214 cluster  $r=0.16$ ) indicating an EMT-independent dysregulation. C19MC expression was lower in metastatic UCS than in paired primary UCS, for both carcinomatous ( $p=3 \times 10^{-11}$ ) and sarcomatous components ( $p=8 \times 10^{-10}$ ), suggesting reactivation is not maintained at metastatic sites.

**Conclusion/Implications:** C19MC reactivation is a primary tumour-specific event, localised predominantly to the sarcomatous component and most prominent in early-stage disease. The non-correlation with standard EMT pathways suggests C19MC represents a distinct regulatory program in UCS histogenesis, potentially serving as an early driver of biphasic divergence that is not required for metastatic maintenance.

**Topic:** AS01. Basic & Translational Science / AS01b. Translational Findings

## **LIVE ATTENUATED BACTERIAL THERAPEUTICS (SPIKE) AS A NOVEL TREATMENT STRATEGY FOR PLATINUM-RESISTANCE EPITHELIAL OVARIAN CANCER**

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**Introduction:** Ovarian cancer remains a highly lethal gynecological malignancy and the second leading cause of death among reproductive cancers. Despite advances in cytoreductive surgery and platinum-based chemotherapy, outcomes for advanced disease remain poor, with five-year survival rates below 40% for stage III and under 20% for stage IV. These challenges are driven by late diagnosis, absence of effective screening strategies, rapid disease progression, and the emergence of chemotherapy resistance. Clinically, platinum sensitivity is defined by time to relapse, with recurrence occurring six months or more after therapy classified as platinum-sensitive, and recurrence within six months considered platinum-resistant. The development of resistance, alongside a highly immunosuppressive tumor microenvironment, underscores the urgent need for novel therapeutic approaches.

**Methods:** In this study, we investigated SPIKE (Synthetic Programmable bacteria for Immune-directed Killing in tumor Environments), an attenuated *Brucella melitensis* 16M  $\Delta$ vjbR strain, as a potential therapeutic for ovarian cancer. SPIKE has demonstrated tumor-homing ability, macrophage reprogramming toward a pro-inflammatory M1 phenotype, and enhanced CD8<sup>+</sup> T cell activity in prior models; however, its role in ovarian cancer remains unclear. Using the homologous recombination-proficient KPCA ovarian cancer model, which closely recapitulates high-grade serous ovarian cancer and platinum resistance, we administered live and heat-killed SPIKE to tumor-bearing mice. Treatment began seven days post-transplantation with a subsequent booster dose.

**Results:** SPIKE treatment significantly reduced tumor burden, achieving approximately 66% tumor clearance and prolonging survival. This effect was accompanied by increased infiltration of CD8<sup>+</sup> cytotoxic T cells.

**Conclusion/Implications:** Collectively, these findings highlight SPIKE's promise as a novel bacteria-based therapeutic for platinum-resistant ovarian cancer.

## BIOINFORMATICS ANALYSIS REVEALS CANDIDATE TARGET ANTIGENS FOR CAR-T CELL THERAPY IN OVARIAN CLEAR CELL CARCINOMA

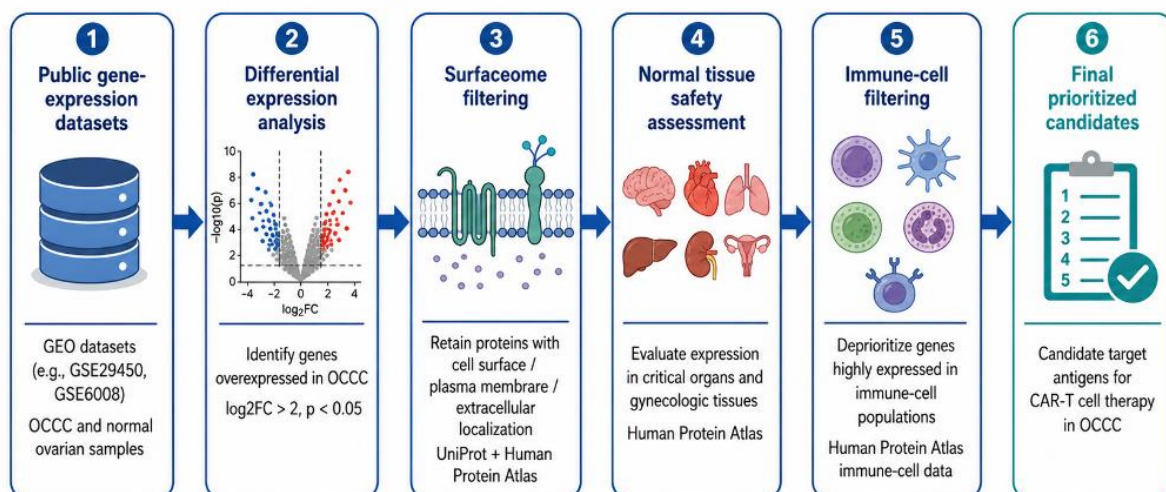
Oanh Huynh Thi

Taipei Medical University, Taipei, Taiwan

**Introduction:** Ovarian clear cell carcinoma (OCCC) is a rare, aggressive ovarian cancer subtype with platinum resistance and poor outcomes in advanced or recurrent disease. Although targeted therapies and immune checkpoint inhibitors benefit selected patients, no broadly effective systemic treatment exists. CAR-T therapy has transformed hematologic malignancies, but solid-tumor use remains limited by antigen heterogeneity, immunosuppressive microenvironments, and lack of safe tumor-specific surface targets. This study used bioinformatics analysis to identify OCCC-enriched, surface-accessible candidate antigens with low normal and immune tissue expression for potential CAR-T development.

**Methods:** Public GEO datasets containing OCCC and normal ovarian/ovarian surface epithelial samples were analyzed for overexpressed genes using  $\log_2FC > 2$  and  $p < 0.05$ . Tumor-enriched genes were filtered by surfaceome, UniProt, and Human Protein Atlas annotations to retain surface-accessible proteins. Candidates were further screened against normal tissue and immune-cell expression data, then prioritized by tumor enrichment, surface localization, low normal/immune expression, and CAR-T target suitability.

### Bioinformatics Pipeline for Candidate CAR-T Antigen Discovery in Ovarian Clear Cell Carcinoma



OCCC = ovarian clear cell carcinoma.

**Results:** The pipeline identified **104 overlapping upregulated genes** from GSE29450 and GSE6008. Sequential surfaceome, normal-tissue, and immune-cell filtering narrowed these to **12 final candidate antigens** with tumor-enriched expression, predicted surface accessibility, and low normal/immune expression. Patient-specific WES analysis is ongoing and was not available at abstract submission.

**Conclusion/Implications:** This study identified **12 preliminary candidate surface antigens** for CAR-T development in OCCC using differential expression, surface localization, and normal/immune tissue safety filtering. These candidates provide a focused shortlist for further validation. Ongoing patient-specific WES analysis may add genomic support and strengthen future antigen prioritization for safer, more precise CAR-T strategies.

**Topic:** AS01. Basic & Translational Science / AS01b. Translational Findings

## **RESTORING HLA-I LOSS TO OVERCOME IMMUNE EVASION IN DEDIFFERENTIATED ENDOMETRIAL/OVARIAN CANCER**

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**Introduction:** Dedifferentiated carcinomas of the endometrium and the ovary (DDC) are aggressive cancers that typically occur in microsatellite instability-high (MSI-H) context. Despite a high neo-antigen load, DDC can evade immune surveillance and metastasize widely.

**Methods:** Whole-slide immunohistochemistry-based image analysis was used to compare the immune landscape between the differentiated and undifferentiated components of 14 DDCs, followed by functional analysis in patient-derived tumor models.

**Results:** Dedifferentiation was associated with changes in spatial cancer immunophenotypes, most frequently from an inflamed immunophenotype in the differentiated to an excluded immunophenotype in the undifferentiated component, with loss of tumor HLA-I expression and increased stromal PD-L1+ immune infiltrates. In patient-derived ex vivo 3D spheroid tumor models of DDC, low surface HLA-I expression was also observed in the undifferentiated carcinoma of 2 endometrial models (DDEC1 and DDEC2) and one ovarian model (DDOC1) by flow cytometry analysis. INF- $\gamma$  treatment (100ng/ml) increased HLA-I expression in DDEC2 (3.5-fold increase,  $p < 0.05$ ) and DDOC1 (nearly 2-fold increase,  $p < 0.05$ ) but not in DDEC1, which harbored inactivating *JAK1* mutations. Co-culture experiments using DDOC1 and autologous T-cells showed a baseline apoptosis of 19.6% with the addition of T-cells after vehicle control pretreatment and this increased to 75.5% with the addition of T-cells after IFN- $\gamma$  pretreatment.

**Conclusion/Implications:** These findings implicate the loss of tumor HLA-I expression as an immune evasion mechanism acquired during dedifferentiation. INF- $\gamma$  can restore tumor HLA-I expression which enhances T-cell mediated cell killing, hence providing

the preclinical rationale to combine immune check point inhibitor with INF- $\gamma$  in the treatment of MSI-H DDC.

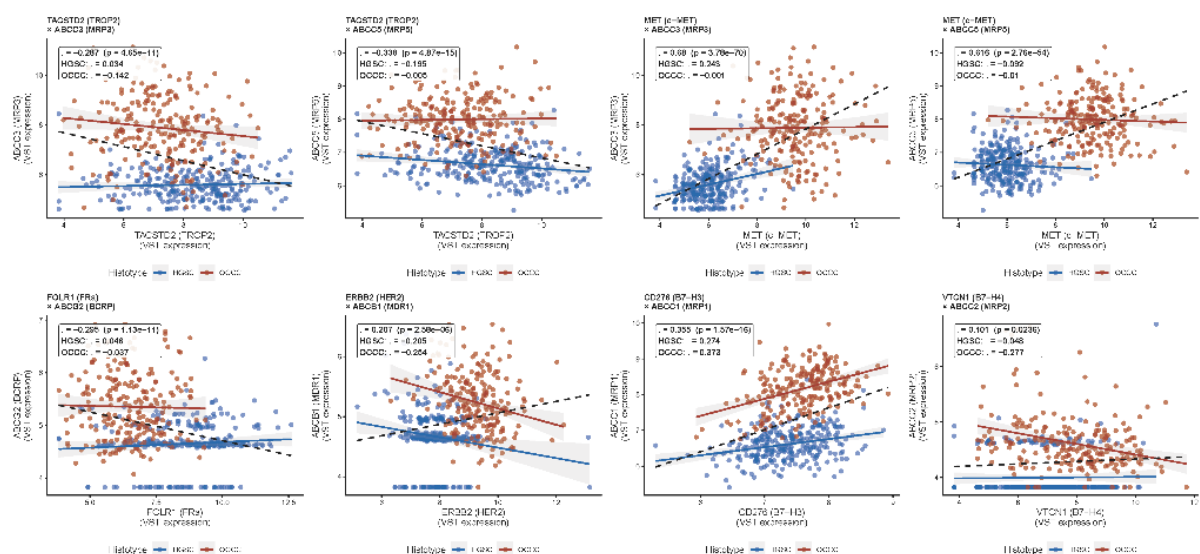
## HISTOTYPE-SPECIFIC ANTIBODY-DRUG CONJUGATE STRATEGIES FOR OVARIAN CANCER: TRANSCRIPTOMIC TARGET IDENTIFICATION AND DRUG EFFLUX CO-EXPRESSION IN CLEAR CELL VS. HIGH-GRADE SEROUS CARCINOMA

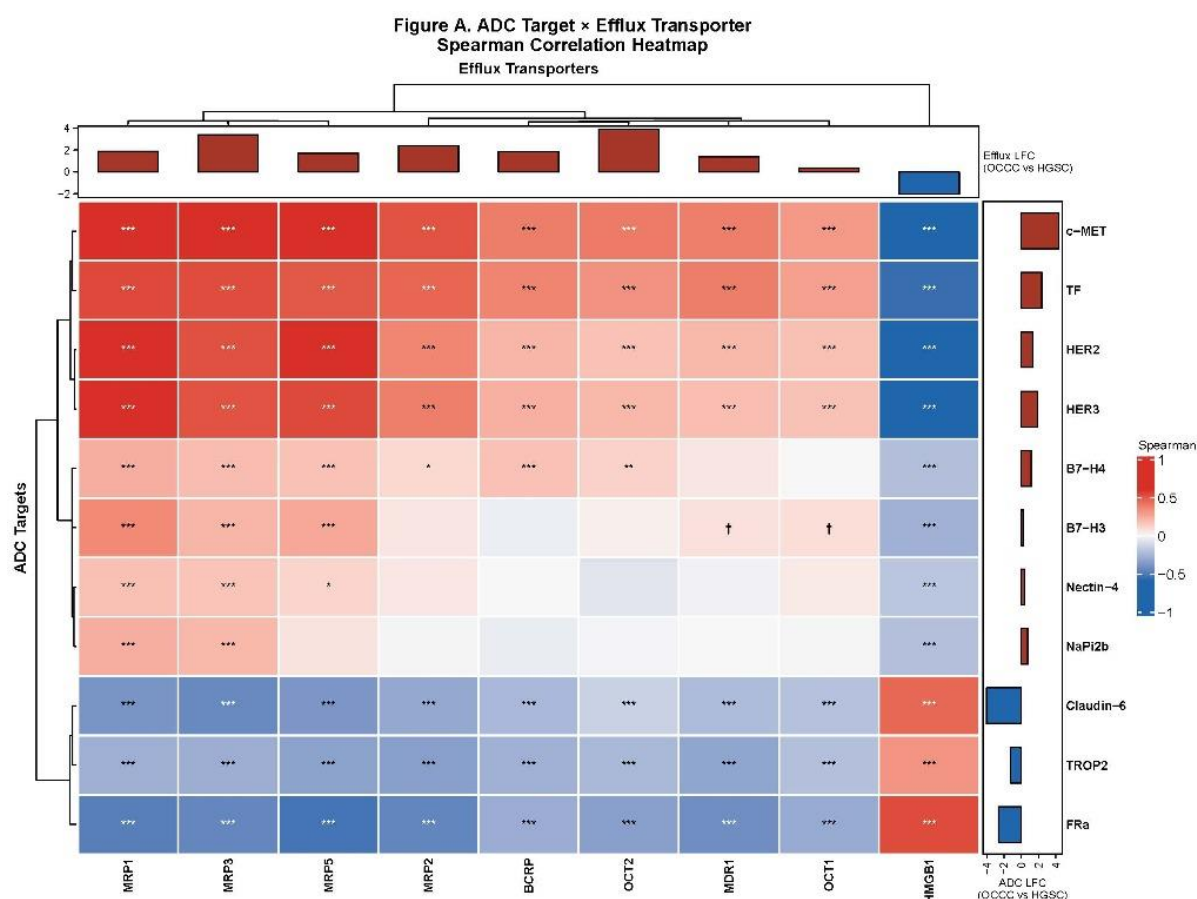
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Soonchunhyang Univerisity Hospital Bucheon, Bucheon, Korea, Republic of

**Introduction:** Ovarian clear cell carcinoma (OCCC) has limited therapeutic options and poor chemotherapy response. We aimed to identify antibody-drug conjugate (ADC) targets in OCCC and assess co-expression of drug efflux transporters as resistance mechanisms.

**Methods:** We analyzed three public RNA-seq datasets from JGOG3025 (GSE263083, HGSC n=274; GSE307292, OCCC n=166) and the Kyoto cohort (GSE306901, OCCC n=57). After ComBat-seq batch correction, DESeq2 was applied for differential expression. Spearman correlation was assessed between 11 ADC targets and 9 efflux transporter genes.

### Results:





Six ADC targets were upregulated in OCCC vs. HGSC: c-MET (log<sub>2</sub>FC=4.31), TF (2.39), HER3 (1.90), HER2 (1.29), B7-H4 (1.15), NaPi2b (0.76); whereas TROP2 (−1.26) and FRα (−2.64) were HGSC-enriched. MRP1/2/3/5 were concurrently upregulated in OCCC. Two contrasting patterns emerged (Fig A,B): OCCC-enriched targets showed positive MRP correlation — c-MET×MRP1 ( $p=0.681$ ), c-MET×MRP3 (0.680), HER2×MRP1 (0.681), HER2×MRP5 (0.603), HER3×MRP1 (0.608), TF×MRP1 (0.545) — indicating concurrent risk; conversely, HGSC-enriched TROP2 and FRα showed inverse correlation (TROP2×MRP3  $\rho=-0.287$ , TROP2×MRP5  $-0.338$ ; FRα×MRP5  $-0.532$ ). NaPi2b and B7-H4 showed minimal correlation (mean  $p<0.16$ ). GSEA confirmed enrichment of ABC transporter pathways in OCCC.

**Conclusion/Implications:** NaPi2b and B7-H4 are favorable OCCC targets with low efflux burden, supporting monotherapy. TROP2- and FRα-directed ADCs are mechanistically favored for HGSC given inverse efflux correlation. In contrast, c-MET-, TF-, HER2-, and HER3-directed ADCs in OCCC showed strong MRP co-expression ( $p>0.50$ ), suggesting MRP inhibitor combination or topoisomerase I-inhibitor payloads with bystander activity may be required to overcome efflux-mediated resistance. These findings provide a transcriptomic rationale for ADC strategies tailored to OCCC and HGSC.

## ASSESSMENT AND DETECTION OF PHTHALATES IN THE VAGINA IN PATIENTS WITH ENDOMETRIAL CANCER

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**Introduction:** Endometrial cancer (EC) is the most common gynecologic malignancy worldwide. Although hormonal and metabolic risk factors are well established, the contribution of environmental exposures to EC remains poorly understood. Phthalates are ubiquitous endocrine-disrupting chemicals implicated in hormone-mediated carcinogenesis; however, their presence in the vaginal environment has not been previously evaluated in EC. This study aimed to identify and quantify six vaginal phthalates in patients with EC compared with benign controls.

**Methods:** Vaginal swabs were collected during hysterectomy from patients with EC and benign controls. Phthalates were identified by ultra-performance liquid chromatography-tandem mass spectrometry. Bis(2-ethylhexyl) phthalate (DEHP), and five metabolites—monoethylhexyl phthalate (MEHP), mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP), monobutyl phthalate (mBP), monobenzyl phthalate (mBzP), and monoethyl phthalate (mEP)—were quantified. Calibration curves ranged from 0.01–200 ng/mL ( $R^2 > 0.99$ ). Phthalate concentrations were compared among benign controls, low-grade (LG), and high-grade (HG) EC using Welch's t-test.

**Results:** 269 patients were included (118 benign controls, 91 LG, and 60 HG EC). All six phthalates were detectable across groups. mBzP concentrations were significantly higher in HG EC compared with benign controls (5.20 vs 1.37 ng/mL;  $p=0.015$ ). mEP levels were significantly elevated in both LG (27.30 ng/mL;  $p=0.049$ ) and HG EC (22.06 ng/mL;  $p=0.007$ ) relative to benign controls (6.33 ng/mL).

**Conclusion/Implications:** Vaginal phthalates are detectable in EC and selectively enriched by tumor grade. These findings support a potential role for environmental exposures in EC and highlight the vaginal environment as a novel, non-invasive site for exposure assessment. Further studies are warranted to elucidate host-phthalate interactions and implications for EC prevention and early detection.

**Topic:** AS01. Basic & Translational Science / AS01b. Translational Findings

## **EFFICACY TRANSLATION BETWEEN PHASE II AND PHASE III TRIALS IN GYNECOLOGIC ONCOLOGY: A CROSS-PHASE META-COMPARATIVE ANALYSIS**

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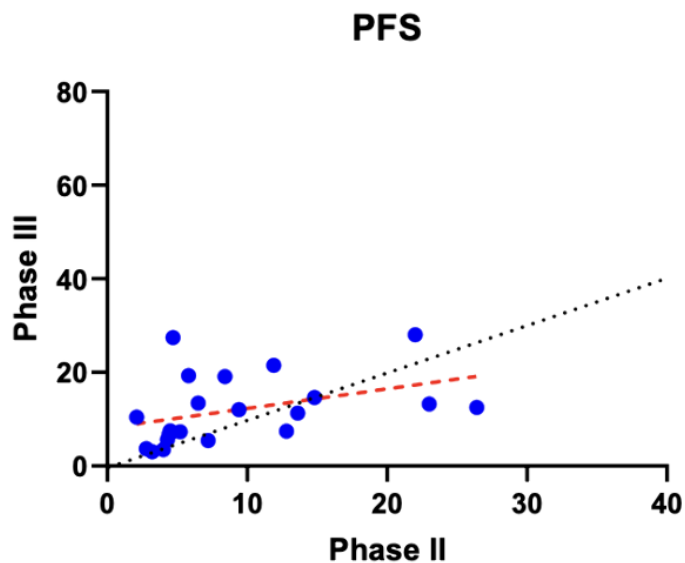
<sup>1</sup>McGill University, Obstetrics & Gynecology, Montreal, Canada, <sup>2</sup>McGill University Health Centre (MUHC), Department Of Gynecologic Oncology, Montreal, Canada, <sup>3</sup>McGill University Health Centre, Gynecologic Oncology, Montreal, Canada, <sup>4</sup>Florida Cancer Specialists & Research Institute, West Palm Beach, United States of America, <sup>5</sup>Cedars Sinai Medical Center, Division Of Minimally Invasive Gynecologic Surgery, Los Angeles, United States of America, <sup>6</sup>Texas Oncology, The Woodlands, United States of America

**Introduction:** The reliability of phase II results informing phase III outcomes has been inconsistent across tumor treatment settings. We aim to quantify the magnitude of treatment-effect attenuation between phase II and III gynecologic oncology trials.

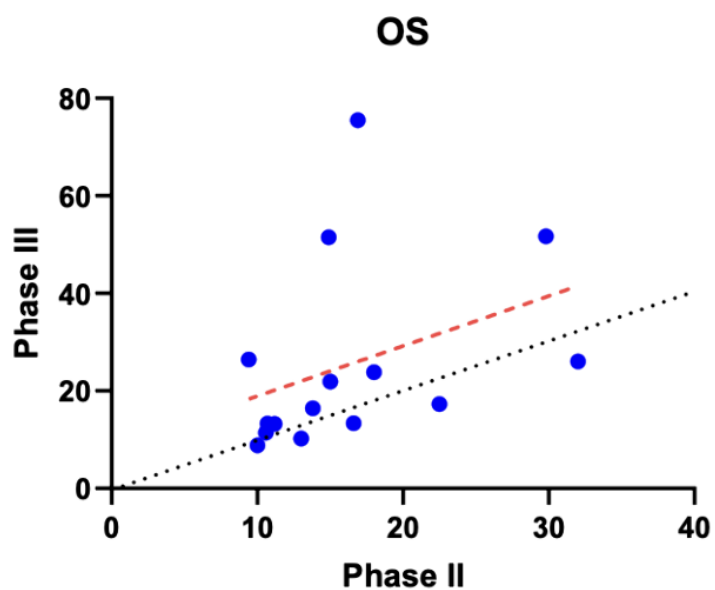
**Methods:** We systematically identified phase III gynecologic cancer trials published between 2010 and 2025 through ClinicalTrials.gov. Each phase III study was paired with its preceding phase II trial. Demographics, design, and efficacy outcomes were extracted. Correlations between phase II and phase III progression-free survival (PFS) and overall survival (OS) were assessed using Spearman's rank coefficients, and directional differences were compared with paired and non-parametric tests.

**Results:** Of 221 screened phase III trials, 25 matched phase II–III pairs were included. The median PFS data was 11.3 months (interquartile range [IQR] 6.1–16.8) in phase III versus 7.2 months (IQR 4.1–13.2) in phase II ( $p = .11$ ). PFS data values were correlated ( $\rho = 0.59$ ,  $p = .005$ ). Phase III–superior pairs ( $n = 13$ ) had a median gain of 4.6 months (IQR 2.2–9.4) versus 2.3 months (IQR 0.5–9.8) for phase II–superior pairs. The median OS was 20.4 months (IQR 13.2–38.2) versus 14.9 months (IQR 10.8–21.3) ( $p = .06$ ); OS values were correlated ( $\rho = 0.57$ ,  $p = .002$ ). Median OS gain was 5.9 months (IQR 2.7–17.0) for phase III–superior versus 3.2 months (IQR 2.8–3.5) for phase II–superior pairs ( $p = .022$ ).

**Figure 1.** Correlation between progression free survival of paired phase II – phase III trials.



**Figure 2.** Correlation between overall survival of paired phase II – phase III trials.



**Conclusion/Implications:** Phase II and phase III gynecologic oncology trials demonstrate moderate concordance of PFS and OS. Greater use of randomized phase II designs and improved demographic reporting may enhance translational validity.

**Topic:** AS02. Clinical Disciplines / AS02e. Surgical Techniques & Perioperative Management

## **20 CASES OF UTERINE TRANSPOSITION IN ORGAN-PRESERVING TREATMENT OF INVASIVE CERVICAL CANCER**

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**Introduction:** Not long ago, the radical trachelectomy has become a standard of the treatment. However, the treatment option is limited to IB1 stage. Uterine transposition, provides the technical conditions for pelvic radiation, expands the possibilities of organ-preserving treatment.

**Methods:** Our study include 20 patients with squamous cell cervical cancer at stages Ib2, Ib3, II, and IIIC since 2018. The median of age is 31.6 years. All patients received 2-3 courses of systemic or intra-arterial chemotherapy through the uterine vessels along with GnRH agonists, administered for ovarian reserve preserving. Next step of treatment the radical abdominal or laparoscopic trachelectomy with paraumbilical uterine transposition was performed, without utero-umbilical anastomosis, due to amenorrhea by the GnRH agonists. The third step is chemoradiation therapy according to the standards. Next is the uterus reposition into the pelvis with the uterovaginal anastomosis.

**Results:** The median of follow-up is 24.2 months. Menstrual function was recovered in all women after discontinuation of GnRH agonists. 19 patients have no signs of recurrence. One patient has the multiple metastatic lesions that were detected in the liver three months after the treatment was been completed. The metastatic lesions was not present in any other organs. From our patients no more than 4 woman is ready to realize the reproduction function now. One patient is undergoing IVF. There are no spontaneous pregnancies have been reported among our patients.

**Conclusion/Implications:** Uterine transposition creates conditions for chemoradiation and expands the possibilities of the organ-preserving treatment for invasive cervical cancer. The study has positive results and should be continued.

**Topic:** AS02. Clinical Disciplines / AS02e. Surgical Techniques & Perioperative Management

**RANDOMIZED CONTROLLED STUDY EVALUATING THE FEASIBILITY AND EFFICACY OF DIGITAL INFORMED CONSENT FOR SURGERY. (SHORT TITLE: DIGITAL INFORMED CONSENT TO SURGERY: A RANDOMIZED STUDY)**

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**Introduction:** Informed consent for surgery is ethically essential yet often inconsistently delivered, resulting in variable patient comprehension, preparedness, and engagement.

**Methods:** Patients with endometrial cancer were randomized 1:1 to standard consent or a secure multimedia digital consent platform (Precare®). Participants completed standardized assessments of demographics and health literacy, as well as pre- and postoperative patient-reported outcome measures. Postoperative semi-structured interviews were performed. Engagement analytics from the Precare® platform were extracted and analyzed to characterize patient usage patterns and time spent across individual subjects of the consent.

**Results:** A total of 100 patients were randomized and completed the study. Unlike traditional consent, the Precare® platform enabled longitudinal engagement, content revisitation, and measurable interaction with consent materials. It produced convergent improvements across perioperative consent outcomes, with higher preoperative information scores for supportive services ( $52.3 \pm 33.0$ ,  $31.7 \pm 29.0$ ;  $p=.015$ ), preparedness to provide consent ( $87.4 \pm 16.5$ ,  $79.6 \pm 20.5$ ), preferences and concerns being considered ( $86.2 \pm 24.4$ ,  $76.3 \pm 23.1$ ;  $p=.047$ ), certainty about the surgical decision ( $94.3 \pm 15.6$ ,  $86.0 \pm 18.8$ ;  $p=.038$ ), and postoperative informational satisfaction ( $89.3 \pm 18.3$ ,  $77.4 \pm 22.3$ ;  $p=.030$ ), comprehension of surgical information ( $93.1 \pm 13.5$ ,  $82.7 \pm 16.6$ ;  $p=.016$ ), agency/autonomy ( $79.4 \pm 24.5$ ,  $73.0 \pm 17.8$ ;  $p=.043$ ). The strongest effects were observed in domains central to informed consent: feeling informed, understanding risks and benefits, preparedness for recovery, perception of personalized information, involvement in decision-making, and ability to clearly express a decision. The platform demonstrated high understandability and usability. Qualitative interviews revealed patients used the platform to revisit complex information, involve caregivers, tailor learning, and better prepare for recovery.

**Conclusion/Implications:** Digital education and consent platforms offer a standardized, trackable, and patient-directed approach to informed consent, improving comprehension, engagement, and preparedness, while being time-efficient for care teams.

**REDIRECTS: REDUCING DIVERTING ILEOSTOMY RATES THROUGH EVIDENCE-BASED DECISION-MAKING IN OVARIAN CYTOREDUCTIVE SURGERY**

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**Introduction:** Diverting ileostomy (DI) is commonly performed during ovarian cancer cytoreductive surgery with large bowel resection to mitigate anastomotic leak (AL). Reported DI rates vary widely (3–69%), reflecting institutional and surgeon preference rather than standardized criteria. Our prior cohort (n=134) had DI 44.8% and AL 3.7%. We aimed to develop evidence-based diversion criteria to reduce DI rates without compromising AL outcomes.

**Methods:** A quality improvement framework was developed from validated literature, incorporating intraoperative indocyanine green fluorescence angiography (ICG-FA). The REDIRECTS decision-tree protocol offers an objective, reproducible intraoperative aid for determining diversion. Six absolute and four relative consensus-driven criteria were established; diversion was recommended for  $\geq 1$  absolute or  $\geq 2$  relative criteria. Outcomes were compared using Mann–Whitney U, Fisher's exact, or chi-square tests.

**Results:** Between January 2022 and January 2026, 146 patients met eligibility (median age 63; BMI 25.0; 84.2% serous; 51.4% stage III). Primary, interval, and secondary cytoreduction comprised 59.6%, 20.5%, and 19.9%, respectively. 88.4% had one large bowel resection and 11.6% had  $\geq 2$ . Gynecologic oncologists performed resection/reconstruction in 88.4%, with general surgeon involvement in 11.6%. Diversion occurred in 26 patients (17.8%); REDIRECTS compliance was 84.7%. AL occurred in 6 (4.1%): 3.3% non-diverted vs 7.7% diverted. Readmission, intra-abdominal infection, and SSI rates were significantly higher in the diverted group.

**Table 1. Cohort Characteristics by Diversion Status**

| Variable                                 | Total (n=146)         | Non-diverted (n=120) | Diverted (n=26)       | p-value          |
|------------------------------------------|-----------------------|----------------------|-----------------------|------------------|
| Age                                      | 60.8 [53.2–69.0]      | 61.0 [53.0–69.0]     | 60.0 [58.0–65.8]      | 0.749            |
| BMI                                      | 25.3 [21.0–27.0]      | 25.5 [21.0–27.0]     | 24.7 [20.9–27.2]      | 0.727            |
| Albumin                                  | 42.0 [40.0–45.0]      | 42.7 [40.0–45.8]     | 39.5 [35.0–44.0]      | <b>0.031</b>     |
| <b>Histology</b>                         |                       |                      |                       | <b>0.562</b>     |
| Serous                                   | 123 (84.2%)           | 102 (85.0%)          | 21 (80.8%)            |                  |
| Non-serous                               | 23 (15.8%)            | 18 (15.0%)           | 5 (19.2%)             |                  |
| <b>Stage</b>                             |                       |                      |                       | <b>0.952</b>     |
| Stage I                                  | 1 (0.7%)              | 1 (0.8%)             | 0 (0.0%)              |                  |
| Stage II                                 | 8 (5.6%)              | 7 (5.9%)             | 1 (4.0%)              |                  |
| Stage III                                | 75 (52.4%)            | 61 (51.7%)           | 14 (56.0%)            |                  |
| Stage IV                                 | 31 (21.7%)            | 25 (21.2%)           | 6 (24.0%)             |                  |
| Recurrence                               | 28 (19.6%)            | 24 (20.3%)           | 4 (16.0%)             |                  |
| <b>Type of surgery</b>                   |                       |                      |                       | <b>0.769</b>     |
| Primary Cytoreductive Surgery            | 87 (59.6%)            | 70 (58.3%)           | 17 (65.4%)            |                  |
| Interval Cytoreductive Surgery           | 30 (20.5%)            | 25 (20.8%)           | 5 (19.2%)             |                  |
| Secondary Cytoreductive Surgery          | 29 (19.9%)            | 25 (20.8%)           | 4 (15.4%)             |                  |
| <b>Bowel resection (BR) count</b>        |                       |                      |                       | <b>&lt;0.001</b> |
| <b>Patients with total BR = 1</b>        | <b>127 (87.0%)</b>    | <b>111 (92.5%)</b>   | <b>16 (61.5%)</b>     |                  |
| Low Anterior Resection (LAR) only        | 97 (66.4%)            | 84 (70.0%)           | 13 (50.0%)            |                  |
| Non-LAR Large Bowel Resection            | 30 (20.5%)            | 27 (22.5%)           | 3 (11.5%)             |                  |
| Right hemicolectomy / ileocectomy        | 13 (43.3%)            | 13 (48.1%)           | 0 (0.0%)              |                  |
| Descending / sigmoid                     | 9 (30.0%)             | 9 (33.3%)            | 0 (0.0%)              |                  |
| Transverse colon resection               | 5 (16.7%)             | 5 (18.5%)            | 0 (0.0%)              |                  |
| Subtotal colectomy                       | 3 (10.0%)             | 0 (0.0%)             | 3 (100.0%)            |                  |
| <b>Patients with total BR = 2</b>        | <b>16 (11.0%)</b>     | <b>8 (6.7%)</b>      | <b>8 (30.8%)</b>      |                  |
| LAR + LBR                                | 14 (9.6%)             | 7 (5.8%)             | 7 (26.9%)             |                  |
| One LBR/LAR + one Small BR (SBR)         | 2 (1.4%)              | 1 (0.8%)             | 1 (3.8%)              |                  |
| <b>Patients with total BR = 3</b>        | <b>3 (2.1%)</b>       | <b>1 (0.8%)</b>      | <b>2 (7.7%)</b>       |                  |
| Three LBR/LAR                            | 2 (1.4%)              | 1 (0.8%)*            | 1 (3.8%)              |                  |
| Two LBR/LAR + one SBR                    | 1 (0.7%)              | 0 (0.0%)             | 1 (3.8%)              |                  |
| <b>Complications</b>                     |                       |                      |                       |                  |
| Estimated blood loss (EBL)               | 1021.0 [500.0–1200.0] | 863.4 [500.0–1000.0] | 1742.3 [800.0–2475.0] | <b>&lt;0.001</b> |
| Length of stay (LOS), days               | 9.3 [6.0–9.0]         | 9.1 [6.0–9.0]        | 10.2 [7.5–13.5]       | <b>0.002</b>     |
| Unplanned ICU admission                  | 6 (4.3%)              | 4 (3.5%)             | 2 (8.0%)              | 0.298            |
| SSI within 30 days                       | 32 (22.9%)            | 20 (17.4%)           | 12 (48.0%)            | <b>0.003</b>     |
| Postoperative anastomotic leak           | 6 (4.2%)              | 4 (3.4%)             | 2 (7.7%)              | 0.282            |
| Reoperation within 30 days               | 4 (2.8%)              | 3 (2.5%)             | 1 (4.0%)              | 0.541            |
| Readmission within 30 days               | 20 (14.0%)            | 11 (9.3%)            | 9 (36.0%)             | <b>0.002</b>     |
| Intra-abdominal infection within 30 days | 13 (9.2%)             | 6 (5.2%)             | 7 (28.0%)             | <b>0.002</b>     |

**Table 2. REDIRECTS criteria**

| <b>Absolute Criteria: 1 needed to recommend diversion</b>                                              |                                                           |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <b>Criterion</b>                                                                                       | <b>Current Cohort meeting absolute criteria (n=12/26)</b> |
| Anastomosis <=6 cm from the anal verge or Hartman                                                      | n=6                                                       |
| Hand sewn anastomosis of large bowel anastomosis                                                       | n=0                                                       |
| Prior pelvic radiation therapy                                                                         | n=2                                                       |
| Bevacizumab or high-dose chronic steroids (equivalent to prednisone >=10 mg) within 4 weeks of surgery | n=0                                                       |
| Positive air leak test or incomplete rectal donut                                                      | n=3                                                       |
| Poor ICG perfusion or clinical ischemia                                                                | n=1                                                       |
| <b>Relative Criteria: 2 needed to recommend diversion</b>                                              |                                                           |
| <b>Criterion</b>                                                                                       | <b>Current Cohort meeting relative criteria</b>           |
| Pre-operative albumin <=3.0 g/dL                                                                       | n=3                                                       |
| >=3 bowel resections or Deloyers procedure or/and previous large bowel resection                       | n=8                                                       |
| Moderate chronic steroid use (equivalent to 7.5-10 mg prednisone) within 4 weeks of surgery            | n=2                                                       |
| Anastomosis on tension                                                                                 | n=2                                                       |
| Surgeon concern due to other risk factors for poor healing [please specify]*                           | n=6                                                       |

\*This included 2 patient with 2 Large Bowel resections, 1 patient with anaphylactic reaction at time of surgery, 1 significant bowel edema+ HIPEC 1 significant bowel contamination, 1 significant blood loss and hemodynamic instability

**Conclusion/Implications:** REDIRECTS implementation achieved a 60.2% reduction in DI rates (44.8%→17.8%) with lower AL in non-diverted patients (3.3%) and high surgeon compliance. Structured, risk-based diversion criteria can safely reduce avoidable ileostomies and minimize stoma-related morbidity in patients undergoing ovarian cancer cytoreductive surgery with large bowel resection.

**Topic:** AS02. Clinical Disciplines / AS02e. Surgical Techniques & Perioperative Management

**TEXTBOOK ONCOLOGIC OUTCOME AND SURVIVAL FOLLOWING PRIMARY DEBULKING SURGERY FOR ADVANCED OVARIAN CANCER: A MEMORIAL SLOAN KETTERING CANCER CENTER TEAM OVARY STUDY**

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**Introduction:** Textbook Oncologic Outcome (TOO) is a composite quality metric reported to reflect optimal multidisciplinary care after cancer surgery. For ovarian cancer, TOO is defined as complete surgical cytoreduction, postoperative length of stay <10 days, no 30-day readmission, and initiation of adjuvant chemotherapy within 42 days. While population-based studies suggest an association between TOO and improved survival, data from institutional PDS cohorts remain limited. This study evaluates the association between TOO and survival outcomes in advanced ovarian cancer.

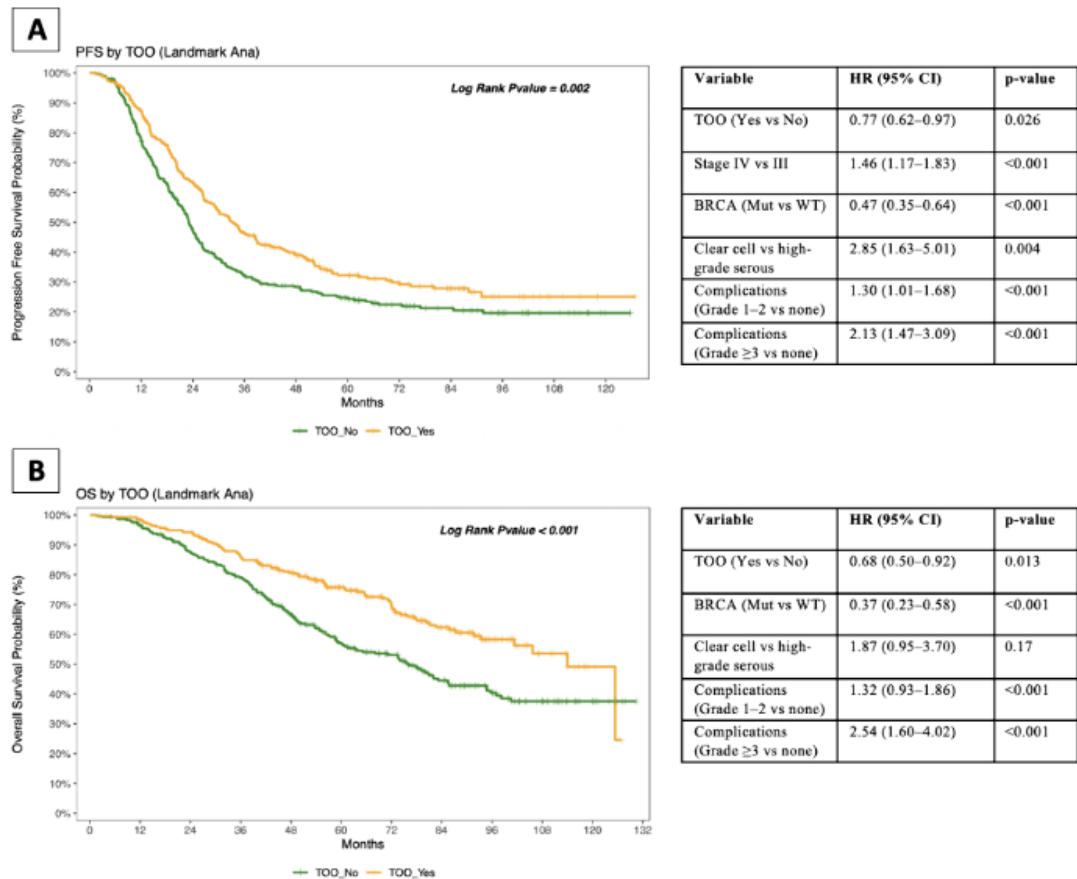
**Methods:** We conducted a retrospective cohort study of 574 patients with FIGO stage III–IV ovarian cancer who underwent PDS at our institution between January 2015 and August 31, 2022. PFS and OS were analyzed using Kaplan–Meier methods and Cox models.

**Results:** TOO was achieved in 281 patients (49%). Patients with and without TOO were comparable in baseline characteristics. Median follow-up was 86.5 months. Patients who achieved TOO had improved outcomes: median PFS was 33.3 vs 23.1 months (HR 0.73, 95% CI 0.60–0.89,  $p=0.002$ ), and median OS was 114 vs 76.1 months (HR 0.59, 95% CI 0.46–0.76,  $p<0.001$ ). On multivariate analysis TOO remained independently associated with improved PFS (HR 0.77,  $p=0.026$ ) and OS (HR 0.68,  $p=0.013$ ). Worse outcomes were associated with stage IV disease, non–high-grade serous histology, *BRC*A wild-type status, and postoperative complications, with worse outcomes observed with increasing complication severity.

**Table 1. Patient Characteristics**

| Characteristic                      | All, N = 574 <sup>1</sup> | TOO No,<br>N = 293 (20%) <sup>1</sup> | TOO Yes,<br>N = 281 (80%) <sup>1</sup> | p-value <sup>2</sup> |
|-------------------------------------|---------------------------|---------------------------------------|----------------------------------------|----------------------|
| Age at surgery, median (IQR), years | 60 (52, 67)               | 61 (52, 68)                           | 59 (52, 66)                            | 0.27                 |
| ASA class                           |                           |                                       |                                        | 0.18                 |
| ASA 1-2                             | 149 (26%)                 | 69 (24%)                              | 80 (28%)                               |                      |
| ASA 3-4                             | 425 (74%)                 | 224 (76%)                             | 201 (72%)                              |                      |
| Pathologic FIGO stage               |                           |                                       |                                        | 0.12                 |
| III                                 | 353 (61%)                 | 171 (58%)                             | 182 (65%)                              |                      |
| IV                                  | 221 (39%)                 | 122 (42%)                             | 99 (35%)                               |                      |
| Histology                           |                           |                                       |                                        | 0.09                 |
| HGSOC*                              | 486 (85%)                 | 254 (87%)                             | 232 (83%)                              |                      |
| LGSOC*                              | 25 (4.4%)                 | 16 (5.5%)                             | 9 (3.2%)                               |                      |
| Clear cell carcinosarcoma           | 25 (4.4%)                 | 10 (3.4%)                             | 15 (5.3%)                              |                      |
| Endometrioid carcinoma              | 11 (1.9%)                 | 4 (1.4%)                              | 7 (2.5%)                               |                      |
| Mucinous                            | 4 (0.7%)                  | 2 (0.7%)                              | 2 (0.7%)                               |                      |
| Carcinosarcoma                      | 23 (4.0%)                 | 7 (2.4%)                              | 16 (5.7%)                              |                      |
| BRCA 1/2 mutational status          |                           |                                       |                                        | 0.74                 |
| WT/VUS*                             | 367 (79%)                 | 183 (78%)                             | 184 (79%)                              |                      |
| BRCA1/BRCA2                         | 100 (21%)                 | 52 (22%)                              | 48 (21%)                               |                      |
| Missing                             | 107                       | 58                                    | 49                                     |                      |
| Residual disease                    |                           |                                       |                                        | -                    |
| Complete gross resection            | 448 (78%)                 | 167 (57%)                             | 281 (100%)                             |                      |
| Residual disease >0 cm              | 126 (22%)                 | 126 (43%)                             | 0 (0%)                                 |                      |
| Adjuvant chemotherapy completion    |                           |                                       |                                        | 0.25                 |
| No adjuvant/ <6 cycles              | 20 (3.5%)                 | 13 (4.4%)                             | 7 (2.5%)                               |                      |
| ≥6 cycles                           | 554 (97%)                 | 280 (96%)                             | 274 (98%)                              |                      |
| Highest postoperative complications |                           |                                       |                                        | <0.001               |
| No complication                     | 191 (33%)                 | 71 (24%)                              | 120 (43%)                              |                      |
| Grade 1-2 complication              | 318 (55%)                 | 168 (57%)                             | 150 (53%)                              |                      |
| Grade 3 complication                | 65 (11%)                  | 54 (18%)                              | 11 (4%)                                |                      |

<sup>1</sup> n(%), <sup>2</sup> Wilcoxon rank sum test; Fisher's exact test. **Abbreviations:** TOO, Textbook Oncologic Outcome; IQR, interquartile range; ASA, American Society of Anesthesiologists; HGSOC, high-grade serous ovarian cancer; LGSOC, low-grade serous ovarian cancer; FIGO, International Federation of Gynecology and Obstetrics; WT/VUS, wild type/variant of uncertain significance.



**Figure 1. Association of Textbook Oncologic Outcome (TOO) with progression-free and overall survivals.**  
 (A) Kaplan–Meier estimates of progression-free survival stratified by TOO status with corresponding multivariable Cox regression results.  
 (B) Kaplan–Meier estimates of overall survival stratified by TOO status with corresponding multivariable Cox regression results.  
 Abbreviations: HR, hazard ratio; CI, confidence interval; TOO, Textbook Oncologic Outcome; PFS, progression-free survival; OS, overall survival; mut, mutation; WT, wild type.

**Conclusion/Implications:** TOO appears to be independently associated with improved survival following PDS for advanced ovarian cancer and may serve as a clinically meaningful composite metric linking surgical quality and oncologic outcomes.

**PATIENT SELECTION FOR PELVIC AND PARA-AORTIC LYMPHADENECTOMY IN THE SENTINEL LYMPH NODE ERA IN ENDOMETRIAL CANCER**

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**Introduction:** In the sentinel lymph node era, the role of para-aortic lymphadenectomy in endometrial cancer remains uncertain, and this study aimed to reassess its clinical significance in patients at risk of nodal metastasis.

**Methods:** This retrospective study included 579 patients with preoperative International Federation of Gynecology and Obstetrics stage I–III endometrial carcinoma treated between January 2018 and December 2024. Patients were categorized into PLND alone (n=190) or PLND+PALND (n=110). Clinical, pathological, operative, and postoperative data were collected. Survival outcomes were analyzed using the Kaplan–Meier method, log-rank test, and multivariable Cox regression models.

**Results:** The median number of lymph nodes removed was 69.0 (interquartile range [IQR], 56.8–82.0) in the PLND+PALND group and 29.0 (IQR, 22.8–39.0) in the PLND group ( $P < .001$ ). Postoperative lymphadenectomy-associated complications were significantly more frequent in the PLND+PALND group (23.3% vs 13.6%,  $P = 0.46$ ). Combined lymphadenectomy resulted in higher surgical upstaging, with more patients identified as having lymph node metastases (13.7% vs 10.0%, difference 3.7%, 95% confidence interval [CI] 3.63–3.77,  $P = 0.79$ ).

At a median follow-up of 42.7 months, 31 recurrences and 20 deaths were observed. The risks of recurrence and death were similar between groups (recurrence: hazard ratio [HR] 1.36, 95% CI 0.6–3.08,  $P = 0.46$ ; overall survival: HR 1.07, 95% CI 0.40–2.82,  $P = 0.90$ ). Five-year disease-free and overall survival rates were comparable between groups (88.1% and 92.5% in the PLND group vs 84.8% and 86.1% in the PLND+PALND group, respectively).

**Conclusion/Implications:** Para-aortic lymphadenectomy improved staging accuracy but increased morbidity without a survival benefit.

**PROSPECTIVE TRIAL OF INDOCYANINE GREEN (ICG) AS A STANDALONE TRACER FOR SENTINEL LYMPH NODE DETECTION IN VULVAR CANCER (IGNITE-V TRIAL)**

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**Introduction:** The IGNITE-V trial (ClinicalTrials.gov identifier: NCT06039111) evaluated the diagnostic accuracy of Indocyanine Green (ICG) alone compared with the current dual tracer standard (ICG and Technetium-99 (Tc<sup>99</sup>)) in sentinel lymph node (SLN) mapping in patients with early vulvar cancer.

**Methods:** Patients with vulvar tumours ≤4 cm and clinically negative groins were prospectively enrolled. All underwent sequential SLN mapping: ICG-guided first, followed by Tc<sup>99</sup> gamma probe assessment. Nodes were classified as “green” (ICG-avid), “hot” (Tc<sup>99</sup>-avid) or both. Outcomes included detection rate, sensitivity and false negative rate of ICG alone.

**Results:** Thirty-seven patients (66 groins) were enrolled. Median BMI was 30. Overall SLN detection success was 98.5% (65/66, 95%Confidence Interval (CI) 91.8-100%). Detection success was 97% with ICG alone (64/66, 95%CI 89.5-99.6%) and 89.4% with Tc99 alone (59/66, 95%CI 79.4-95.6%). Nodal metastases were detected in 29.7% of patients (11/37) and 19.7% of groins (13/66). All positive nodes were both green and hot. 92.3% (12/13) of nodal metastases were identified using ICG alone. One positive SLN was initially missed by ICG, due to lateral location to the femoral artery, and subsequently identified with Tc<sup>99</sup>; this node was found to be both green and hot ex-vivo. ICG alone demonstrated a sensitivity of 96.8% (95%CI 88.8-99.6%) compared to dual tracer. The false negative rate was low at

**Table 1. Patient Characteristics and Outcomes**

| Characteristic                                                      | Statistic                                                                    | All Patients                                                      |
|---------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------|
| <b>N</b>                                                            |                                                                              | 37                                                                |
| <b>Patient Characteristics</b>                                      |                                                                              |                                                                   |
| <b>Age at diagnosis (years)</b>                                     | Mean (sd)<br>Median (range)                                                  | 69.0 (13.0)<br>68 (37-91)                                         |
| <b>Race, N (%)</b>                                                  | Caucasian<br>Asian<br>Other                                                  | 33 (89.2)<br>1 (2.7)<br>3 (8.1)                                   |
| <b>BMI (kg/m<sup>2</sup>)</b>                                       | Median (range)                                                               | 29.5 (15.1, 67.4)                                                 |
| <b>Smoking , N (%)</b>                                              | Yes                                                                          | 9 (25.0)                                                          |
| <b>Tumor Characteristics</b>                                        |                                                                              |                                                                   |
| <b>Tumour Size (cm)</b>                                             | Median (range)                                                               | 2.4 (0.3, 5.9)                                                    |
| <b>Histology, N (%)</b>                                             | SCC<br>Adenocarcinoma<br>Melanoma                                            | 31 (83.8)<br>1 (2.7)<br>5 (13.5)                                  |
| <b>FIGO Stage, N (%)</b>                                            | IB<br>II<br>III                                                              | 23 (62.2)<br>4 (10.8)<br>10 (27.0)                                |
| <b>Surgical Information</b>                                         |                                                                              |                                                                   |
| <b>Distance from vulvar midline, N (%)</b>                          | <1 cm<br>1 to <2 cm<br>2 cm or more                                          | 26 (72.2)<br>5 (13.9)<br>5 (13.9)                                 |
| <b>SLN planned, N (%)</b>                                           | Bilateral                                                                    | 30 (81.1)                                                         |
| <b>Inguinofemoral Lymphadenectomy Required, N (%)</b>               | Yes                                                                          | 2 (5.4)                                                           |
| <b>Indication for Inguinofemoral Lymphadenectomy, N (%)</b>         | Clinically Suspicious Node<br>Failure SLN Technique                          | 1 (2.9)<br>1 (2.9)                                                |
| <b>Outcome of sentinel technique right groin, N (%) (out of 35)</b> | Success                                                                      | 34 (97.1)                                                         |
| <b>Outcome of sentinel technique left groin, N (%) (out of 34)</b>  | Success                                                                      | 33 (97.1)                                                         |
| <b>Outcomes</b>                                                     |                                                                              |                                                                   |
| <b>Vulvar Margin Status, N (%)</b>                                  | Positive                                                                     | 1 (2.9)                                                           |
| <b>Vulvar closest margin distance (mm)</b>                          | Median (range)                                                               | 4 (0, 13)                                                         |
| <b>Depth of Invasion (mm)</b>                                       | Median (range)                                                               | 5 (0.3, 20)                                                       |
| <b>HPV Status, N (%)</b>                                            | Positive                                                                     | 10 (27.0)                                                         |
| <b>P16 status, N (%)</b>                                            | Positive                                                                     | 10 (31.3)                                                         |
| <b>P53 status, N (%)</b>                                            | Positive                                                                     | 13 (35.1)                                                         |
| <b>LVSI, N (%)</b>                                                  | Positive                                                                     | 5 (17.2)                                                          |
| <b>Adjuvant treatment, N (%)</b>                                    | No<br>Radiation<br>Chemoradiation<br>Surgery<br>Immunotherapy<br>Combination | 23 (62.2)<br>3 (8.1)<br>6 (16.2)<br>1 (2.7)<br>3 (8.1)<br>1 (2.7) |

7.7%.

**Table 2. SLN per groin outcome data (N = 66 groins)**

|                                                         |                                                          |           |
|---------------------------------------------------------|----------------------------------------------------------|-----------|
|                                                         |                                                          |           |
| Number of nodes removed per groin                       |                                                          |           |
|                                                         | Median (range)                                           | 2 (0, 5)  |
| Number of groins with fibroadipose tissue removed, N, % |                                                          | 15 (22.7) |
| Success of sentinel technique, N, %                     |                                                          | 65 (98.5) |
| Sentinel detection method, N, %                         |                                                          |           |
|                                                         | All nodes green AND hot                                  | 34 (52.3) |
|                                                         | Some nodes just green, NOT hot                           | 25 (38.5) |
|                                                         | Some nodes just hot, NOT Green                           | 5 (7.7)   |
| Lymphosyntiogram matched OR findings, N, %              |                                                          | 55 (83.3) |
| Sentinel detection timing, N, %                         |                                                          |           |
|                                                         | All nodes detected BEFORE gamma probe                    | 52 (80.0) |
|                                                         | Some nodes detected POST gamma probe                     | 13 (20)   |
|                                                         | % detected post gamma probe that are ALSO green          | 9 (13.9)  |
| Sentinel lymph node metastases, N, %                    |                                                          |           |
|                                                         | Yes                                                      | 13 (19.7) |
| Lymph node metastasis size, N, %                        |                                                          |           |
|                                                         | ITCs                                                     | 3 (4.6)   |
|                                                         | Micrometastasis                                          | 4 (6.1)   |
|                                                         | Macrometastasis                                          | 6 (9.1)   |
| Positive sentinel lymph node detection method, N, %     |                                                          |           |
|                                                         | All nodes green AND hot                                  | 13 (100)  |
| Positive sentinel detection timing (n, %)               |                                                          |           |
|                                                         | All positive nodes detected BEFORE gamma probe           | 12 (92.3) |
|                                                         | Some positive nodes detected POST gamma probe            | 1 (7.7)   |
|                                                         | % of those detected post gamma probe that are ALSO green | 1 (100)   |

**Conclusion/Implications:** ICG demonstrated high detection rate and excellent sensitivity as a standalone tracer. Most sentinel and positive nodes were identified prior to gamma probe use. Thorough exploration of the nodal basin for all green nodes remains critical when using ICG alone.

**FP057 / #153**

**Topic:** *AS01. Basic & Translational Science / AS01b. Translational Findings*

**PROTEOMIC LANDSCAPE OF OVARIAN CANCER REVEALS STAGE TRANSITION, IMMUNE EVASION MECHANISMS, AND CLINICALLY RELEVANT SUBTYPES**

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**Introduction:** High-grade serous ovarian cancer (HGSOC) is characterized by marked heterogeneity and poor prognosis. We aimed to systematically define stage-associated proteomic alterations, identify key regulators of tumour progression, and establish clinically relevant molecular and immune subtypes.

**Methods:** Proteomic profiling was performed on 116 primary HGSOC tumours with comprehensive clinical annotation. Integrative analyses included trajectory inference, unsupervised clustering, and transcription factor network modeling. Key findings were validated using multiplex immunohistochemistry, functional in vitro and in vivo assays, and external datasets including TCGA and single-cell transcriptomic cohorts.

**Results:** FIGO stage IIA emerged as a critical transition point distinguishing early and advanced stage disease, characterized by a shift from oxidative stress related pathways to cell cycle activation. Trajectory analysis identified GOSR2 as a key regulator of this transition. Mechanistically, GOSR2 interacted with SEC24D to suppress secretion of CXCL9 and CXCL12, thereby reducing CD8<sup>+</sup> T cell infiltration. Unsupervised clustering defined three robust proteomic subtypes (S-I to S-III) with distinct biological features and clinical outcomes. The S-III subtype exhibited enrichment of extracellular matrix (ECM) receptor interaction, immune evasion signatures, and poor prognosis. In parallel, three immune-contexture subtypes (IC1–IC3) were delineated, reflecting distinct tumour immune microenvironments with prognostic significance.

**Conclusion/Implications:** These findings provide a biologically grounded framework for precision stratification and may inform stage-adapted therapeutic strategies in HGSOC.

**Topic:** AS01. Basic & Translational Science / AS01b. Translational Findings

**PRE-CHEMOTHERAPY INFLAMMATORY INDICES ASSOCIATE WITH THROMBOELASTOGRAPHY-DEFINED HYPERCOAGULABILITY IN WOMEN WITH OVARIAN AND ENDOMETRIAL CANCER**

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**Introduction:** Cancer-associated thrombosis arises from complex interactions between inflammation, platelets, and coagulation. We have previously demonstrated a prevalent thromboelastography (TEG)-defined hypercoagulable phenotype in gynecologic malignancies with potential to refine VTE risk stratification. CBC-derived inflammatory indices, including NLR, PLR, SII, SIRI, MLR, dNLR, and N/L-P, represent accessible markers of immune-platelet activation. Their relationship to global coagulation profiles remains incompletely defined.

**Methods:** In a prospective cohort of 52 patients with ovarian and endometrial cancers, pre-chemotherapy CBC parameters were used to derive inflammatory indices. Coagulation was assessed using TEG<sup>®</sup> 5000 (R, K,  $\alpha$ -angle, MA, CI, LY30). Associations were evaluated using Spearman correlation and logistic regression against hypercoagulability thresholds (MA  $\geq$ 68.9 mm; CI  $\geq$ 3).

## Results:

**Table 1: Correlations between all Pre-chemotherapy Inflammatory Indices and TEG parameters in Ovarian and Endometrial cohort**

| Spearman's Correlations |                         | R     | K     | ALPHA | MA     | CI     | LY30  |
|-------------------------|-------------------------|-------|-------|-------|--------|--------|-------|
| NLR                     | Correlation Coefficient | -.030 | -.122 | .181  | .443** | .357*  | .140  |
|                         | Sig. (2-tailed)         | .838  | .399  | .209  | .001   | .012   | .333  |
|                         | N                       | 50    | 50    | 50    | 50     | 49     | 50    |
| PLR                     | Correlation Coefficient | .052  | -.209 | .223  | .656** | .500** | .090  |
|                         | Sig. (2-tailed)         | .720  | .145  | .119  | .000   | .000   | .534  |
|                         | N                       | 50    | 50    | 50    | 50     | 49     | 50    |
| MLR                     | Correlation Coefficient | -.144 | -.271 | .317* | .292*  | .325*  | -.226 |
|                         | Sig. (2-tailed)         | .320  | .057  | .025  | .040   | .023   | .114  |
|                         | N                       | 50    | 50    | 50    | 50     | 49     | 50    |
| dNLR                    | Correlation Coefficient | -.023 | -.072 | .108  | .388** | .303*  | .242  |
|                         | Sig. (2-tailed)         | .873  | .619  | .454  | .005   | .034   | .090  |
|                         | N                       | 50    | 50    | 50    | 50     | 49     | 50    |
| N/LP                    | Correlation Coefficient | -.068 | .054  | .026  | -.001  | -.047  | -.139 |
|                         | Sig. (2-tailed)         | .638  | .711  | .857  | .996   | .747   | .337  |
|                         | N                       | 50    | 50    | 50    | 50     | 49     | 50    |
| SII                     | Correlation Coefficient | .047  | -.189 | .213  | .631** | .504** | .177  |
|                         | Sig. (2-tailed)         | .747  | .188  | .137  | .000   | .000   | .219  |
|                         | N                       | 50    | 50    | 50    | 50     | 49     | 50    |
| SIRI                    | Correlation Coefficient | -.122 | -.226 | .269  | .327*  | .396** | -.078 |
|                         | Sig. (2-tailed)         | .399  | .114  | .059  | .021   | .005   | .590  |
|                         | N                       | 50    | 50    | 50    | 50     | 49     | 50    |

**Abbreviations:** NLR, neutrophil-to-lymphocyte ratio; PLR, platelet-to-lymphocyte ratio; MLR, monocyte-to-lymphocyte ratio; dNLR, derived neutrophil-to-lymphocyte ratio; SII, systemic immune-inflammation index (platelet  $\times$  neutrophil / lymphocyte); SIRI, systemic inflammation response index (neutrophil  $\times$  monocyte / lymphocyte); N/LP, neutrophil-to-(lymphocyte  $\times$  platelet) ratio; TEG, thromboelastography; R, reaction time; K, clot kinetics;  $\alpha$ -angle, rate of clot formation; MA, maximum amplitude; CI, coagulation index; LY30, clot lysis at 30 minutes.

Correlation coefficients ( $\rho$ ) are reported using Spearman's rank correlation.  $p < 0.05$ . \*\*  $p < 0.01$  (two-tailed).

**Table 2: Individual Binary Logistic Regression analysis of Pre-chemotherapy Inflammatory Indices against TEG-MA cut-off point ( $\geq 68.9$ ) and TEG-CI cut-off point ( $\geq 3$ ) as indicators of Hypercoagulability in Ovarian and Endometrial cohort**

| Hypercoagulability Dependent variable is TEG-MA cut-off point (68.9) |        |        |       |    |             |            |
|----------------------------------------------------------------------|--------|--------|-------|----|-------------|------------|
|                                                                      | B      | S.E.   | Wald  | df | Sig.        | Exp(B)     |
| <b>NLR</b>                                                           | .271   | .152   | 3.162 | 1  | 0.075       | 1.311      |
| <b>PLR</b>                                                           | .008   | .003   | 5.952 | 1  | <b>.015</b> | 1.008      |
| <b>MLR</b>                                                           | 3.384  | 1.757  | 3.710 | 1  | 0.054       | 29.491     |
| <b>dNLR</b>                                                          | .217   | .178   | 1.492 | 1  | .222        | 1.242      |
| <b>N/LP</b>                                                          | 19.776 | 22.111 | .800  | 1  | .371        | 38763996.5 |
| <b>SII</b>                                                           | .001   | .000   | 5.635 | 1  | <b>.018</b> | 1.001      |
| <b>SIRI</b>                                                          | .605   | .260   | 5.400 | 1  | <b>.020</b> | 1.831      |
| Hypercoagulability Dependent variable is TEG-CI cut off point (3)    |        |        |       |    |             |            |
| <b>NLR</b>                                                           | .126   | .101   | 1.562 | 1  | .211        | 1.134      |
| <b>PLR</b>                                                           | .004   | .002   | 3.392 | 1  | .066        | 1.004      |
| <b>MLR</b>                                                           | 3.070  | 1.717  | 3.196 | 1  | .074        | 21.534     |
| <b>dNLR</b>                                                          | .100   | .118   | .723  | 1  | .395        | 1.106      |
| <b>N/LP</b>                                                          | 12.323 | 20.494 | .362  | 1  | .548        | 224798.678 |
| <b>SII</b>                                                           | .001   | .000   | 3.692 | 1  | .055        | 1.001      |
| <b>SIRI</b>                                                          | .568   | .255   | 4.977 | 1  | <b>.026</b> | 1.765      |

**Abbreviations:** NLR, neutrophil-to-lymphocyte ratio; PLR, platelet-to-lymphocyte ratio; MLR, monocyte-to-lymphocyte ratio; dNLR, derived neutrophil-to-lymphocyte ratio; SII, systemic immune-inflammation index (platelet  $\times$  neutrophil / lymphocyte); SIRI, systemic inflammation response index (neutrophil  $\times$  monocyte / lymphocyte); N/LP, neutrophil-to-(lymphocyte  $\times$  platelet) ratio; TEG, thromboelastography; MA, maximum amplitude; CI, coagulation index.

Inflammatory indices correlated predominantly with clot strength and global coagulation. SII ( $p[\text{MOI}] = 0.631$ ,  $p < 0.001$ ) and PLR ( $p = 0.656$ ,  $p < 0.001$ ) showed the strongest associations with MA, followed by NLR ( $p = 0.443$ ,  $p = 0.001$ ) and dNLR ( $p = 0.388$ ,  $p = 0.005$ ) (Table1). MLR and SIRI demonstrated moderate associations with MA and CI, supporting a monocyte-driven contribution. Associations with clot initiation and kinetics were minimal. In logistic models for MA-defined hypercoagulability, PLR ( $p = 0.015$ ), SII ( $p = 0.018$ ), and SIRI ( $p = 0.020$ ) were significant predictors, while NLR and

MLR showed borderline significance. For CI-defined hypercoagulability, only SIRI remained a significant predictor ( $p=0.026$ ) (Table 2).

**Conclusion/Implications:** Pre-chemotherapy inflammatory indices in ovarian and endometrial cancers are associated with TEG-defined hypercoagulability, driven primarily by clot strength. Platelet-integrated markers (SII, PLR) show the strongest relationships, with additional contribution from monocyte-associated indices. These findings support a pragmatic, low-cost approach to complement viscoelastic testing and refine thrombosis risk stratification in gynecologic malignancies.

**Topic:** AS04. Patient-Centered Care / AS04b. Palliative, Symptomatic & Supportive Care

**“SOMETHING I CAN USE TO PULL MYSELF OUT”: SELF-REPORTED NEEDS AMONG U.S. BLACK WOMEN WHEN BEGINNING ADJUVANT TREATMENT FOR ENDOMETRIAL CANCER**

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**Introduction:** Among U.S. women with endometrial cancer (EC), Black women face the highest mortality rate of any racial group, driven partly by lower rates of treatment completion. Social-emotional, informational, and tangible support needs before adjuvant therapy among Black women may be a factor influencing treatment completion but are currently unknown. The Social Interventions for Support during Treatment for Endometrial cancer and Recurrence (SISTER) Study is the first national randomized controlled trial of newly diagnosed U.S. Black women. We aimed to characterize support needs among SISTER study participants prior to treatment initiation.

**Methods:** We conducted semi-structured interviews with 45 SISTER Study participants. Data were coded using the consolidated framework for implementation research and analyzed until thematic saturation.

**Results:** Social-emotional needs were largely unmet before treatment. Themes included concern about burdening friends and family, maintaining outward strength, and desire for lighthearted support. At the intersection of social-emotional and informational needs, participants desired connections with EC survivors to understand the range of potential experiences and increase agency during treatment. Informational needs included additional information from clinicians related to biology, genetics, and treatment toxicities, yet limited information-seeking was common and attributable to overwhelm. Tangible needs included transportation, insurance navigation, and financial assistance. Community-level needs, which emerged spontaneously, included addressing racism-related barriers to care and self-advocacy resources.

**Conclusion/Implications:** Black women with EC expressed several unmet needs at treatment initiation. Intervention development and individualized guidance to appropriately address these social-emotional, informational, and tangible needs may lead to improved treatment adherence and outcomes for this high-risk population.

**Topic:** AS04. Patient-Centered Care / AS04b. Palliative, Symptomatic & Supportive Care

## **HIGH RATES OF CANNABIS USE AMONG PATIENTS WITH GYNECOLOGIC MALIGNANCIES: A PAN-CANADIAN SURVEY**

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**Introduction:** Following medical legalization of cannabis in Canada in 2001 and non-medical legalization in 2018, use has increased, including among patients with cancer. However, data on patterns of use among gynecologic oncology patients in Canada remain limited.

**Methods:** We conducted a pan-Canadian, cross-sectional survey of patients with gynecologic malignancies using a hybrid recruitment strategy in collaboration with the GOC Community of Practice on medical cannabis. An anonymous, self-administered electronic survey was distributed via REDCap to capture cannabis use patterns and sources of cannabis products and information. Multivariable logistic regression was performed to identify predictors of use.

**Results:** Among 178 respondents, 32.6% reported current cannabis use. Cannabis was most commonly used for cancer-related symptom management, particularly pain and insomnia, with 83.3% of users reporting perceived symptom improvement. In multivariable analysis, performance status was independently associated with cannabis use; patients with a self-reported ECOG score of 1 were more likely to use cannabis (aOR 2.25, 95% CI 1.01–5.03). Most obtained cannabis through recreational dispensaries and relied on non-medical sources for information, while fewer than one-third reported receiving physician guidance. Cost was identified as a barrier to access by approximately one-third of users.

**Conclusion/Implications:** Cannabis use is common among gynecologic oncology patients in Canada and is primarily driven by symptom management. Despite limited clinician involvement and financial barriers, many patients report perceived benefit. These findings highlight the need for improved clinician engagement and patient education, as well as further research to support evidence-based integration of cannabis into supportive cancer care.

**Topic:** AS04. Patient-Centered Care / AS04b. Palliative, Symptomatic & Supportive Care

## **MALNUTRITION IN ADVANCED OVARIAN CANCER – THE IMPACT ON TREATMENT TOXICITY AND INTERRUPTIONS**

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**Introduction:** To evaluate whether malnutrition is associated with increased chemotherapy-induced toxicities in advanced ovarian cancer (OC).

**Methods:** This prospective cohort patient enrolled patients with newly diagnosed stage III-IV OC treated at Princess Margaret Cancer Centre, Toronto, Canada, between March 2023-July 2025. The Patient-Generated Subjective Global Assessment Short Form (PG SGA SF) was completed by participants along with albumin levels during their first clinic encounter. Patients with PG SGA $\geq$  9 were classified as having severe malnutrition and those with PG SGA $<$  9 had mild-to-moderate malnutrition. The primary outcome was chemotherapy-induced grade 2+ toxicity according to CTCAE.v5. Secondary outcomes included grade 3+ hematologic toxicity and treatment interruptions.

**Results:** Of the 85 participants, 29% (n=25) had mild-to-moderate malnutrition and 71% (n=60) had severe malnutrition. Patients with severe malnutrition were older than those with mild-to-moderate malnutrition (65.5 vs 57 years, p=.002) (table 1). There was no difference in rates of grade 2+ toxicity (95% vs 88%, p=.35), but severe malnutrition had higher rates of treatment interruptions (85% vs 60%, p=.025), table 2. On multivariate logistic regression, severe malnutrition was not an independent predictor for grade 2 toxicity (aOR 6.12, 95% CI 0.17-528.5, p=.30), or treatment interruptions (aOR 4.57, 95% CI 0.96 – 26.80, p=.067). Albumin levels at baseline were associated with decreased odds of treatment interruptions (aOR 0.84, 95% CI 0.69-0.98, p=.046).

**Table 1 - Baseline Characteristics**

|                                         | Full Sample (n=85) | Mild to Moderate Malnutrition (n=25) | Severe Malnutrition(n=60) | p-value          |
|-----------------------------------------|--------------------|--------------------------------------|---------------------------|------------------|
| <b>Age, years, median</b>               | 63 (41, 88)        | 57 (41, 82)                          | 65.5 (41.0, 88.0)         | <b>0.002</b>     |
| <b>BMI, kg/m2, median</b>               | 25.5 (16.4, 48.1)  | 24.4 (19.7, 48.1)                    | 26.1 (16.4, 36.1)         | 0.45             |
| <b>Smoking</b>                          |                    |                                      |                           | 0.31             |
| current smoker                          | 8 (9.4)            | 3 (12.0)                             | 5 (8.3)                   |                  |
| ex-smoker                               | 19 (22.4)          | 3 (12.0)                             | 16 (26.7)                 |                  |
| never smoker                            | 58 (68.2)          | 19 (76.0)                            | 39 (65.0)                 |                  |
| <b>Alcohol</b>                          |                    |                                      |                           | 0.061            |
| regular                                 | 9 (10.6)           | 5 (20.0)                             | 4 (6.7)                   |                  |
| social                                  | 38 (44.7)          | 13 (52.0)                            | 25 (41.7)                 |                  |
| never                                   | 38 (44.7)          | 7 (28.0)                             | 31 (51.7)                 |                  |
| <b>Diabetes</b>                         | 8 (9.4)            | 2 (8.0)                              | 6 (10.0)                  | 1.00             |
| <b>Hypertension</b>                     | 29 (34.1)          | 7 (28.0)                             | 22 (36.7)                 | 0.61             |
| <b>Hyperlipidemia</b>                   | 16 (18.8)          | 4 (16.0)                             | 12 (20.0)                 | 0.77             |
| <b>ECOG</b>                             |                    |                                      |                           | 0.27             |
| 0-1                                     | 75 (88.2)          | 24 (96.0)                            | 51 (85.0)                 |                  |
| 2+                                      | 10 (11.8)          | 1 (4.0)                              | 9 (15.0)                  |                  |
| <b>CA125 at baseline, median</b>        | 1007 (19, 32100)   | 950 (89, 21800)                      | 1065.5 (19.0, 32100.0)    | 0.83             |
| <b>Albumin at baseline, g/L, median</b> | 41 (26, 50)        | 43 (38, 50)                          | 39 (26, 48)               | <b>&lt;0.001</b> |
| <b>Albumin level</b>                    |                    |                                      |                           | <b>0.004</b>     |
| ≥ 35 g/L                                | 70 (82.4)          | 25 (100.0)                           | 45 (75.0)                 |                  |
| < 35 g/L                                | 15 (17.6)          | 0 (0.0)                              | 15 (25.0)                 |                  |
| <b>Histology</b>                        |                    |                                      |                           | 1.00             |
| HGSOC                                   | 83 (97.6)          | 25 (100.0)                           | 58 (96.7)                 |                  |
| other                                   | 2 (2.4)            | 0 (0.0)                              | 2 (3.3)                   |                  |
| <b>Stage</b>                            |                    |                                      |                           | 1.00             |
| III                                     | 41 (48.2)          | 12 (48.0)                            | 29 (48.3)                 |                  |
| IV                                      | 44 (51.8)          | 13 (52.0)                            | 31 (51.7)                 |                  |
| <b>Ascites</b>                          | 78 (91.8)          | 22 (88.0)                            | 56 (93.3)                 | 0.41             |

BMI – Body Mass Index; ECOG – Eastern Cooperative Oncology Group; HGSOC – High-Grade Serous Ovarian Cancer

**Table 2 - Treatment Characteristics and Toxicities**

|                                                             | Full Sample<br>(n=85) | Mild to Moderate<br>Malnutrition (n=25) | Severe<br>Malnutrition(n=60) | p-value      |
|-------------------------------------------------------------|-----------------------|-----------------------------------------|------------------------------|--------------|
| <b>Primary Treatment</b>                                    |                       |                                         |                              | 0.49         |
| NACT                                                        | 44 (51.8)             | 11 (44.0)                               | 33 (55.0)                    |              |
| Surgery                                                     | 41 (48.2)             | 14 (56.0)                               | 27 (45.0)                    |              |
| <b>Surgical Outcome</b>                                     |                       |                                         |                              | 0.27         |
| Complete                                                    | 49 (70.0)             | 21 (84.0)                               | 28 (62.2)                    |              |
| Optimal                                                     | 9 (12.9)              | 2 (8.0)                                 | 7 (15.6)                     |              |
| Suboptimal                                                  | 1 (1.4)               | 0 (0.0)                                 | 1 (2.2)                      |              |
| Open/Close                                                  | 11 (15.7)             | 2 (8.0)                                 | 9 (20.0)                     |              |
| No surgery                                                  | 15                    | 0                                       | 15                           |              |
| <b>Days from surgery to<br/>Chemotherapy, median</b>        | 29 (7, 74)            | 29 (21, 43)                             | 27 (7, 74)                   | 0.26         |
| <b>Bevacizumab</b>                                          | 16 (19.0)             | 2 (8.0)                                 | 14 (23.7)                    | 0.13         |
| <b>HIPEC</b>                                                | 9 (10.7)              | 3 (12.0)                                | 6 (10.2)                     | 1.00         |
| <b>Any Grade 2 Toxicity</b>                                 | 79 (92.9)             | 22 (88.0)                               | 57 (95.0)                    | 0.35         |
| <b>Grade <math>\geq 3</math> hematologic<br/>toxicities</b> | 43 (50.6)             | 11 (44.0)                               | 32 (53.3)                    | 0.58         |
| <b>Anemia, grade <math>\geq 3</math></b>                    | 12 (14.1)             | 3 (12.0)                                | 9 (15.0)                     | 1.00         |
| <b>Neutropenia, grade <math>\geq 3</math></b>               | 35 (41.2)             | 8 (32.0)                                | 27 (45.0)                    | 0.39         |
| <b>Thrombocytopenia,<br/>grade <math>\geq 3</math></b>      | 12 (14.1)             | 3 (12.0)                                | 9 (15.0)                     | 1.00         |
| <b>Any Interruption</b>                                     | 66 (77.6)             | 15 (60.0)                               | 51 (85.0)                    | <b>0.025</b> |
| <b>Response to treatment</b>                                |                       |                                         |                              | <b>0.040</b> |
| complete                                                    | 58 (72.5)             | 22 (91.7)                               | 36 (64.3)                    |              |
| partial                                                     | 14 (17.5)             | 1 (4.2)                                 | 13 (23.2)                    |              |
| stable                                                      | 3 (3.8)               | 1 (4.2)                                 | 2 (3.6)                      |              |
| progressive                                                 | 5 (6.2)               | 0 (0.0)                                 | 5 (8.9)                      |              |
| Missing                                                     | 5                     | 1                                       | 4                            |              |

NACT – Neoadjuvant Chemotherapy; HIPEC – Hyperthermic Intraperitoneal Chemotherapy;

**Conclusion/Implications:** In patients with advanced OC, severe malnutrition as assessed by the PG-SGA SF, was not associated with chemotherapy-induced toxicity. However, baseline albumin level emerged as a significant predictor for treatment interruptions.

**Topic:** AS04. Patient-Centered Care / AS04b. Palliative, Symptomatic & Supportive Care

**A REAL-WORLD STUDY ON THE RISK AND TREATMENT OF VENOUS THROMBOEMBOLISM IN PATIENTS WITH ADVANCED OVARIAN CANCER DURING NEOADJUVANT CHEMOTHERAPY**

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**Introduction:** This real-world study aimed to determine the incidence, timing, risk factors, and prognostic impact of VTE during NACT, and to compare the efficacy and safety of low-molecular-weight heparin (LMWH) versus direct oral anticoagulants (DOACs) in the management of VTE.

**Methods:** We retrospectively reviewed 698 consecutive patients with stage III–IV epithelial ovarian cancer who underwent NACT at our institution between 2015 and 2025. Clinical characteristics, VTE features, anticoagulation regimens, surgical outcomes, intraoperative blood loss, progression-free survival (PFS), and overall survival (OS) were collected and analyzed.

**Results:** The incidence of VTE during NACT was 8.2%. The median time to VTE was 38 days after initiation of NACT and 44 days from histopathological diagnosis. Patients with VTE showed a lower surgical rate (75.4% vs. 90.4%,  $P < 0.05$ ) and longer interval from diagnosis to interval debulking surgery (IDS) (138 days vs. 97 days,  $P < 0.05$ ). Anticoagulation included LMWH (56.1%) and DOACs (40.4%). Both regimens achieved high clinical efficacy ( $P = 0.299$ ) without increasing intraoperative blood loss. VTE was associated with significantly shorter median PFS (14.0 vs. 15.0 months,  $P = 0.049$ ) and median OS (28.0 vs. 46.0 months,  $P = 0.009$ ). No conventional risk factors were significantly associated with VTE occurrence.

**Conclusion/Implications:** VTE significantly reduces surgical rate, delays IDS, and independently predicts inferior PFS and OS. Both LMWH and DOACs are effective and safe for VTE treatment without elevated perioperative bleeding risk. Routine vascular ultrasonography screening may facilitate early detection of asymptomatic VTE in this high-risk population.

**Topic:** AS02. Clinical Disciplines / AS02a. Artificial Intelligence Applied to Medicine

## **OVARIAN CANCER DIAGNOSIS AND CHEMORESISTANCE PREDICTION MODEL BASED ON CFRNA MOLECULAR SIGNATURE**

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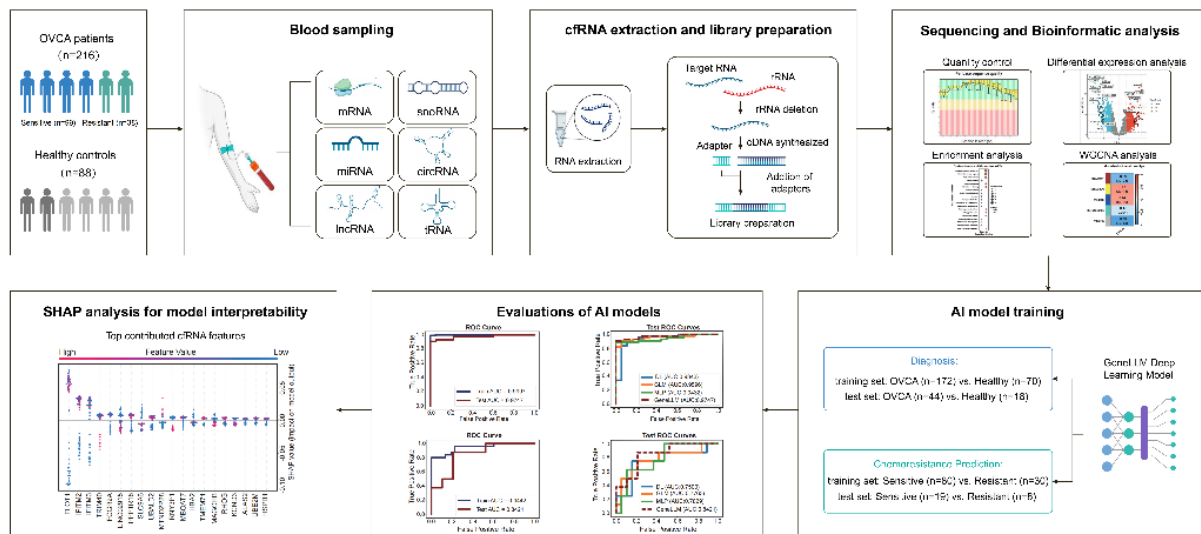
**Introduction:** Ovarian cancer (OVCA) is a common and highly aggressive gynecologic malignancy. Nonspecific symptoms often delay diagnosis, leading to presentation at late stages. Approximately 30% of patients develop platinum resistance, resulting in disease recurrence and progression. Currently, no diagnostic or chemoresistance prediction model based on plasma cell-free RNA (cfRNA) profiling exists.

**Methods:** We recruited 304 participants and performed cfRNA sequencing on plasma samples. After quality control, 172 OVCA patients and 70 healthy controls were assigned to the training set, and 44 OVCA patients with 18 controls to the test set. A DenseNet-based deep learning model was developed to analyse cfRNA features.

**Results:** The model distinguished OVCA patients from healthy controls, achieving an area under the curve (AUC) of 0.9997 in the training set and 0.9747 [0.9437–0.9963] in the test set. For predicting chemotherapy resistance, it yielded AUCs of 0.9442 and 0.8421 [0.7504–0.9147] in the training and test sets, respectively, outperforming conventional models. Interpretability analyses combined with bioinformatics identified several cfRNA features, such as *FLOT1*, *IFITM3*, and *IFITM2* as putative biomarkers for OVCA diagnosis.

**Conclusion/Implications:** This plasma cfRNA-based deep learning model identifies OVCA patients and predicts chemoresistance. This offers a non-invasive tool for early

## diagnosis and treatment stratification.



**Topic:** AS02. Clinical Disciplines / AS02a. Artificial Intelligence Applied to Medicine

**DATA-DRIVEN AI PREDICTION OF SUPPLEMENTAL INTERSTITIAL NEEDLE NEED AND POSITIONING IN HYBRID CERVIX BRACHYTHERAPY**

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**Introduction:** Hybrid intracavitary/interstitial brachytherapy (IC/ISBT) provides dosimetric advantages for treating cervical cancer; however, estimating needle need and placement remains largely experience-driven. We developed a machine-learning framework using quantitative geometric features to predict needle utilization and suggest needle locations.

**Methods:** Seventy-five stage I–IV cervical cancer patients treated with IC/ISBT from 2022–2025 were analyzed. Needle utilization was defined as the relative dose contribution from interstitial needles (2.5–70.4%). Cases were classified as moderate ( $\leq 15\%$ ,  $n=37$ ) or high ( $>15\%$ ,  $n=38$ ) utilization. A total of 222 features describing high-risk clinical target volume (HR-CTV), organs-at-risk (OARs), and spatial relationships among targets, OARs, and applicator geometry were extracted and reduced to 30. A machine learning model was designed to predict needle utilization. For smaller tumors ( $<30\text{cc}$ ,  $n=41$ ), a separate model was designed to recommend three needle positions out of nine from an institutional 3D-printed template.

**Results:** The needle usage model achieved an AUC of 0.95 and accuracy of 0.91 (Table 1), outperforming models using FIGO-stage and HR-CTV volume alone (AUC 0.81). For needle position, the model identified at least one utilized location in 91% of the testing dataset ( $n=11$ ), with  $1.91 \pm 0.94$  out of 3 correct needles among predictions and sensitivity of  $0.72 \pm 0.34$  (Table 2). The most predictive features were HR-CTV superior–inferior extent relative to ovoid plane and HR-CTV maximum 3D diameter for needle usage and location prediction, respectively.

**Table 1** Needle usage prediction comparison between the proposed model and the model using only clinical features.

| Model          | AUC  | Accuracy | Sensitivity | Specificity | F1   |
|----------------|------|----------|-------------|-------------|------|
| Proposed model | 0.95 | 0.91     | 0.87        | 0.93        | 0.88 |
| Clinical-only  | 0.85 | 0.80     | 0.80        | 0.80        | 0.76 |

**Table 2** Needle location prediction results for 11 testing cases.

| Patient | Predicted Location | Actual Location | Number of Correct Predictions | Prediction Sensitivity |
|---------|--------------------|-----------------|-------------------------------|------------------------|
| 1       | 3, 5, 6            | 5, 6            | 2                             | 1                      |
| 2       | 4, 7, 8            | 7, 8            | 2                             | 1                      |
| 3       | 5, 7, 8            | 4, 5, 8         | 2                             | 0.67                   |
| 4       | 5, 7, 8            | 5, 7, 8         | 3                             | 1                      |
| 5       | 4, 7, 8            | 1, 4, 7, 8      | 3                             | 0.75                   |
| 6       | 5, 7, 8            | 3, 4, 5, 6      | 1                             | 0.25                   |
| 7       | 5, 6, 8            | 5, 6            | 2                             | 1                      |
| 8       | 4, 7, 8            | 1, 2, 7, 8      | 2                             | 0.5                    |
| 9       | 4, 7, 8            | 4, 5, 7, 8      | 3                             | 0.75                   |
| 10      | 5, 6, 8            | 5               | 1                             | 1                      |
| 11      | 5, 6, 7            | 3, 4            | 0                             | 0                      |
| Average |                    |                 | 1.91±0.94                     | 0.72±0.34              |

**Conclusion/Implications:** By capturing comprehensive spatial relationships beyond clinical parameters, this approach can predict interstitial needle need and provide location suggestions, supporting more consistent and efficient hybrid IC/ISBT.

**Topic:** AS02. Clinical Disciplines / AS02a. Artificial Intelligence Applied to Medicine

## **ADAPTING PATHOLOGY FOUNDATION MODELS FOR PREDICTION OF HOMOLOGOUS RECOMBINATION DEFICIENCY STATUS IN HIGH-GRADE SEROUS CARCINOMAS USING WHOLE-SLIDE IMAGES**

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**Introduction:** Poly (ADP-ribose) polymerase (PARP) inhibitors represent a targeted therapy for ovarian high-grade serous carcinomas (HGSCs), particularly in tumours harbouring *BRCA1/2* mutations or other causes of homologous recombination deficiency (HRD). Accurate classification of HRD status using molecular methods is costly, tissue-destructive and time consuming. HGSCs can show subtly different morphologic features on haematoxylin-and-eosin (H&E) stained slides based on their HRD status. Our objective was to leverage this observation to develop a machine learning algorithm capable of accurately predicting HRD status in HGSCs using digitized H&E-stained slides alone.

**Methods:** We assembled a cohort of 874 HGSCs from across North America with known *BRCA1/2* mutational status, of which 265 cases were from centres with available comprehensive HRD status. Binary classification models for *BRCA1/2* and HRD prediction were developed using 588 unique experiments, leveraging seven publicly available pathology foundation models and twelve attention-based multiple-instance-learning techniques.

**Results:** The best single-centre model achieved an area under the curve (AUC) of 0.865 for HRD prediction, and the best multi-centre model achieved an AUC of 0.849, which

was consistently higher than the accuracy for predicting *BRCA1/2* mutations. External validation on a held-out test resulted in an AUC of 0.705, emphasizing the importance of expanding the size and diversity of the training data for future model development.

**Conclusion/Implications:** HRD status can be predicted from H&E-stained slides alone, and this may allow for expansion of HRD testing to jurisdictions without access to molecular testing. Larger and more diverse datasets are needed to further improve algorithm performance and achieve clinical-grade diagnostic accuracy.

**Topic:** AS03. Global Health, Economic Challenges & Inequity / AS03a. Equity-Driven Innovation

**DISPARITIES IN VARIANTS OF UNCERTAIN SIGNIFICANCE IN A MULTI-ETHNIC COHORT AT RISK FOR HEREDITARY BREAST AND GYNECOLOGICAL CANCER SYNDROMES BETWEEN 2019 AND 2025**

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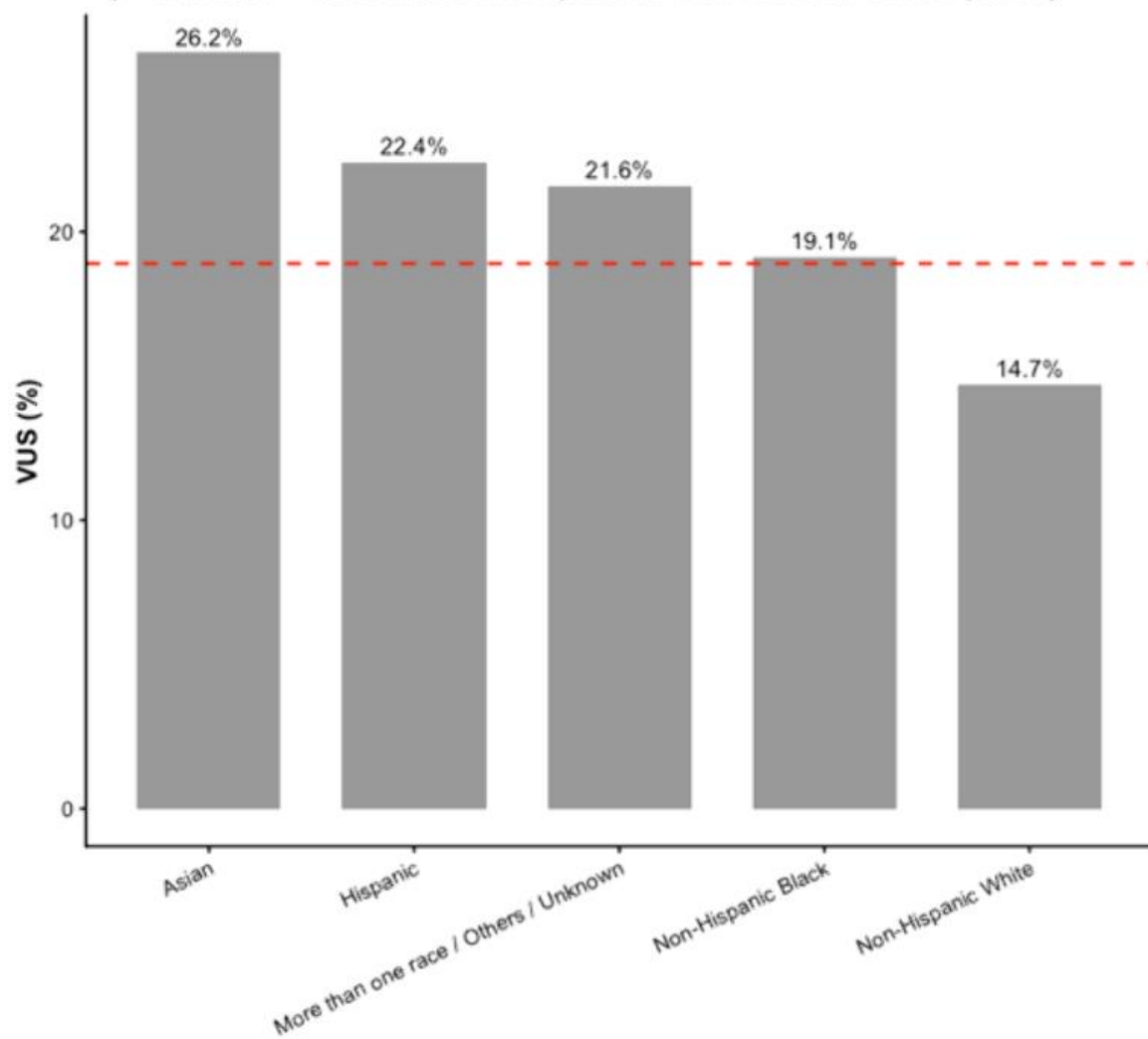
**Introduction:** Multigene panel testing has expanded hereditary breast and gynecological cancer (HBGC) syndrome risk assessment beyond *BRCA1/2*. Yet the paralleled increase in detection of variants of uncertain significance (VUS) complicates clinical interpretation and actionability. We therefore examined ethnic differences in VUS burden and *non-BRCA* pathogenic/ likely pathogenic (P/LP) variants in an urban demographic.

**Methods:** This retrospective cohort study analyzed 1520 high-risk individuals referred for HBGC genetic assessment at a tertiary care center (2019-2025). Variants were classified according to the American College of Medical Genetics (ACMG) criteria as *BRCA1/2* P/LP, *non-BRCA* P/LP, VUS or negative. Variant distributions were compared across self-reported ethnic groups using chi-square testing and multivariable regression adjusting for clinical covariates.

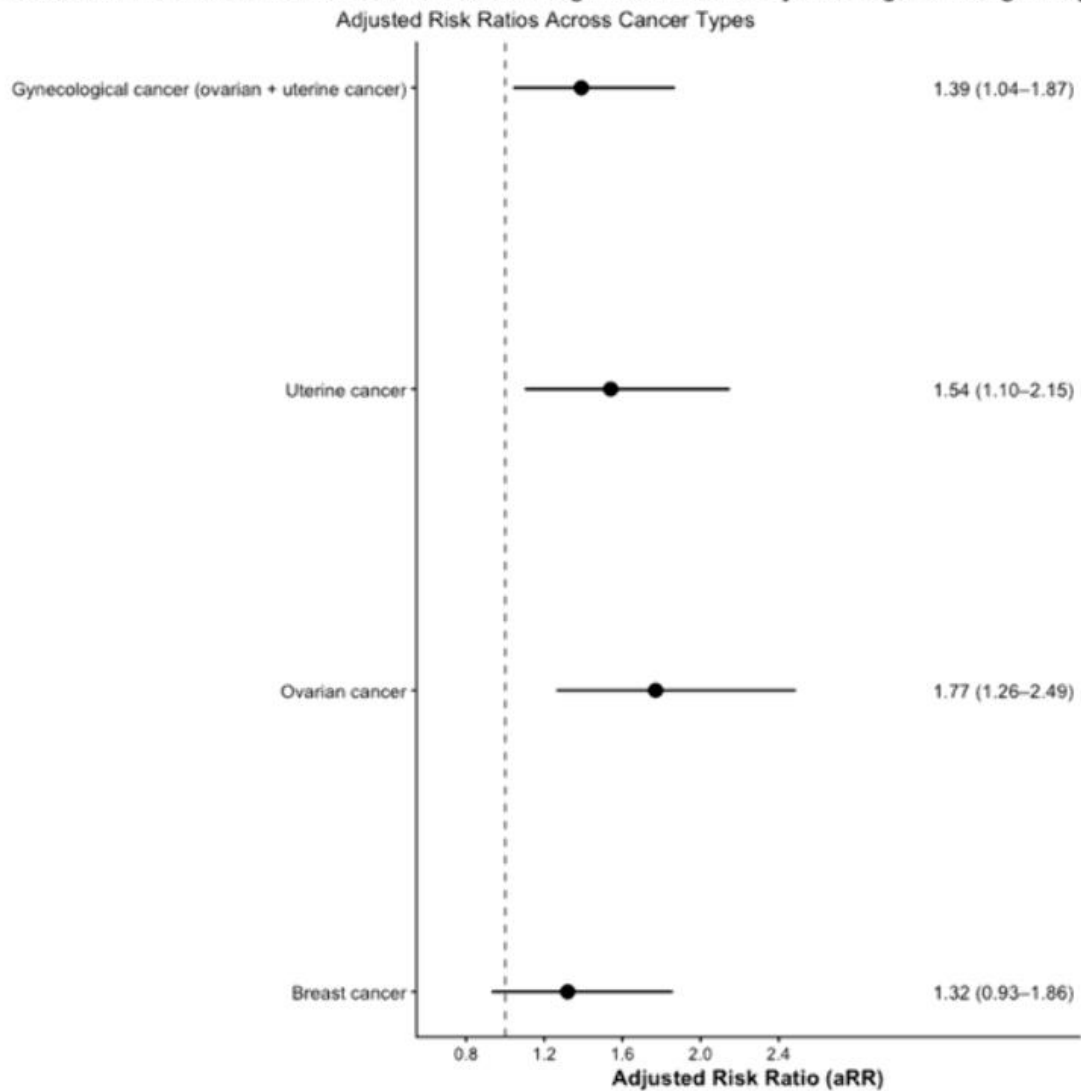
**Results:** VUS rates have decreased from 28.4% (2019) to 19.9% (2025), and were identified in 18.9% of patients overall. VUS prevalence was associated with ethnicity ( $p=0.0059$ , *Figure 1*), highest among Asians (26.2%), Hispanics (22.4%) and non-Hispanic Blacks (19.1%) compared to non-Hispanic Whites (14.7%). On multivariable analysis, the association between ethnicity and VUS rates remained significant. Personal history of gynecological cancer was associated with increased VUS prevalence (*Figure 2*,  $aRR=1.39$ , 95%CI: 1.04-1.87), especially uterine cancer ( $aRR=1.54$ , 95%CI: 1.10-2.15). *Non-BRCA* P/LP variants were uncommon (4.4%, 67/1520), and without association with ethnicity or cancer types.

### Variant of Uncertain Significance (VUS) Prevalence by Ethnicity

$p = 0.0059$ ;  $N = 1520$ . Dashed line represents overall cohort VUS rate (18.9%)



### Association Between Variants of Uncertain Significance and Gynecological Malignancy



**Conclusion/Implications:** Even as VUS rates decline, under-represented populations remain disproportionately affected by genomic uncertainty. Our findings of the significant association between VUS and gynecological malignancies suggests these uncertainties carry under-characterized clinical impact. These findings highlight the need for intentional inclusivity of all demographics in cancer genomic and precision oncology initiatives.

**Topic:** *AS03. Global Health, Economic Challenges & Inequity / AS03a. Equity-Driven Innovation*

**RACIAL AND ETHNIC REPRESENTATIVENESS OF CLINICAL TRIALS SUPPORTING FDA APPROVALS IN GYNECOLOGIC ONCOLOGY: A DRIVE SCORE ANALYSIS**

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**Introduction:** Racial and ethnic disparities remain a major challenge in gynecologic oncology. Randomized clinical trials (RCTs) supporting regulatory approvals often underrepresent minoritized populations, limiting generalizability. The Diversity Representation & Inclusion for Value & Equity (DRIVE) score is a quantitative metric designed to assess representativeness relative to disease epidemiology.

**Methods:** We conducted a cross-sectional analysis of U.S. Food and Drug Administration (FDA) approvals for gynecologic cancers (2017–2025). For each approval, the primary RCT publication was identified. Trials reporting racial and/or ethnic data were considered evaluable; those without such data were classified as non-informative. DRIVE scores (0–5) were calculated using SEER benchmarks. A score  $\geq 3$ —defined as minority enrollment reaching 41–60% of the expected level based on disease prevalence, with at least two racial/ethnic groups achieving  $\geq 60\%$  of their proportional prevalence targets—was prespecified as adequate representativeness.

**Results:** Twenty-four trials were identified. Fifteen (62.5%) were evaluable, while nine (37.5%) were non-informative. Among evaluable trials, 66.7% achieved DRIVE  $\geq 3$ , with scores ranging from 0 to 5 (most commonly 3, 40.0%). Considering all approvals, 41.7% were supported by trials with adequate representativeness, 20.8% showed inadequate representation (DRIVE  $< 3$ ), and 37.5% lacked demographic

reporting.

**Table 1. Distribution of DRIVE scores among evaluable gynecologic cancer clinical trials (n = 15)**

| DRIVE score | Number of trials | Percentage (%) |
|-------------|------------------|----------------|
| 0           | 1                | 6.7            |
| 1           | 3                | 20.0           |
| 2           | 1                | 6.7            |
| 3           | 6                | 40.0           |
| 4           | 3                | 20.0           |
| 5           | 1                | 6.7            |

**\* Excellence was defined as a DRIVE score  $\geq 3$ , corresponding to minority enrollment of 41–60% of expected levels based on disease prevalence, with  $\geq 2$  racial/ethnic groups achieving  $\geq 60\%$  of their proportional prevalence targets.**

**Conclusion/Implications:** Fewer than half of FDA approvals in gynecologic oncology are supported by adequately representative trials, and over one-third lack demographic reporting. These findings highlight a critical gap in the evidentiary basis of regulatory decisions and raise concerns about external validity. Systematic incorporation of the DRIVE score may improve transparency and promote equity in clinical trial design.

**Topic:** AS03. Global Health, Economic Challenges & Inequity / AS03a. Equity-Driven Innovation

**REACHING THE UNREACHABLE: CERVICAL CANCER SCREENING THROUGH VAGINAL HPV SELF-SAMPLING AND POINT-OF-CARE RT-PCR-BASED URINARY HPV TESTING AMONG MARGINALISED AND HIGH-RISK INDIAN WOMEN**

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**Introduction:** Marginalised women, including WLHIV, female sex workers(FSWs) and prison-inmates, remain under-screened for cervical cancer despite a disproportionately high hrHPV burden (20%–53%). Stigma, immunosuppression, restricted autonomy, incarceration and poor access to facility-based care widen this prevention gap. We evaluated cervicovaginal HPV self-sampling and urinary HPV testing using a point-of-care PCR-based assay as an equity-driven, innovative, privacy-preserving, and potentially scalable screening strategy.

**Methods:** Total 744 marginalised women were enrolled: WLHIV (n=349), prison inmates (n=243) and FSWs (n=152). Participants self-collected cervicovaginal samples, tested using the Cobas HPV assay. Urinary HPV (uHPV) testing using an indigenous point-of-care PCR assay (Truenat®, Molbio-Diagnostics,India) was additionally performed among WLHIV and FSWs; but not among incarcerated women due to institutional constraints. Acceptability and feasibility were assessed using a structured Likert-scale tool.

**Results:** Prior screening uptake was negligible (5.9%–7.5%), HPV vaccination was below 1%, and cervical cancer awareness was 10-21%. hrHPV positivity was high across cohorts (FSWs:28.9%; Inmates:20.2%; WLHIV:19.2%). HPV16/18 accounted for a substantial proportion of infections (10.6%-15.1%), with additional burden from other

high-risk types (9.9% to 19.1%). Acceptability was uniformly high, with comfort, privacy and instruction clarity rated positively across groups; >97% were willing to undergo repeat screening. Concordance between uHPV testing and cervicovaginal self-sampling was substantial ( $\kappa=0.76$ ). Follow-up completion was challenged by relocations among FSWs (23.8%) and institutional transfers among inmates (63%).

**Conclusion/Implications:** Self-sampling and uHPV testing were feasible, acceptable, offering a novel indigenous scalable solution. Integration into ART clinics, prison health services and FSW outreach through a single-visit-approach may reduce cervical screening inequities among India's underserved-women.

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**Topic:** AS03. *Global Health, Economic Challenges & Inequity* / AS03b. *Healthcare Delivery*

**EXPLORING THE CORRELATION BETWEEN DEMOGRAPHIC RISK FACTORS AND INGUINAL LYMPH NODE ASSESSMENT IN WOMEN WITH VULVAR CANCER: A NATIONAL SURGEONS QUALITY IMPROVEMENT PROGRAM (NSQIP) STUDY**

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**Introduction:** Demographic factors such as age and socioeconomic status are risk factors for vulvar cancer. However, increasing age has also been associated with lower rates of inguinal lymph node (ILN) assessment, a critical aspect of surgical staging and management. The aim of this study was to examine the association between demographic factors and ILN assessment, and to explore possible justification in the association between these factors and 30-day postoperative outcomes.

**Methods:** A retrospective cohort study was conducted using the NSQIP Participant Use Data File database (2006-2021). Adult patients with vulvar cancer who underwent vulvectomy were included. Multivariable logistic regression assessed the association between demographic factors and ILN assessment, including sentinel and full ILN assessments, adjusting for a priori selected pre/perioperative factors. Exploratory multivariable regression analyses assessed associations between patient factors and postoperative complications.

**Results:** Among 2,282 patients, 309 (13.5%) underwent ILN assessment by ICD codes and 925 (40.5%) by linguistic procedure search. Increasing age and lower preoperative hematocrit were associated with less ILN assessment by ICD codes (Table 1). In exploratory analyses (Table 2), age was not associated with postoperative complications. Lower hematocrit was associated with postoperative complications including DVT, blood transfusion, septic shock and unplanned return to OR (Table 2).

Table 1. Results of adjusted logistic regression for associations between demographic characteristics and lymph node assessment (identified by ICD code) in women undergoing vulvectomy for vulvar cancer

| <i>Demographic characteristic</i> | <i>Adjusted OR (95% CI)</i> | <i>P-value</i> |
|-----------------------------------|-----------------------------|----------------|
| <b>Age</b>                        | <b>0.983 (0.971, 0.995)</b> | <b>0.0052</b>  |
| BMI                               | 0.984 (0.964, 1.004)        | 0.12           |
| Race                              |                             | 0.51           |
| White                             | 0.00 (reference)            |                |
| Asian                             | 0.540 (0.208, 1.404)        | 0.21           |
| Black or African American         | 1.324 (0.781, 2.246)        | 0.30           |
| Hispanic                          | 1.042 (0.554, 1.959)        | 0.90           |
| Other*                            | 0.494 (0.062, 3.955)        | 0.51           |
| Diabetes                          | 1.271 (0.885, 1.827)        | 0.19           |
| Hypertension                      | 0.912 (0.657, 1.264)        | 0.58           |
| <b>Pre-Operative Hematocrit</b>   | <b>1.056 (1.020, 1.093)</b> | <b>0.0022</b>  |
| Pre-Operative Platelet Count      | 1.001 (0.999, 1.003)        | 0.25           |
| Pre-Operative AKI                 | 0.762 (0.464, 1.250)        | 0.28           |
| ASA class                         |                             | 0.63           |
| 1                                 | 0.00 (reference)            |                |
| 2                                 | 0.585 (0.216, 1.583)        | 0.29           |
| 3                                 | 0.671 (0.245, 1.842)        | 0.44           |
| 4                                 | 0.739 (0.209, 2.619)        | 0.64           |

\*Other race encompasses: American Indian or Alaska Native, Native Hawaiian or Pacific Islander, or Multiracial

Abbreviations: AKI – acute kidney injury, ASA - American Society of Anesthesiologists, BMI- body mass index, CI- confidence interval, ICD – international classification of diseases, OR- odds ratio

Table 2. Results of adjusted linear regression for associations between age and hematocrit, and each 30-day postoperative adverse outcome

| <i>Adverse outcome</i>                | <i>Age</i>                            |         | <i>Hematocrit</i>                     |                  |
|---------------------------------------|---------------------------------------|---------|---------------------------------------|------------------|
|                                       | Adjusted Beta coefficient<br>(95% CI) | P-value | Adjusted Beta coefficient<br>(95% CI) | P-value          |
| Surgical site infection               |                                       |         |                                       |                  |
| Superficial                           | -0.943 (-2.725, 0.839)                | 0.30    | 0.0716 (-0.564, 0.707)                | 0.83             |
| Deep                                  | -3.941 (-8.176, 0.294)                | 0.068   | -0.428 (-1.939, 1.083)                | 0.58             |
| Organ space                           | -3.314 (-10.035, 3.406)               | 0.33    | 1.198 (-1.198, 3.594)                 | 0.33             |
| Wound disruption                      | -0.258 (-2.977, 2.461)                | 0.85    | -0.105 (-1.075, 0.864)                | 0.83             |
| Stroke/CVA                            | 9.257 (4.501, 23.0158)                | 0.19    | 2.907 (-1.999, 7.812)                 | 0.25             |
| Pulmonary embolism                    | 2.330 (-8.430, 13.090)                | 0.67    | -0.563 (-4.399, 3.274)                | 0.77             |
| Deep vein thrombosis                  | 1.100 (-7.044, 9.242)                 | 0.79    | <b>3.016 (0.116, 5.915)</b>           | <b>0.042</b>     |
| Myocardial infarction                 | 4.943 (-5.099, 14.986)                | 0.33    | -1.231 (-4.812, 2.350)                | 0.50             |
| Post-operative blood transfusion      | -2.191 (-4.891, 0.510)                | 0.11    | <b>-4.945 (-5.884, -4.007)</b>        | <b>&lt;.0001</b> |
| Sepsis                                | -4.532 (-9.340, 0.275)                | 0.065   | 0.207 (-1.508, 1.922)                 | 0.81             |
| Septic shock                          | -6.027 (-16.539, 4.485)               | 0.26    | <b>-4.471 (-8.215, -0.727)</b>        | <b>0.019</b>     |
| Pneumonia                             | -3.844 (-13.969, 6.281)               | 0.46    | -0.586 (-4.196, 3.024)                | 0.75             |
| Urinary tract infection               | 3.149 (-0.618, 6.916)                 | 0.10    | 0.685 (-1.153, 1.535)                 | 0.78             |
| Unplanned return to OR within 30 days | -1.316 (-4.387, 1.755)                | 0.40    | <b>-1.183 (-2.277, -0.099)</b>        | <b>0.034</b>     |
| Death within 30 days                  | 8.859 (-7.498, 25.217)                | 0.28    | -4.808 (-10.638, 1.021)               | 0.11             |

Abbreviations: CI- confidence interval; CVA- cerebrovascular accident; OR- operating room

**Conclusion/Implications:** Older patients and those with lower preoperative hematocrit are less likely to undergo ILN assessment at time of vulvectomy for vulvar cancer, however only hematocrit is associated with postoperative complications. This suggests possibly reduced ILN assessment in older patients may not be clinically justified and highlights a potential disparity in guideline-concordant care.

**Topic:** AS03. Global Health, Economic Challenges & Inequity / AS03b. Healthcare Delivery

## **PATTERNS OF CARE, BIOMARKER TESTING, AND EDUCATIONAL NEEDS IN OVARIAN AND ENDOMETRIAL CANCER ACROSS LATIN AMERICA: AN INTERNATIONAL GYNECOLOGIC CANCER SOCIETY SURVEY**

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**Introduction:** This initiative addressed the scarcity of data on gynecologic cancer management in Latin America by evaluating care patterns for endometrial cancer (EC) and ovarian cancer (OC), with a focus on biomarker testing and diagnostics access to targeted therapies, multidisciplinary team (MDT) approaches, and educational needs among oncology professionals.

**Methods:** IGCS conducted an online survey of MDT members from March 3–August 2, 2024. The questionnaire assessed biomarker testing/diagnostics for EC/OC. MDT structures, access to therapies, treatment delays, care barriers, institutional resources and preferred educational formats. Data were summarized using descriptive statistics.

**Results:** Among 578 respondents, most centers reported offering core diagnostic and treatment services for EC and OC. MDT infrastructure was inconsistent, with regular tumor boards present in 50–75% of sites. Biomarker testing rates varied widely in EC (54.7–85.0%) but were more consistent in OC (>70%). In-house testing (NGS, POLE, HRD) was limited. Access to targeted therapies varied for both EC and OC, with treatment delays up to three months. These gaps may limit delivery of guideline-concordant, biomarker-driven care. Key barriers included resource constraints, cost, and logistical challenges. Respondents prioritized practical education on biomarker interpretation and MDT-based care.

**Conclusion/Implications:** Heterogeneity in biomarker testing, treatment access, and MDT integration contributes to inequities in EC and OC care across Latin America. Without standardized diagnostic pathways and improved access to targeted therapies, the clinical value of emerging molecular classifications will not be translated into clinical benefit. Coordinated regional initiatives are needed to standardize diagnostics, expand access to biomarker testing and targeted therapies, and strengthen

MDT coordination to support equitable,biomarker-guided care and improve patient outcomes.

**Topic:** AS03. *Global Health, Economic Challenges & Inequity* / AS03b. *Healthcare Delivery*

## **QUALITY ASSURANCE REVIEW OF ENDOMETRIAL CANCER WAIT TIMES IN NOVA SCOTIA, CANADA**

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**Introduction:** Population-based evidence shows that prolonged biopsy-to-surgery wait times in low-risk endometrial cancer are associated with inferior survival outcomes. In Nova Scotia (NS), wait times increasingly exceeded recommended targets prior to 2020. A revised model of care delivery was implemented to reduce delays to surgery.

**Methods:** This prospective quality assurance initiative, registered with Nova Scotia Health REB, evaluated provincial wait times before and after a change in care delivery. Prior to 2020, all endometrial cancer surgeries in Nova Scotia (population ~1 million) were performed centrally by gynecologic oncologists in Halifax. In 2020, a centralized referral and triage with selective distributive surgery to general gynecologists in the NS health zones was introduced. Triage was guided by pathology review and pelvic MRI findings. Population data was used to measure Biopsy-to-surgery intervals for patients with grade 1 endometrioid adenocarcinoma. Outcomes included the proportion meeting the 42-day target and the number of days required for 80% of patients to undergo surgery.

**Results:** Approximately 250 hysterectomies for uterine cancer are performed annually in Nova Scotia. Wait times for grade 1 disease improved over time following care redistribution. From 2021–2024, community centres more frequently met the 42-day target, at 50% compared to 16%, and achieved treatment for 80% of patients in fewer days (60days) than the central subspecialty service (112days).

**Conclusion/Implications:** Centralized triage using pathology review and pelvic MRI with selective community-based surgery significantly improved wait times for low-risk endometrial cancer, enabling province-wide monitoring and potentially improving outcomes while reducing the need for adjuvant therapy.

**Topic:** AS03. *Global Health, Economic Challenges & Inequity* / AS03b. *Healthcare Delivery*

**PROMOTORA-LED HPV SELF-SAMPLING IMPROVES SCREENING FOR CERVICAL CANCER IN A U.S.-MEXICO BORDER POPULATION**

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**Introduction:** Cervical cancer screening disparities persist among Hispanic women in rural U.S.-Mexico border communities, where structural, cultural, and access barriers affect screening. Human papillomavirus (HPV) self-sampling may reduce these barriers, but real-world data on screening participation, HPV detection, and clinical integration remain limited. This study evaluated a promotora-led HPV self-sampling intervention among Hispanic women in Southern Arizona.

**Methods:** We conducted a community-based pilot study at a federally qualified health center in Santa Cruz County, Arizona. Self-identified Hispanic women aged 25-65 years were recruited through clinic- and community-based outreach to complete home-based HPV self-sampling. Feasibility outcomes included eligibility, consent, and screening completion, benchmarked against predefined thresholds. Clinical outcomes included high-risk HPV positivity and genotype distribution. Acceptability, appropriateness, and feasibility were measured using validated AIM, IAM, and FIM instruments. Differences across clinician-based, vaginal self-sampling, and urine self-sampling modalities were evaluated using repeated-measures ANOVA.

**Results:** Among 534 eligible women, 392 consented (73.4%) and 328 completed screening (83.7% of consented participants), exceeding feasibility benchmarks. High-risk HPV positivity was 14.3% (47/327), dominated by non-16/18 high-risk genotypes. HPV16 and HPV45 were infrequent, and no HPV18 infections were detected. Self-sampling modalities scored significantly higher than clinician-based screening across acceptability, appropriateness, and feasibility domains (all  $p < 0.001$ ), with no significant differences between vaginal and urine self-sampling ( $p = 0.26$ ).

**Conclusion/Implications:** Promotora-led HPV self-sampling achieved high participation and identified clinically relevant high-risk HPV infections in an underserved border population. These findings support patient-centered self-sampling strategies to improve access to cervical cancer screening and warrant further evaluation of effectiveness, scalability, and integration into screening programs.

**Topic:** AS05. *Prevention & Early Detection* / AS05e. *Prevention & Vaccination*

## **GLUCAGON-LIKE PEPTIDE-1 RECEPTOR AGONISTS (GLP-1RAS) AND THE RISK OF GYNECOLOGICAL MALIGNANCIES IN DIABETIC PATIENTS**

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**Introduction:** GLP-1 receptor agonists (GLP-1RAs) are widely used for type 2 diabetes mellitus (T2DM), a known risk factor for obesity-related cancers, but their association with gynecological malignancies remains debated.

**Methods:** Using the TriNetX Global Collaborative Network, we identified two cohorts of T2DM patients (ICD-10-CM: E11.): those initiating GLP-1RAs (group A) versus oral antidiabetics (group B). Cohorts were 1:1 propensity score-matched (PSM) for demographics, BMI, HbA1c, comorbidities, tobacco use, genetic susceptibility to neoplasms, and contraceptive use. Hazard ratios (HRs) with 95% confidence intervals (CIs) were estimated via Cox proportional hazards regression.

**Results:** PSM yielded balanced cohorts of 35,760 patients each (median age was 54 years, interquartile range - IQR 17 for group A; 55 years, IQR 19, for group B). Severe obesity (BMI >35 kg/m<sup>2</sup>) affected 57.8% in group A and 58.1% in group B. Endometrial cancer occurred in 114 (0.3%) patients of group A versus 244 (0.7%) patients of group B (HR = 0.68, 95% CI 0.54-0.85, p = 0.001). Ovarian cancer occurred in 39 (0.1%) and 119 (0.3%) patients, respectively (HR = 0.47, 95% CI 0.32-0.67, p < 0.001).

**Conclusion/Implications:** GLP-1RA therapy was associated with reduced risk of endometrial and ovarian cancer. Prospective studies are needed to validate these findings and elucidate underlying mechanisms.

**Topic:** AS05. Prevention & Early Detection / AS05e. Prevention & Vaccination

**ASSOCIATION BETWEEN HPV VACCINATION AND VAGINAL MICROBIOTA:  
METAGENOMIC EVIDENCE FROM WOMEN WITH CERVICAL LESIONS**

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**Introduction:** Persistent high-risk HPV (hrHPV) infection is a prerequisite for cervical cancer, and the vaginal microbiota (VM) significantly influences viral persistence. While vaccines are effective, breakthrough infections occur. This study investigates the association between HPV vaccination and VM profiles in women with confirmed cervical lesions.

**Methods:** In this cross-sectional study of 60 premenopausal women with histologically confirmed cervical lesions, vaginal samples underwent high-resolution shotgun metagenomic sequencing (vaccinated n=33, unvaccinated n=27). Taxonomic profiling was performed using MetaPhlAn 4.0. Community state types (CSTs) were assigned based on species dominance. PERMANOVA and causal mediation analysis were utilized to assess the independent association of vaccination with microbiota structure.

**Results:** Vaccinated women exhibited a markedly higher prevalence of protective CST I (*L. crispatus*-dominant) compared to unvaccinated women (90.9% vs. 9.1%), while unvaccinated women more frequently harbored dysbiotic CST IV communities (60.0%). PERMANOVA confirmed that vaccination status was independently associated with overall community structure ( $p=0.024$ ,  $R^2=0.096$ ). Causal mediation analysis revealed that this association was primarily driven by a significant direct effect of vaccination ( $p=0.022$ ) rather than being mediated by hrHPV status.

**Conclusion/Implications:** HPV vaccination is significantly associated with a shift toward a healthy, *L. crispatus*-dominant vaginal microbiota in women with cervical lesions. These findings suggest that prophylactic vaccination may confer ecological benefits beyond simple viral neutralization, potentially fostering a more eubiotic environment that supports viral clearance. This provides a novel perspective on the synergistic interaction between vaccine-induced immunity and the vaginal ecological niche in preventing cervical disease progression.

**Topic:** AS05. Prevention & Early Detection / AS05e. Prevention & Vaccination

## **ACCEPTABILITY OF A VIDEO DECISION AID FOR OPPORTUNISTIC SALPINGECTOMY DURING NON-GYNECOLOGIC SURGERY**

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**Introduction:** Opportunistic salpingectomy (OS) is widely adopted during gynecological surgeries as a risk-reduction strategy for ovarian cancer but is rarely offered during non-gynecological surgeries. Barriers such as knowledge gaps, surgeon coordination, and insurance coding challenges limit its use in general surgery. To support patient decision-making for OS during non-gynecological procedures, we developed an educational video decision aid and evaluated its acceptability among patients and gynecological and general surgeons.

**Methods:** We assessed the acceptability and usability of the decision aid video using two approaches. First, we surveyed 502 female-identifying individuals on Amazon Mechanical Turk who viewed the video and completed background questions, knowledge assessments, the Ottawa Acceptability Tool (OAT), the System Usability Scale (SUS), and provided feedback. Second, we conducted in-person interviews with 10 patients and 10 general and gynecologic surgeons at Columbia University Medical Center, where participants viewed the video, completed the OAT and SUS, and provided feedback.

**Results:** More than 80% of respondents across both studies reported that they would find the decision aid useful if deciding whether to undergo OS, and its use was associated with a significant improvement in knowledge of ovarian cancer and OS-related risk reduction ( $p < 0.01$ ). Moreover, both surgeons and patients assigned high scores to the video on acceptability and usability assessments.

**Conclusion/Implications:** A video decision aid is a well-accepted tool that may support decision-making regarding OS during non-gynecologic surgeries and enhance counseling and care coordination across surgical settings.

**FP076 / #685**

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**MECHANISTIC STUDY ON THE ACTIVATION OF PRIMARY MOTOR CORTEX (M1) IN INHIBITING OVARIAN CANCER THROUGH IGLUR-MEDIATED REVERSAL OF CD8<sup>+</sup> T CELL EXHAUSTION**

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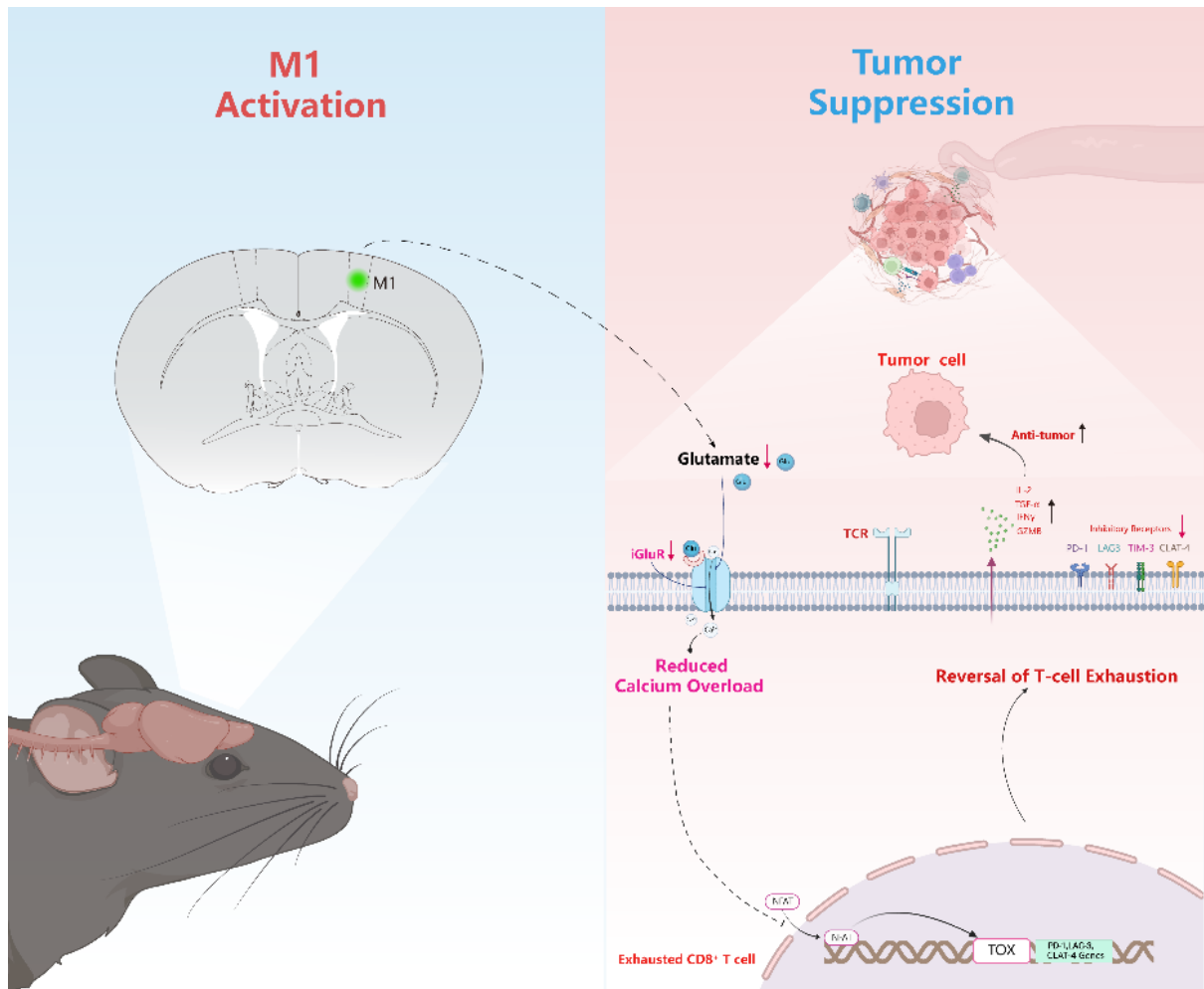
**Introduction:** Ovarian cancer (OC) immunosuppression severely limits therapeutic efficacy. While peripheral neural tumor regulation is recognized, the central nervous system's (CNS) role in modulating the tumor immune microenvironment (TIME) remains unclear. We aimed to map the primary motor cortex (M1)-ovary neural connection and elucidate how M1 activation regulates OC progression and CD8<sup>+</sup> T cell function.

**Methods:** PRV retrograde tracing mapped the brain-ovary circuit, and chemogenetics modulated M1 excitability in an orthotopic ID8-luc mouse OC model. Tumor-infiltrating CD8<sup>+</sup> T cells were analyzed via scRNA-seq and flow cytometry. TME neurotransmitters were assessed using LC-MS targeted metabolomics. The Glutamate-iGluR-Ca<sup>2+</sup> axis was investigated via real-time calcium imaging and CNQX pharmacological rescue.

**Results:** PRV tracing revealed a direct, contralateral neural projection from M1 to the ovary. Unilateral M1 activation significantly suppressed contralateral OC progression and extended survival, an effect completely abolished by CD8<sup>+</sup> T cell depletion. M1 activation reinvigorated immunity by reducing CD8<sup>+</sup> T cell exhaustion (downregulating PD-1/TIM-3) and enhancing effector molecules (GZMB, TNF- $\alpha$ ). Metabolomics showed M1 activation significantly decreased TME L-glutamate levels, which correlated with tumor burden. Mechanistically, high TME glutamate drove pathological TCR-mediated calcium overload via ionotropic glutamate receptors (iGluRs, specifically GRIK5) on T cells. Pharmacological iGluR blockade completely rescued this glutamate-induced T cell dysfunction.

**Conclusion/Implications:** We reveal a previously unrecognized descending axis by which higher brain centers regulate peripheral tumor progression: M1 activation remodels the TME metabolic landscape by reducing glutamate concentration, thereby blocking iGluR-mediated CD8<sup>+</sup> T cell exhaustion and reinvigorating anti-tumor immunity. These findings provide a novel theoretical framework and CNS-targeted

therapeutic strategy for OC.



**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

## **EFFICACY OF AVUTOMETINIB AND DEFACTINIB VS CONVENTIONAL CARE IN LOW-GRADE SEROUS OVARIAN CANCER: AN EXTERNAL CONTROL ARM ANALYSIS**

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**Introduction:** In a phase II study (RAMP 201), the combination of avutometinib + defactinib demonstrated efficacy in patients with recurrent low-grade serous ovarian cancer (LGSOC) (ORR, 31%; 44% *KRAS*<sup>mt</sup>, 17% *KRAS*<sup>wt</sup>). The purpose of this analysis was to construct an external control arm to contextualize the clinical benefit of avutometinib and defactinib compared to conventional care (CC) in this population.

**Methods:** Data from RAMP 201 (avutometinib 3.2 mg BIW and defactinib 200 mg BID) and GOG 281 (physician's choice CC: letrozole, tamoxifen, paclitaxel, pegylated liposomal doxorubicin, or topotecan) were included. A matching approach was used to re-weight patient-level data to adjust for differences in key baseline characteristics (eg, age, weight, height, extent of prior therapy, disease history, and *KRAS* mutation status). Outcomes included PFS and ORR per RECIST v1.1 as assessed by the investigator.

**Results:** 115 patients from RAMP 201 and 130 from GOG 281 CC were included. *KRAS* mutation status was captured for all patients in RAMP 201 and in 49% in GOG 281. Effective sample size after propensity score weighting was 64.5 for avutometinib + defactinib and 53.6 for SOC. Avutometinib + defactinib showed improvement in PFS over CC in both *KRAS*<sup>mt</sup> (HR=0.29 [0.15,0.56]; p<0.05) and *KRAS*<sup>wt</sup> patients (HR=0.58

[0.34, 0.98];  $p < 0.05$ ). A similar trend was observed for ORR (Table).

| Efficacy Endpoints<br>(Investigator Assessment) | <i>KRAS</i> mutant                    |                              | <i>KRAS</i> wildtype                 |                              |
|-------------------------------------------------|---------------------------------------|------------------------------|--------------------------------------|------------------------------|
|                                                 | Defactinib +<br>Avutometinib<br>n= 57 | Conventional<br>Care<br>n=14 | Defactinib +<br>Avutometinib<br>n=58 | Conventional<br>Care<br>n=50 |
| <b>ORR</b>                                      |                                       |                              |                                      |                              |
| Weighted ORR, %<br>(95% CI)                     | 38.71<br>(22.39, 55.02)               | 0.00%<br>(0.00, 0.00)        | 22.65<br>(8.79, 36.52)               | 7.87<br>(0.70, 15.04)        |
| <b>PFS</b>                                      |                                       |                              |                                      |                              |
| Median weighted PFS, months<br>(95% CI)         | 22.05<br>(10.94, NR)                  | 6.54<br>(3.48, NR)           | 11.30<br>(8.51, NR)                  | 7.72<br>(5.55, 12.68)        |
| Weighted Hazard Ratio (95% CI)                  | 0.29 (0.15, 0.56)                     |                              | 0.58 (0.34, 0.98)                    |                              |

**Conclusion/Implications:** These findings, adjusted for the evaluated baseline characteristics, demonstrate favorable ORR and PFS for avutometinib + defactinib for patients with recurrent LGSOC with and without *KRAS* mutations compared to conventional care.

**Topic:** AS01. Basic & Translational Science / AS01b. Translational Findings

**PATIENT-DERIVED ORGANOIDS PREDICT THE THERAPEUTIC RESPONSE TO GASTRIC-TYPE CERVICAL ADENOCARCINOMA**

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**Introduction: Objective** Gastric-type cervical adenocarcinoma (GAS) is rare and aggressive, which poses challenges for research due to the absence of models that accurately replicate their biology, and this leads to poor prognoses. The current study aimed to develop a new preclinical model using patient-derived organoids to assess its utility in medical research and potential for guiding personalized treatment.

**Methods: Methods** Organoids were created from GAS patient tumor tissues and used for histopathologic analyses and whole genome sequencing to verify that organoids mirrored the original tumor genetics and histology. Simultaneous radiochemical tests and drug screenings on GAS organoids were also performed by comparing outcomes with retrospective patient treatment data to assess GAS organoids predictive power for successful radiotherapy and drug efficacy in GAS patients.

**Results: Results** A culture method was successfully developed for human organoids from tumor tissues of GAS patients and the required medium components for organoids were detailed. Pathologic review and whole-genome sequencing confirmed that organoids closely reflected the histologic features and genomic diversity of the primary tumors. Drug and radiotherapy sensitivity tests showed varying responses in organoids that 100% aligned with actual patient outcomes.

**Conclusion/Implications: Conclusion** A method for creating human GAS organoids was introduced that provided a valuable tool for GAS research and advancing our understanding of GAS. Moreover, these organoids could assess the efficacy of drug therapies and radiotherapy for GAS patients, providing a platform for personalized treatment strategies.

**Topic:** AS04. Patient-Centered Care / AS04c. Patient Advocacy & Survivorship

## **TESTING A NOVEL PATIENT-LED NATIONAL COMPETITION FRAMEWORK FOR OVARIAN CANCER SURVIVORSHIP RESEARCH**

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**Introduction:** Ovarian Cancer Canada (OCC) and Cancer Research Society (CRS)'s Research Impact in Survivorship and Engagement (RISE) competition centered patients and caregivers at each step: they defined research priorities, co-developed the framework, and drove funding decisions. Herein, we describe and evaluate the RISE model.

**Methods:** Twenty-six patients and caregivers from nine provinces/territories co-developed a bilingual, anonymous survey to define national ovarian cancer (OC) survivorship priorities and competition guidelines. Fifteen multidisciplinary experts performed an academic pre-screen (pass/fail) of 20 proposals, based on scientific merit, fit and feasibility. The top 12 were evaluated by nine patient reviewers using patient-focused criteria (impact, importance, fit, lay summary, patient engagement), supported by anonymized academic feedback. Patient reviewers determined final rankings in a moderated panel meeting and provided feedback on their experience.

**Results:** Survey responses revealed physical, emotional, social and systemic challenges of OC survivorship (N=134). Proposals were received from five provinces - 76% of applicants new to OCC - and addressed challenges in sexual health, psychosocial support, menopausal care, exercise, and long-term survivorship. Patient reviewer feedback (N=5) revealed 100% satisfaction with the RISE review process. All agreed the balance between academic input and patient perspectives worked well, and the patient-driven final ranking felt appropriate, effective and fair. While 80% agreed that receiving academic comments increased confidence and scientific understanding, 20% worried it may have biased their own review.

**Conclusion/Implications:** This patient-driven competition model successfully engaged a new cohort of multidisciplinary researchers to address survivorship challenges. Reviewer feedback will inform the refinement and future implementation of patient-led competitions by OCC.

**Topic:** AS05. Prevention & Early Detection / AS05f. Screening & Early Detection

## **FEASIBILITY AND SENSITIVITY OF THE MYOMETRIAL LESION ULTRASOUND AND MRI STUDY RESULTS TO DETECT UTERINE LEIOMYOSARCOMA**

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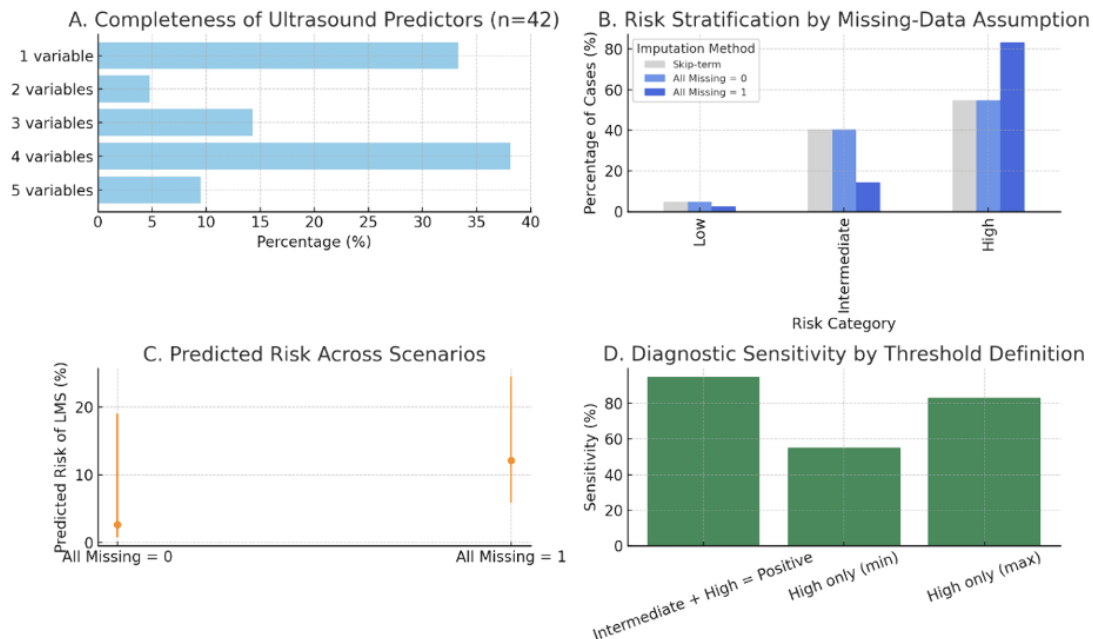
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**Introduction:** The seminal MYometrial Lesion UltrasouNd And mRi study proposed a pre-operative ultrasound-based diagnostic algorithm to estimate likelihood of mesenchymal uterine malignancies. However, feasibility and diagnostic performance in real-world settings remain unknown. This study evaluated the algorithm in detecting uterine leiomyosarcoma (LMS).

**Methods:** We retrospectively identified histologically diagnosed LMS cases from 1993-2024 at a tertiary center in Québec. Clinical and ultrasonographic predictors, including age, lesion diameter>8cm, border irregularity, Doppler score≥4, and presence of acoustic shadows, were retrieved. Predictors inputted in algorithm to calculate probability of LMS(P[LMS]). Missing data handled using three approaches: (i)skip-term (using available predictors), (ii)all missing=0 (benign-assumption), and (iii)all missing=1 (malignant-assumption). Patients classified as low-(<0.39%), intermediate-(0.40–2.2%), or high-risk(≥2.3%).

## Results:

### Feasibility and Sensitivity of the MYometrial Lesion UltrasouNd And mRi Algorithm



Of 109 LMS diagnoses, 42 had ultrasounds from 2005-2024. Of these, 4(9.5%) had all predictors, 16(38.1%) had four, 6(14.3%) had three, 2(4.8%) had two, and 14(33.3 %) had one. Using skip-term method, P[LMS] ranged from 1.5-10.7% for complete cases; 54.8% high-risk, 40.5% intermediate, and 4.8% low-risk. When all missing=0, median risk was 2.6%[IQR 0.7–19.0%], with 23(54.8%) high-, 17(40.5%) intermediate-, and 2(4.8%) low-risk. When all missing=1, median risk increased to 12.1%[IQR:5.8–24.5%], with 35(83.3%) high-, 6(14.3%) intermediate-, and 1(2.4%) low-risk. Those with complete data: two intermediate- and two high-risk. Sensitivity analysis showed algorithm identified 95% of malignancies when intermediate-and-high-risk strata treated test-positive, and 55–83% when in high-risk-category.

**Conclusion/Implications:** Minority of cases could be evaluated via algorithm. <10% of confirmed LMS cases had all predictors. Algorithm achieved sensitivity of 95% when intermediate plus high-risk categories were considered positive, and 55–83% when restricted to high-risk, dependent on predictors.

**Topic:** AS06. Tumor Types / AS06a. Cervical Cancer

**TEMPORAL TRANSCRIPTOMIC DYNAMICS IN PLASMA CELL-FREE RNA DURING CERVICAL CARCINOGENESIS REVEAL PROGRESSIVE TUMOR MICROENVIRONMENT REMODELING CONCORDANT WITH TISSUE ALTERATIONS**

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**Introduction:** Cervical cancer (CC) progresses through cervical intraepithelial neoplasia (CIN) to invasive disease, yet non-invasive biomarkers capturing this continuum are lacking. We aimed to characterize temporal cell-free RNA (cf-RNA) dynamics and validate plasma as a surrogate for tissue transcriptome.

**Methods:** Plasma cfRNA sequencing was performed on 27 controls, 35 CIN, and 40 CC patients. Time-series clustering identified five expression trajectories. Functional enrichment was performed on Cluster 3 genes. Tissue-plasma concordance was assessed by fold-change correlation.

**Results:** To characterize the temporal dynamics of plasma cfRNA during cervical disease progression, we applied Mfuzz clustering to genes altered across control, CIN, and CC stages, identifying five distinct temporal expression patterns. Among these, Cluster 3 exhibited a stepwise increase from control through LSIL and HSIL to invasive CC. Functional enrichment analysis of Cluster 3 genes revealed three significantly enriched biological themes: ATP synthesis coupled electron transport, platelet activation, signaling and aggregation, and cell adhesion, reflecting metabolic and microenvironmental remodeling essential for cervical tumor progression. These tissue-derived molecular changes were detectable noninvasively in plasma: top tissue DEGs (e.g., DEPDC1, CDCA8, STIL, ORC1) showed strong upregulation in plasma cfRNA. Concordance analysis demonstrated a positive correlation between tissue and plasma fold-changes, confirming that cfRNA alterations faithfully reflect TME biology rather than circulating noise. This tissue–plasma concordance provides direct evidence for cfRNA as a credible surrogate for tissue-based assays in cervical carcinogenesis.

**Conclusion/Implications:** Plasma cfRNA captures stage-specific molecular trajectories during cervical carcinogenesis, with strong tissue concordance. These findings support cfRNA as a non-invasive tool for early detection and progression monitoring in CC.

**Topic:** AS06. Tumor Types / AS06b. Endometrial & Uterine Corpus Cancers

## **SEQUENTIAL INTEGRATION OF PTEN AND HER2 WITH MMR AND P53 IMPROVES RISK STRATIFICATION IN ENDOMETRIAL CARCINOMA**

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**Introduction:** To evaluate the prognostic impact of PTEN and HER2 immunohistochemical (IHC) expression in endometrial carcinoma (EC), and determine whether their integration improves risk stratification beyond established markers (MMR and p53).

**Methods:** This retrospective cohort included 145 women diagnosed with EC (2008–2016) with long-term follow-up. Tissue microarrays were constructed, and IHC was performed for MMR proteins, p53, PTEN, and HER2 using standardized protocols with digital analysis. PTEN loss and HER2 overexpression (2+/3+) were assessed according to established criteria. Clinical outcomes included recurrence, disease-free interval, and cancer-specific survival (CSS). Survival analyses were performed using Kaplan–Meier and Cox regression. A sequential model combining MMR, p53, PTEN, and HER2 was developed for risk stratification.

**Results:** PTEN loss was observed in 17% of tumors and was associated with recurrence in low-grade EC ( $p=0.009$ ). HER2 overexpression was identified in 11% of cases and correlated with higher cancer-specific mortality (60% vs. 33%;  $p=0.035$ ). Both PTEN loss and HER2 overexpression were associated with worse CSS ( $p=0.009$ ). In multivariable analysis, p53 abnormality ( $HR=2.73$ ;  $p=0.0006$ ), PTEN loss ( $HR=2.66$ ;  $p=0.005$ ), and HER2 overexpression ( $HR=2.65$ ;  $p=0.009$ ) independently predicted poorer survival. MMR deficiency showed a trend toward improved outcomes ( $HR=0.54$ ;  $p=0.16$ ). Sequential biomarker integration improved prognostic discrimination: a low-risk group (44% of cases) had only 7% cancer-specific mortality, compared with 46% in higher-risk strata ( $p<0.0001$ ).

**Conclusion/Implications:** PTEN loss and HER2 overexpression are independent predictors of poor prognosis in EC and enhance risk stratification when combined with MMR and p53. This integrated IHC-based approach provides a practical and accessible strategy for prognostic classification.

**FP083 / #920**

**Topic:** AS06. *Tumor Types / AS06g. Vulvar & Vaginal Cancer*

**SURVIVAL OUTCOMES FOLLOWING GROIN RADIATION VERSUS SURGICAL LYMPHADENECTOMY IN SENTINEL NODE-POSITIVE VULVAR SQUAMOUS CELL CARCINOMA**

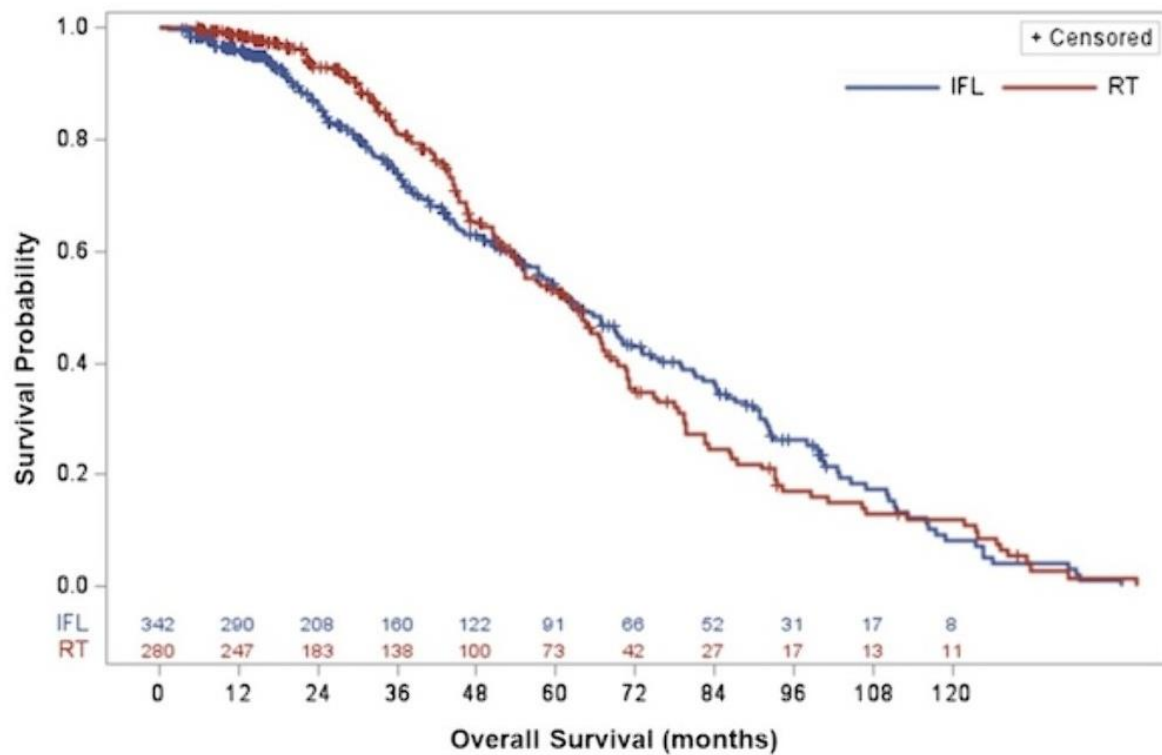
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**Introduction:** GROINSS-V-II concluded that inguino-femoral lymphadenectomy (IFL) with/without radiation was superior to groin radiation (RT) alone for vulvar squamous cell carcinoma (SCC) with sentinel lymph node (sLN) macrometastases due to decreased groin recurrence rate, but without improvement in disease-specific survival. Our objective was to compare overall survival (OS) between those treated with groin RT alone vs. IFL with/without adjuvant radiation in this population.

**Methods:** We performed a retrospective cohort study utilizing National Cancer Database data. Inclusion criteria were vulvar SCC with sLN metastasis diagnosed 2012-2022 subsequently treated with an IFL or RT alone. OS was compared using a restricted mean survival time (RMST) model adjusting for age, race, stage, income, insurance, rurality, diagnosis year, and chemotherapy. Difference in RMST and 95% confidence intervals are reported.

**Results:** 688 patients (IFL n=377, RT n=311) were included. The proportion in the RT group increased over time (36% in 2012-2015, 49% in 2020-2022) and the RT group was more likely to receive chemotherapy (63% vs 47%). 58.1% of participants in the IFL group received adjuvant groin radiation. Median follow-up was 20 months (range: 4-130 months). OS was similar (log-rank p=0.90; RMST adjusted model: 4.7 (-0.6, 9.9) month

survival advantage over 10 years favoring RT group ( $p=0.08$ ), Figure 1).



**Conclusion/Implications:** We did not observe differences in OS with IFL with/without RT versus RT alone in the setting of vulvar cancer with sLN metastasis. These data support the ongoing phase II GROINSS-V-III trial evaluating higher dose radiation and cisplatin chemotherapy for treatment of sLN metastases without IFL.

**Topic:** AS06. Tumor Types / AS06g. Vulvar & Vaginal Cancer

**STRATIFICATION OF VULVAR SQUAMOUS CELL CARCINOMA (VSCC) BY HPV AND P53 STATUS TO GUIDE EXCISION: CCTG VU.2 STRIVE STUDY (NCT06358469)**

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**Introduction:** Optimal surgical margins for VSCC may depend on molecular subtype. HPV associated (HPV-A) VSCC has lower rates of recurrence compared to HPV independent (HPV-I) p53 abnormal (p53abn) VSCC with retrospective data suggesting surgical clearance is critical in HPV-I VSCC.

**Objectives:** *Primary objective:* 3-year local recurrence rate (LRR) for VSCC surgically managed based on HPV/dVIN/p53 status and tumour margins. *Secondary objectives:* recurrence-free/disease-specific and overall survival, economics, patient reported outcomes.

**Methods:** Prospective, international, multicentre, phase II study enrolling VSCC stratified by HPV and p53 status. *Eligibility:* Primary diagnosis VSCC, surgically staged I-II (FIGO), molecular/tumour features known: HPV, margin assessment of carcinoma and/or dVIN (differentiated vulvar intraepithelial neoplasia) or p53. *Ineligibility:* HPV-I p53 wild-type, recurrent VSCC, FIGO stage III-IV, non squamous histotypes, planned or previous RT or chemotherapy. *Treatment arms:* Cohort HPV-A: Margin negative for cancer but < 8mm (regardless of high grade squamous intra epithelial lesion): Active surveillance (AS). Cohort HPV-I p53abn: Margin negative for cancer but <8 mm and/or positive for dVIN and/or positive p53abn: randomization to re-excision versus AS. *Statistical design:* Cohort HPV-A: n=120 enrolled over 3 years, the upper limit of a one-sided 95% CI for 3-year LRR would be 26% when the observed 3-year LRR=20%. Cohort HPV-I: n=129 randomized 2:1 over 3 years to re-excision vs AS, 86 on re-excision arm would have 85% power/95% confidence to exclude a 40% 3-year LRR in favour of a lower rate=25%.

**Current Status & Future Directions:** Trial opened Nov 2024. Centres activated: 10 (9 Canadian and 1 International). Accrual: 14 participants as of March 2026.

**CERVICAL CANCER MANAGEMENT IN THE POST-SHAPE TRIAL ERA: EXAMINING THE ACCURACY OF MRI AND LEEP IN ESTIMATING LESION SIZE AND INFORMING TREATMENT APPROACH**

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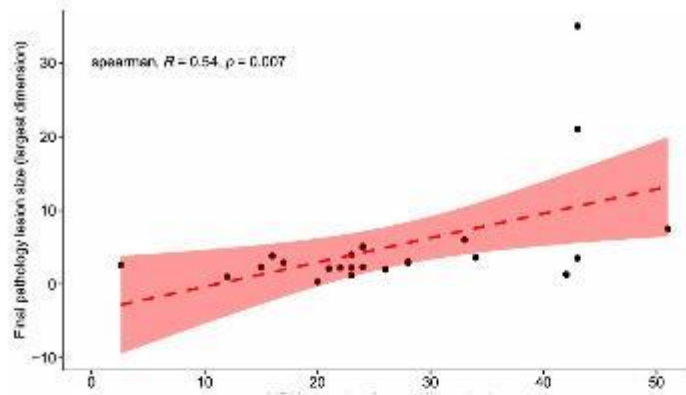
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**Introduction:** Cervical cancer management has evolved significantly over the last decade, driven by the SHAPE, LACC, and ConCerv trials. In early-stage disease, tumor size is estimated by MRI and/or LEEP(s) to direct simple versus radical surgery. We evaluated the accuracy of tumour size estimation by these modalities and their ability to correctly stratify patients to surgery.

**Methods:** Clinicopathological, imaging, and surgical data were collected and reviewed retrospectively for cervical cancer patients treated at a single institution from 2023-2025. Tumour size estimated preoperatively by MRI and/or LEEP(s) was compared to total tumour size after surgery (sum of maximum tumour dimensions from LEEP(s) and hysterectomy/trachelectomy specimen). Spearman correlation analysis was used to assess concordance between estimated lesion size on preoperative MRI and surgical pathology.

**Results:** Of 161 patients investigated with MRI during workup, 54 underwent hysterectomy or trachelectomy: 42 (78%) radical hysterectomy, 8 (15%) simple hysterectomy, 2 (4%) radical trachelectomy, and 2 (4%) simple trachelectomy. Preoperative tumour size estimates based on MRI and LEEP specimen(s) were concordant with final tumour size in 84% of cases, with overestimation in 3 (6%) and underestimation in 6 (11%) patients. Size misestimation misdirected radical surgery in two patients and simple surgery in two patients. MRI alone demonstrated a moderate correlation with lesion size on hysterectomy/trachelectomy specimens ( $r = 0.54$ ,  $p = .007$ ; Fig.

1).



Spearman correlation between tumour size on MRI and surgical pathology lesion size (in cm). Tumour size on MRI was defined as the largest dimension reported by the interpreting radiologist, and tumour size on final pathology as the greatest dimension reported on the surgical specimen.

**Conclusion/Implications:** Estimation of cervical tumor size by MRI and/or LEEP resulted in over- or underestimation in 17% of patients and misdirected 7% of patients to simple or radical surgery based on SHAPE criteria.

**Topic:** AS03. *Global Health, Economic Challenges & Inequity* / AS03c. *Sustainability in Gynecologic Oncology*

## **TWENTY-YEAR TREND IN SURVIVAL OF OVARIAN CANCER PATIENTS IN KAZAKHSTAN: IMPACT OF EVOLVING TREATMENT STRATEGIES**

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**Introduction:** The majority of ovarian cancer cases are diagnosed at advanced stages and associated with poor survival outcomes. Kazakhstan has made significant progress in the treatment of ovarian cancer and reached overall survival of 58.2% in 2025. The aim of this study was to analyze the survival trend of patients with ovarian cancer in Kazakhstan and analyze the impact treatment strategies on the disease outcome.

**Methods:** This is a retrospective cohort study conducted in National Research Oncology Center, a tertiary care center in Astana, Kazakhstan. Overall and disease-free survival rates stratified by cancer stage, cancer morphology types, and volume of surgical interventions were compared between 2001-2005 (436 patients) and 2016-2020 (327 patients).

**Results:** The overall five-year survival rate in 2025 increased by two times compared to 2005. Our analysis shows that one-year survival in 2025 was 96.5% vs. 66.7% in 2005, three-year was 87.5% vs. 47.5%, and five-year was 78.5% vs. 37.8%. Stage-by-stage analysis showed that the best results are achieved with early diagnosis: five-year survival rate at the stage I was 95%, at the stage II was 75%, and at the stage III was 62.2%, while at the stage IV the rates remain below 10%.

**Conclusion/Implications:** The positive changes of survival rates of ovarian cancer in our cohort is associated with an improvement in the quality of surgical interventions, the introduction of standardized chemotherapy regimens and targeted drugs, increased access to chemotherapy as well as improvements in the national oncology care system.

**Topic:** AS05. Prevention & Early Detection / AS05a. Epidemiology

## **MRNA COVID-19 VACCINATION AND SURVIVAL OUTCOMES IN PATIENTS WITH GYNECOLOGIC CANCER TREATED WITH IMMUNE CHECKPOINT INHIBITORS**

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**Introduction:** Immune checkpoint inhibitors (ICIs) are increasingly used in gynecologic cancers. mRNA vaccination may enhance efficacy of ICIs; we hypothesized prior vaccination improves overall survival. Our objective was to determine the association between pre-ICI COVID-19 mRNA vaccination and survival outcomes in patients with gynecologic malignancies.

**Methods:** We conducted a retrospective cohort study using the TriNetX Research Network. Adult patients with gynecologic cancers treated with ICIs (January 2021–March 2026) were included. Patients were stratified by receipt of  $\geq 1$  COVID-19 mRNA vaccine dose prior to ICI initiation; immunocompromised patients (HIV+, transplant, autoimmune disease, pregnancy) were excluded. Cohorts were balanced using 1:1 propensity score matching (PSM) based on baseline demographics (age, race, ethnicity) and selected comorbidities. Overall survival (OS) was estimated using Kaplan–Meier methods and compared using log-rank tests and Cox models.

**Results:** After PSM, a total of 3,582 patients were included, with 1,791 patients per cohort. The mean age was comparable between vaccinated and non-vaccinated cohorts (64.7 vs 65.0 years). Endometrial cancer predominated (48%), followed by cervical (23%) and ovarian (14%); others  $\leq 6\%$  each. Patients received PD-1, PD-L1, or CTLA-4 inhibitors. Median follow-up: 13.2 vs 10.8 months (vaccinated vs unvaccinated). Median overall survival was longer in the vaccinated cohort (37.5 vs. 27.9 months). Kaplan–Meier analysis showed improved survival in the vaccinated cohort (log-rank  $p < 0.001$ ; HR 0.82, 95% CI 0.74–0.92;  $p = 0.03$ ).

**Conclusion/Implications:** Pre-ICI COVID-19 mRNA vaccination was associated with a clinically meaningful survival advantage in gynecologic cancer patients receiving immunotherapy, suggesting a potential immunologic synergy that warrants prospective validation.

**Topic:** AS05. Prevention & Early Detection / AS05c. Disease Pathogenesis

## **EVALUATION OF ATOVAQUONE AS A SAFE PREVENTIVE STRATEGY FOR HIGH-GRADE SEROUS OVARIAN CARCINOMA**

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**Introduction:** High-grade serous ovarian carcinoma (HGSOC) is the most lethal form of ovarian cancer, characterized by late diagnosis and rapid chemoresistance. Women with germline mutations are at particularly high risk, yet current preventive options remain limited and often carry significant long-term side effects. Atovaquone, an FDA-approved oral antimalarial, has shown antitumor activity in ovarian cancer models and may represent a safe chemopreventive strategy. This study evaluated whether atovaquone delays HGSOC development in the BPRN ovarian cancer mouse model.

**Methods:** Mice received either a control diet or an atovaquone-supplemented diet initiated 7 days after tamoxifen-induced recombination (at 6–8 weeks of age). Necropsies ( $n \geq 11$ /group) were conducted at 24, 30, and 52 weeks to assess tumor burden and metastatic spread. Survival was analyzed using Kaplan–Meier curves. RNA sequencing of the ovary and oviduct was performed, followed by differential expression and Gene Ontology analyses (Bonferroni-adjusted  $p < 0.05$ ). To validate transcriptional findings, RNA-seq data from atovaquone-treated OVCAR3 cells were analyzed.

**Results:** No disease was detected at 24 weeks. At 30 weeks, atovaquone reduced tumor progression compared to controls, and at later time points, it decreased metastatic spread. Transcriptomic analyses revealed downregulation of pathways related to epithelial proliferation, extracellular matrix organization, and inflammatory signaling, along with reduced activity of transcription factors linked to tumor progression. These findings were supported by increased survival in treated mice over 52 weeks.

**Conclusion/Implications:** Overall, atovaquone delays HGSOC development and modulates key tumorigenic pathways, supporting its potential as a safe chemopreventive strategy for high-risk populations.

**Topic:** AS05. Prevention & Early Detection / AS05d. Pre-Invasive Disease

## **EFFECTIVENESS OF A 5-YEAR FOLLOW-UP ROUND OF HPV-BASED CERVICAL CANCER SCREENING: RESULTS FROM ESTAMPA II IN COLOMBIA**

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**Introduction:** HPV-based screening and self-sampling are promising strategies to increase cervical cancer screening coverage in low- and middle-income settings, but their long-term effectiveness depends on adherence to follow-up and robust information systems. Evidence on 5-year adherence and outcomes in real-world Latin American programs is scarce.

**Methods:** We performed an observational cohort follow-up of women originally enrolled in the ESTAMPA HPV-based screening study at the Colombian site. Eligible women were invited to a second screening round 5 years after enrollment. Of 1,463 eligible women, 481 (32.9%) were successfully contacted. Participation, uptake of self-sampling versus clinician-collected samples, and screening pathways were assessed by baseline status: HPV-positive treated, HPV-positive untreated, and HPV-negative

**Results:** Among contacted women, 85.0% responded to the first call and 69.7% attended; with a second call, contact rose to 90.8% and attendance to 85.9%, although overall reach remained limited by initial contact failure. Self-sampling was accepted by 71.9% of participants. Overall HPV positivity at 5 years was 19.9% (95% CI: 16.5–23.8) and differed significantly across baseline groups ( $p < 0.001$ ): 85.2% in HPV-positive treated women, 28.2% in HPV-positive untreated women, and 1.6% in HPV-negative women. Three CIN2–3 cases were detected (two HPV-positive treated, one HPV-positive untreated) and no invasive cancers were diagnosed.

**Conclusion/Implications:** A structured 5-year HPV-based recall with the option of self-sampling achieved high attendance among contacted women but modest overall coverage due to substantial contact losses. Strengthening integrated data systems, active follow-up, and patient navigation is essential to translate HPV screening and self-sampling into sustained reductions in cervical cancer burden in Latin America.

**Topic:** AS06. Tumor Types / AS06d. Rare Tumors

## **INTEGRATED GENOMIC ANALYSIS REVEALS SWI/SNF LANDSCAPE, CLONAL EVOLUTION, AND THERAPEUTIC TARGETS IN UNDIFFERENTIATED AND DEDIFFERENTIATED ENDOMETRIAL CARCINOMAS**

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**Introduction:** Undifferentiated carcinoma (UDC) and dedifferentiated carcinoma (DDC) are rare histological subtypes of endometrial carcinoma associated with poor prognosis. As the genetic mechanism underlying the disease progression of UDC and from low-grade endometrioid carcinoma to undifferentiated carcinoma (dedifferentiation) remains unknown, this study examined the comprehensive genomic landscape and carcinogenic mechanisms of UDC/DDC, and identified potential therapeutic targets.

**Methods:** We analyzed comprehensive genomic profiles, including driver mutations, oncogenic pathways, microsatellite instability, tumor mutational burden, and copy number alterations, in 162 UDC/DDC cases derived from three public databases: the AACR Project GENIE, cBioPortal from TCGA, and the Japanese nationwide database (The Center for Cancer Genomics and Advanced Therapeutic, C-CAT). We also conducted whole-exome sequencing for the well-differentiated and undifferentiated components of 10 UDC/DDC cases from our institution, followed by subclonal and phylogenetic analysis.

**Results:** Alterations in chromatin remodeling and epigenomic regulation were the most prominent features of UDC/DDC carcinogenesis. Based on the SWI/SNF chromatin remodeling complex (*ARID1A*, *ARID1B*, *SMARCA4*, and *SMARCB1*) and *TP53* alteration

patterns, we identified five mutually exclusive UDC/DDC subtypes with potential therapeutic implications. Subclonal and phylogenetic analyses of DDC strongly supported a common clonal origin of the two components and illustrated the dedifferentiation process, including an *ARID1A*-to-*ARID1A/ARID1B* co-mutated evolutionary trajectory.

**Conclusion/Implications:** Our comprehensive analysis of the largest UDC/DDC cohort to date revealed distinct genomic architectures and actionable alteration patterns underlying these aggressive tumors. By elucidating the genomic basis of carcinogenesis and dedifferentiation, this study supports the application of genome-based therapeutic strategies for UDC/DDC.

**Topic:** AS06. Tumor Types / AS06f. Trophoblastic Disease

## **PROTEOMIC LANDSCAPE OF HYDATIDIFORM MOLE DEFINES MOLECULAR EVOLUTION AND IMMUNE EVASION IN RECURRENCE**

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**Introduction:** Hydatidiform mole (HM) is a gestational trophoblastic disease characterized by excessive trophoblast proliferation and abnormal embryonic development. Recurrent hydatidiform mole (HMR), defined as the occurrence of two or more consecutive HMs in the same patient, carries an increased risk of malignant transformation. This study aims to characterize the molecular differences and dynamic changes in HM, particularly HMR, to uncover potential diagnostic and therapeutic targets.

**Methods:** We collected Formalin-Fixed Paraffin-Embedded (FFPE) tissue samples from 8 cases of sporadic HM (HMS), 13 recurrent episodes of HMR, 6 paired primary HM episodes from the HMR cohort, and 8 normal villus controls (NV). Quantitative proteomic profiling was performed using liquid chromatography-tandem mass spectrometry (LC-MS/MS). Bioinformatics approaches were utilized to identify differentially expressed proteins (DEPs), perform functional enrichment, and construct protein-protein interaction networks. Furthermore, the expression of key proteins was validated using immunohistochemistry.

**Results:** Across all samples, approximately 4,000 to 5,000 proteins were identified per specimen. Compared to NV group, A total of 2,959 differentially expressed proteins were identified in HM, revealing immune dysregulation and metabolic reprogramming. CD55 and ITGAM emerged as central network hubs of HM, while recurrence-associated signature indicated altered extracellular matrix composition and suppression of key transcriptional regulators (YAP1, STK3, POU2F1). Proteomic trajectory analysis from HMS to HMR highlighted persistent downregulation of neutrophil degranulation and upregulation of the immune checkpoint CD276 (B7-H3).

**Conclusion/Implications:** This study delineated the proteomic evolution and immune landscape of HM, offering molecular insights for recurrence risk assessment and potential targeted therapies for improved clinical management.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

## **RECURRENCE PATTERNS FOLLOWING FIRST-LINE OLAPARIB MAINTENANCE IN BRCA-ASSOCIATED HIGH-GRADE SEROUS OVARIAN CANCER: A REAL-WORLD COHORT STUDY**

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**Introduction:** Recurrence patterns following poly(ADP-ribose) polymerase inhibitor (PARPi) maintenance for BRCA-associated high-grade serous ovarian carcinoma (HGSC) remain incompletely characterized. We aimed to evaluate the anatomic distribution and burden of disease at recurrence to inform subsequent treatment strategies.

**Methods:** A retrospective population-based cohort study was conducted of patients with BRCA-associated HGSC treated with first-line platinum-based chemotherapy followed by maintenance olaparib between 2018-2024 at BC Cancer. First recurrence was categorized by anatomical location and number of new lesions, with oligometastatic disease defined as  $\leq 3$ . Subgroup analyses were performed by BRCA subtype and mutation origin (germline vs. somatic), with adjustment for stage and residual disease.

**Results:** A total of 147 patients were included. Optimal ( $<1\text{cm}$ ) debulking in the first-line setting was achieved in 84.4%. After a median follow-up of 39.0 months (range 13.0-92.0), 69 (46.9%) developed recurrence, with a median time to recurrence of 17.1 months (range 1.5-77.1 months). Most recurrences were intraperitoneal (50.7%), and nodal involvement was common (39.1%). Visceral and distant metastases were observed in 23.2% and 4.3% of patients, respectively. Oligometastatic recurrence occurred in 51.8% of patients, consistent across BRCA subtypes and mutation origins. BRCA1-associated HGSC recurred more frequently than BRCA2 (55.7% vs. 33.3%); this remained significant after adjustment for stage and surgical outcome (adjusted OR 2.51, 95% CI 1.20-5.26,  $p=0.014$ ).

**Conclusion/Implications:** Recurrence following first-line olaparib in BRCA-associated HGSC is characterized by substantial nodal and extra-abdominal disease. Approximately half of patients demonstrate oligometastatic recurrence, supporting a potential role for localized therapies like surgery or radiotherapy. Higher recurrence risk in BRCA1-associated HGSC warrants further investigation.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

## **REAL-WORLD OLAPARIB USE AND OUTCOMES: A WHOLE-OF-POPULATION AUSTRALIAN STUDY.**

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**Introduction:** Olaparib has been publicly subsidised as maintenance therapy in Australia since 2017 for recurrent ovarian cancer, and since 2020 in the first-line setting. Until 2024, access required detection of a pathogenic *BRCA1/2* variant in germline or tumour DNA. We evaluated national real-world olaparib use and patient outcomes and benchmarked results against SOLO1 and SOLO2 trials.

**Methods:** Retrospective cohort study using linked national dispensing and death records. We included all Australians initiating olaparib between January 2017 and December 2023, with follow-up to July 2025. We calculated treatment duration as time from first to last olaparib dispensing plus 28 days. We estimated overall survival (OS) and the proportion of patients alive and free from subsequent therapy at 3- or 5-years from olaparib initiation using Kaplan–Meier methods.

**Results:** We identified 1,090 people dispensed olaparib: 619 in the recurrent setting and 471 in the first-line. In people with recurrent disease (median follow-up 55.1 months, SOLO2 65.7), median treatment duration was 17 months; median OS 51.9 months (SOLO2 51.7); and at 5-years, 32.2% were alive and free from subsequent therapy (SOLO2 28%). In the first-line setting (median follow-up 40.4 months, SOLO1 88.9), median treatment duration was 23.1 months; median OS was not reached; and at 3-years, 61.7% were alive and free from subsequent therapy (SOLO1 64%).

**Conclusion/Implications:** Our analysis provides unique real-world evidence on olaparib use in Australian patients with ovarian cancer. Eight years after it was publicly

subsidised, the findings from the pivotal trials appear to be translating well to routine care.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**FIVE-YEAR OUTCOMES OF STAGE 1A MALIGNANT OVARIAN GERM CELL TUMOURS:  
A RETROSPECTIVE COHORT STUDY (2003–2020)**

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**Introduction: Objective:** To assess five-year outcomes in Stage IA malignant ovarian germ cell tumours (MOGCT).

**Methods:** Retrospective cohort study of 61 patients from 01/2003 to 12/2020.

**Results:** Median age 28 years (10–67). Histology: immature teratoma grades 1/2 (18/61, 29.6%), grade 3 (15/61, 24.6%), dysgerminoma (10/61, 16.4%), mixed (4/61, 6.6%); yolk sac (YST) (2/61, 3.3%), other (12/61, 19.7%). Surgery: laparotomy in 51/61 (83.6%), laparoscopy in 10/61 (14.7%) and fertility-preserving in 49, (80.3%); 43 (87.8%) unilateral salpingo-oophorectomy, 6 (12.2%) cystectomy. One YST patient received adjuvant BEP, the remainder (n=60, 98.4%) underwent surveillance. Median follow-up was 116 months, all disease-free at last review. 48/61 (78.7%) were recurrence-free. Six (9.8%) underwent surgery for suspected growing teratoma, confirmed histologically. Seven patients recurred (11.5%) at median 10 months (range 5–34 months), five within the abdo/pelvis and two beyond (one intracranial, one mediastinal). Recurrence was detected by imaging in 5/7 (two immature teratoma grade 3, one grade 2, one dysgerminoma, and one other) and two with raised tumour markers. 4/7 (57.1%) underwent secondary cytoreduction, two receiving subsequent chemotherapy (BEP or EP/OMB) and two requiring no further treatment. Three (42.9%) patients received BEP or POMB/ACE chemotherapy alone – one with squamous carcinoma having additional pembrolizumab; two tumour marker relapses received BEP. All (n=7) had complete responses and are in remission. Pregnancy occurred in 16/49 (32.7%) following fertility-sparing surgery.

**Conclusion/Implications:** Stage IA MOGCT has excellent prognosis and fertility-sparing surgery with surveillance is associated with high survival rates and favourable reproductive outcomes.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**REJOICE-OVARIAN01 AND DS6000-A-U101 STUDIES: BIOMARKER ANALYSIS OF CDH6 AND FRA EXPRESSION, AND RALUDOTATUG DERUXTECAN (R-DXd) ANTITUMOR ACTIVITY BY FRA STATUS, IN PLATINUM-RESISTANT OVARIAN CANCER**

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**Introduction:** R-DXd, a CDH6-directed ADC, has shown promising antitumor activity in platinum-resistant ovarian cancer (PROC). While the FR $\alpha$ -directed mirvetuximab soravtansine has improved outcomes, only 36% of patients with PROC are eligible. This post-hoc analysis evaluates CDH6 and FR $\alpha$  expression in PROC and the impact of FR $\alpha$  expression on R-DXd efficacy.

**Methods:** Baseline tumor samples from patients with PROC from the DS6000-A-U101 Phase 1 study (expansion part) and the REJOICE-Ovarian01 study (Phase 2 dose-optimization part) of R-DXd were analyzed for CDH6 expression and FR $\alpha$  expression (CDH6 clinical trial assay SP450 and VENTANA FOLR1 [FOLR1-2.1] RxDx assay, respectively; both Roche Diagnostics). CDH6 expression was evaluated by H-score and CDH6-positivity ( $\geq 1\%$  of viable tumor cells with membrane staining at any intensity). FR $\alpha$  expression was evaluated by H-score and FR $\alpha$  positivity ( $\geq 75\%$  of viable tumor cells with 2+/3+ membrane staining). Patients received R-DXd 4.8–6.4 mg/kg IV Q3W.

**Results:** Overall, 184 samples had paired CDH6 and FR $\alpha$  expression data (DS6000-A-U101: n=95; REJOICE-Ovarian01: n=89). Across all samples, 93.5% (n=172) were CDH6-positive and 31.0% (n=57) were FR $\alpha$ -positive (Table 1). The median CDH6 expression on the tumor cell membrane was 77.0% (range, 0–100) and the median FR $\alpha$  expression was 35.0% (range, 0–100). There was no correlation between CDH6 and FR $\alpha$  expression evaluated by H-score. R-DXd had antitumor activity regardless of tumor FR $\alpha$  status (Table 2).

**Conclusion/Implications:** R-DXd exhibited efficacy regardless of FR $\alpha$  expression level. Most PROC tumors were CDH6 positive; CDH6 expression showed no correlation with FR $\alpha$  expression, suggesting that they are independent biomarkers in PROC.

**Table 1**

| Total sample N=184<br>n (%) |                                  | FR $\alpha$ expression           |                                |
|-----------------------------|----------------------------------|----------------------------------|--------------------------------|
|                             |                                  | Positive ( $\geq 75\%$ )<br>n=57 | Negative ( $< 75\%$ )<br>n=127 |
| CDH6 expression             | Positive ( $\geq 1\%$ )<br>n=172 | 57 (31.0)                        | 115 (62.5)                     |
|                             | Negative ( $< 1\%$ )<br>n=12     | 0                                | 12 (6.5)                       |

**Table 2**

|                                    | R-DXd 5.6 mg/kg                 |                                 | R-DXd 4.8–6.4 mg/kg             |                                  |
|------------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|
|                                    | FR $\alpha$ -positive<br>(n=19) | FR $\alpha$ -negative<br>(n=42) | FR $\alpha$ -positive<br>(n=54) | FR $\alpha$ -negative<br>(n=122) |
| <b>ORR by BICR, %<br/>(95% CI)</b> | 47.4<br>(24.4–71.1)             | 52.4<br>(36.4–68.0)             | 59.3<br>(45.0–72.4)             | 50.0<br>(40.8–59.2)              |
| <b>DCR, %<br/>(95% CI)</b>         | 78.9<br>(54.4–93.9)             | 83.3<br>(68.6–93.0)             | 85.2<br>(72.9–93.4)             | 77.9<br>(69.5–84.9)              |

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**NEXT GENERATION IMMUNE CHECKPOINT INHIBITION WITH BOTENSILIMAB PLUS BALSTILIMAB IN RECURRENT OVARIAN CANCER: RESULTS BY PLATINUM SENSITIVITY STATUS AND 3-YEAR OVERALL SURVIVAL**

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**Introduction:** Recurrent ovarian cancer has high unmet need, especially in platinum-resistant/refractory disease, with limited durable survival. Botensilimab (BOT; Fc-enhanced anti-CTLA-4) augments T-cell priming, depletes Tregs, and activates antigen-presenting cells, demonstrating durable anti-cancer responses in “cold” tumors. We report phase 1b (C-800-01; NCT03860272) results evaluating BOT+balstilimab (BAL; anti-PD-1) in recurrent ovarian cancer by platinum sensitivity status, including 3-year overall survival (OS).

**Methods:** Patients received BOT 1 or 2 mg/kg every 6 weeks (Q6W) plus BAL 3 mg/kg Q2W (up to 2 years). Primary objectives were safety/tolerability. Objective response rate (ORR) was an efficacy endpoint; OS was exploratory. Clinical benefit rate (CBR) was complete/partial response/stable disease  $\geq 24$  weeks. Platinum-refractory/resistant (platinum-free interval [PFI]  $\leq 6$  months, including progression on or  $\leq 1$ -month post-first-line platinum) and platinum-sensitive (PFI  $> 6$  months) analyses were post hoc.

**Results:** As of 13 December 2025, 44 patients (n=35 efficacy-evaluable) received BOT+BAL (reverse Kaplan–Meier, 21.3 months [95% CI, 9.2–33.4]). Median prior lines was 4 (range, 1–17; 77% had  $\geq 3$ ). No new safety signals occurred. In efficacy-evaluable platinum-resistant/refractory (n=25) and platinum-sensitive (n=10) patients, ORR was 20% (95% CI, 7–41) and 30% (95% CI, 7–65), CBR was 28% (95% CI, 12–49) and 40% (95% CI, 12–74), median OS was 14.8 months (95% CI, 10.5–not estimable [NE]) and 12.9 months (95% CI, 2.4–NE), and 3-year OS was 47% (95% CI, 23–68) and 45% (95% CI, 11–75), respectively.

**Conclusion/Implications:** BOT+BAL demonstrates durable responses and long-term survival in recurrent ovarian cancer, including platinum-resistant/refractory disease, supporting further evaluation.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**PATIENTS WITH NEWLY DIAGNOSED ADVANCED OVARIAN CANCER IN ATHENA-MONO/GOG-3020/ENGOT-OV45: SUBSEQUENT ANTI-CANCER THERAPY BY HRD STATUS**

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**Introduction:** In ATHENA-MONO, 5-year progression-free rates were 37% (rucaparib) vs 22% (placebo) for the HRD-positive population and 21% vs 14% for the HRD-negative population. Rucaparib prolonged the time to first subsequent therapy (TFST) for those with HRD-positive and HRD-negative tumors; overall survival (OS) remains immature. As OS in advanced ovarian cancer (AOC) is impacted by high crossover rates to active treatment and by longer post-progression survival, TFST may provide a more reliable endpoint beyond progression-free survival (PFS). Here we describe the type, distribution, and timing of subsequent anti-cancer therapy (ST) by HRD status.

**Methods:** Patients with AOC (stage III–IV) who underwent cytoreductive surgery (R0 permitted) and 4–8 cycles of 1L platinum-doublet chemotherapy with a response were randomized 4:1 to oral rucaparib 600mg BID or placebo for up to 2 years in the phase 3 ATHENA trial. The primary endpoint is investigator-assessed PFS; TFST and time to

second subsequent therapy (TSST) are exploratory endpoints. All patients were followed for ST q12w.

**Results:** The data cutoff was 5 May 2025. In the ITT, 26% of patients (111/427) receiving rucaparib and 14% (16/111) receiving placebo remained in long-term follow-up without receiving any ST. In the HRD-positive and HRD-negative subgroups, a higher percentage of ST were administered to patients receiving placebo than rucaparib (Table 1). Time to first and second ST was delayed with rucaparib (Table 2) for both subgroups.

**Conclusion/Implications:** Rucaparib prolonged the median time to first and second ST for 6-16 months longer than placebo, regardless of HRD status.

**Table 1**

|                                                                                     | HRD-positive         |                   | HRD-negative         |                   |
|-------------------------------------------------------------------------------------|----------------------|-------------------|----------------------|-------------------|
| n, %                                                                                | Rucaparib<br>(n=185) | Placebo<br>(n=49) | Rucaparib<br>(n=189) | Placebo<br>(n=49) |
| <b>≥1 ST regimen</b>                                                                | 104 (56)             | 33 (67)           | 131 (69)             | 41 (84)           |
| <b>Had PARPi as part of the first ST regimen</b>                                    | 21 (20)              | 13 (39)           | 14 (11)              | 12 (29)           |
| <b>First ST regimen<sup>a</sup></b>                                                 |                      |                   |                      |                   |
| Platinum-based chemotherapy regimen <sup>b</sup>                                    | 88 (85)              | 24 (73)           | 96 (73)              | 26 (63)           |
| With maintenance PARPi                                                              | 15                   | 13                | 9                    | 12                |
| Non-platinum-based chemotherapy regimen <sup>b</sup>                                | 7 (7)                | 8 (24)            | 21 (16)              | 14 (34)           |
| Bevacizumab alone                                                                   | 0                    | 1 (3)             | 1 (1)                | 0                 |
| PARPi monotherapy                                                                   | 6 (6)                | 0                 | 5 (4)                | 0                 |
| Other                                                                               | 3 (3)                | 0                 | 8 (6)                | 1 (2)             |
| <b>≥2 ST regimens</b>                                                               | 61 (33)              | 21 (43)           | 86 (46)              | 28 (57)           |
| <sup>a</sup> Denominator includes patients with ≥1 ST regimen                       |                      |                   |                      |                   |
| <sup>b</sup> Regimens may include maintenance therapy, such as bevacizumab or PARPi |                      |                   |                      |                   |

**Table 2**

|                     | HRD-positive         |                   | HRD-negative         |                   |
|---------------------|----------------------|-------------------|----------------------|-------------------|
|                     | Rucaparib<br>(n=185) | Placebo<br>(n=49) | Rucaparib<br>(n=189) | Placebo<br>(n=49) |
| Median TFST, months | 32.7                 | 16.1              | 16.2                 | 10.4              |
| HR (95% CI)         | 0.59 (0.40-0.86)     |                   | 0.60 (0.42-0.84)     |                   |
| Median TSST, months | 55.9                 | 40.7              | 28.9                 | 21.4              |
| HR (95% CI)         | 0.76 (0.49-1.18)     |                   | 0.63 (0.44-0.90)     |                   |

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**PHASE 2 STUDY OF UBAMATAMAB ALONE OR IN COMBINATION WITH ADDITIONAL AGENTS IN PATIENTS WITH PLATINUM-RESISTANT OVARIAN CANCER: TRIAL IN PROGRESS**

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**Introduction:** Current treatment options are limited for patients with platinum-resistant ovarian cancer (PROC), underscoring a substantial unmet need for improved therapies. Ubamatamab, a MUC16×CD3 bispecific antibody, bridges MUC16+ tumor cells and T cells through a major histocompatibility complex-independent mechanism, promoting cytotoxicity. In a first-in-human Phase 1 study, ubamatamab demonstrated an acceptable safety profile with durable activity in patients with PROC. This ongoing, multiarm, Phase 2 study (NCT06787612) assesses efficacy, safety, and tolerability of ubamatamab ± standard of care/novel PROC treatments.

**Objectives:** The primary endpoint is objective response rate (RECIST 1.1 per investigator assessment). Secondary endpoints include CA-125 response, complete response rate, disease control rate, duration of response, progression-free survival (RECIST 1.1 per investigator assessment), Grade ≥2 cytokine release syndrome (CRS) incidence (Lee criteria), safety, pharmacokinetics, and immunogenicity.

**Methods:** Up to 220 patients with advanced PROC will be enrolled: 50 each in Arms A1, B, C, and D; 20 in Arm A2. Patients will receive the recommended Phase 2 dose of ubamatamab alone in Arm A, a calibrator arm. Combination arms include ubamatamab + standard doses of bevacizumab (Arm B), triple immunotherapy (ubamatamab + cemiplimab + fianlimab; Arm C), and ubamatamab + pegylated liposomal doxorubicin (Arm D). Patients will receive sarilumab prophylaxis to mitigate CRS risk. Adverse events will be graded per NCI-CTCAE v5.0.

**Current Status & Future Directions:** Enrollment began in July 2025 and is ongoing across 25 US and 37 global sites. Primary completion is December 2028. With limited immunotherapy options in PROC, ubamatamab may offer a novel approach.

**Topic:** AS06. Tumor Types / AS06c. Ovarian Cancer

**PARAGON-II COHORT C: A PHASE II BASKET STUDY OF LETROZOLE PLUS RIBOCICLIB IN HORMONE RECEPTOR POSITIVE PLATINUM-RESISTANT HIGH-GRADE EPITHELIAL OVARIAN CANCER**

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**Introduction:** Hormone receptor expression is common in epithelial ovarian cancer, and endocrine therapy is included in guidelines for recurrent disease. Dysregulation of the cyclin-dependent kinase 4/6 (CDK4/6) pathway is frequent in high-grade serous carcinoma, providing a rationale for combining CDK4/6 inhibition with endocrine therapy. PARAGON II Cohort C assessed letrozole plus ribociclib in hormone receptor-positive, *PIK3CA* wild-type platinum-resistant ovarian cancer.

**Methods:** PARAGON II is a multicenter, phase II basket trial. Participants received letrozole 2.5 mg daily plus ribociclib 600 mg (3-weeks-on/1-week-off) until progression or unacceptable toxicity. The primary endpoint was objective response rate by RECIST v1.1 or GCIG CA-125. Secondary endpoints included disease control rate, progression-free survival, patient-reported outcomes, and safety.

**Results:** Thirty-two participants were enrolled (median age 64 years; 97% high-grade serous histology). Patients were heavily pre-treated: 56% had  $\geq 3$  prior lines, 69% had prior bevacizumab, and 25% prior PARP inhibitors. Among 25 participants with measurable disease, objective response rate was 4.0% (95% CI, 0.1–20.0; one partial response). One GCIG CA-125 response (3.3%; 95% CI, 0.1–17.2) was observed. In evaluable participants (n=30), 12-week disease control rate was 27.0%. Median progression-free survival was 1.9 months, with a 6-month progression-free survival rate of 16.0%. Grade  $\geq 3$  toxicities were mainly hematologic. Over half of participants reported moderate–severe baseline abdominal symptoms, which were associated with significantly shorter survival. Patient reported outcomes declined over time, consistent with disease progression.

**Conclusion/Implications:** Letrozole plus ribociclib demonstrated minimal clinical activity in hormone receptor-positive, *PIK3CA* wild-type platinum-resistant ovarian cancer, indicating that hormone-targeted therapy combined with CDK4/6 inhibition is futile in this population.

**Topic:** AS04. Patient-Centered Care / AS04c. Patient Advocacy & Survivorship

**SELECTIVE "SEE AND TREAT" PROTOCOL: A DATA-DRIVEN STRATEGY TO IMPROVE HEALTHCARE DELIVERY IN NORTHERN CHILE.**

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**Introduction:** High cervical cancer prevalence and socioeconomic vulnerability often cause significant diagnostic latency. Delays between referral and surgery can result in loss of follow-up or disease progression. This study evaluates a selective "See and Treat" (S&T) protocol, where patients referred with high-grade lesions (CIN 2+) or clinical suspicion undergo immediate conization, bypassing prior directed biopsies.

**Methods:** A retrospective analysis of 222 cervical conizations (2025) at a regional hospital was conducted. We analyzed the diagnostic correlation between referral cytology and final surgical histopathology for patients referred as CIN 2, CIN 3, or suggestive of invasive disease. Statistical association was evaluated to determine the safety of bypassing pre-conization biopsies based on the Positive Predictive Value (PPV).

**Results:** High-risk referral groups (CIN 2, CIN 3, HSIL) revealed a **PPV for CIN 2+ of 94.1%**, with 88.2% confirmed as CIN 3 or invasive cancer in the final specimen. In cases with clinical suspicion and suggestive colposcopy, diagnostic concordance reached 100%. Implementing an S&T approach would have ensured immediate resolution for 15% of the total cohort, significantly reducing the treatment interval without compromising oncological safety.

**Conclusion/Implications:** A selective "See and Treat" protocol in Northern Chile is a robust and safe strategy for patients referred with high-grade cytology or clinical suspicion. This model optimizes surgical resources, eliminates the latency period caused by pre-conization biopsies, and ensures immediate oncological resolution for the most vulnerable patients in high-prevalence areas ( $p < 0.001$ ).

**Topic:** AS04. Patient-Centered Care / AS04c. Patient Advocacy & Survivorship

**ASSOCIATION OF THE COMPLETENESS OF CYTOREDUCTIVE SURGERY AND SURGICAL COMPLEXITY SCORE WITH THE BRCA MUTATION STATUS IN PATIENTS WITH HIGH-GRADE SEROUS OVARIAN CANCER**

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**Introduction:** Primary objective was to see the association between BRCA mutation status and rates of complete cytoreduction between the groups, and secondary objectives were to see the association between BRCA mutation status and SCS and PCI score, and to estimate the PFS and OS between the two groups. to evaluate whether germline BRCA mutation status is associated with surgical outcomes.

**Methods:** This was a cohort study conducted at the Department of Gynaecological Oncology, Tata Medical Centre, Kolkata (May 2024–February 2026). A total of 287 patients with HGSOV undergoing upfront surgery, interval/delayed surgery, or completion surgery (following inadequate surgical effort leaving residual disease at a different hospital) at the centre were included.

**Results:** Of the 287 patients, 77 (26.8%) were BRCA positive (56 BRCA1, 21 BRCA2) and 210 (73.2%) were BRCA negative. BRCA-positive patients were significantly younger ( $49.7 \pm 10.5$  vs  $54.3 \pm 10.2$  years,  $P=0.001$ ), more often pre-menopausal ( $P=0.015$ ). The median SCS was 6 (IQR 4–9) in both groups ( $P=0.506$ ). Median PCI was 10 in BRCAm vs 9 in BRCAwt ( $P=0.320$ ). In multivariable logistic regression, only PCI remained independently associated with achieving CC-0 (OR 0.89, 95%CI 0.81–0.97,  $P=0.013$ ), however there was no difference between the groups ( $P=0.032$ ). With a median follow-up of 17 months, recurrence occurred in 65 patients (8 in BRCAm vs 57 BRCA-negative,  $P=0.003$ ). Median PFS was significantly longer in the BRCAm group (35 months).

**Conclusion/Implications:** Among all factors analysed, PCI was the only independent predictor of complete cytoreduction irrespective of BRCA mutation status.

**Topic:** AS04. Patient-Centered Care / AS04c. Patient Advocacy & Survivorship

**INCOREPARP: A MULTIMODAL CARDIO-ONCOLOGY AND INTEGRATIVE CARE PROGRAM TO IMPROVE CLINICAL OUTCOMES IN PATIENTS WITH ADVANCED OVARIAN CANCER**

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**Introduction:** Advanced ovarian cancer treated with poly (ADP-ribose) polymerase inhibitors (PARPi) is associated with cumulative toxicities including fatigue, sarcopenia and metabolic impairment, negatively affecting quality of life (QoL) and treatment outcomes. INCOREPARP proposes a cardio-oncology care as a primary prevention therapy, integrating exercise, nutrition, and mindfulness into standard oncology practice.

**Objectives:** Primary endpoints focus on patient-centered outcomes, including cardiorespiratory fitness, QoL, and cardiovascular risk factors. Secondary endpoints evaluate treatment effectiveness in a non-controlled setting, including tolerance to PARPi, cardiac and inflammatory biomarkers, and healthcare resource utilization, with exploratory survival outcomes (PFS, OS).

**Trial Design:** INCOREPARP is a prospective, single-centre, controlled pragmatic trial enrolling 60 patients with stage III–IV ovarian cancer receiving maintenance PARPi ± bevacizumab (PS 0–1). Participants are randomized 1:1 to usual care versus a 12-week, hospital-based, supervised integrative intervention combining cardiopulmonary exercise (aerobic and resistance training), a personalized Mediterranean diet, and an 8-week mindfulness program. A digital health platform supports remote monitoring, symptom tracking, adherence, and dynamic intervention adjustment. Pragmatic features include integration within routine clinical practice, flexible and patient-centered intervention delivery, and use of digital tools for patient monitoring.

**Feasibility and Implementation:** We will evaluate adherence rate to demonstrate the feasibility of implementing supervised exercise programs in hospital settings, indicating that, with appropriate infrastructure and multidisciplinary coordination, such interventions can be successfully incorporated into routine oncology care.

**Conclusion:** INCOREPARP multimodal cardio-oncology program aims at optimizing functional, metabolic, and psychological health to improve PARPi clinical outcomes, supporting its integration into standard ovarian cancer care.

**Topic:** AS04. Patient-Centered Care / AS04c. Patient Advocacy & Survivorship

**PATIENT-REPORTED OUTCOMES AFTER SIMPLE VERSUS NERVE-SPARING RADICAL VERSUS STANDARD RADICAL HYSTERECTOMY FOR LOW-RISK EARLY-STAGE CERVICAL CANCER: A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS**

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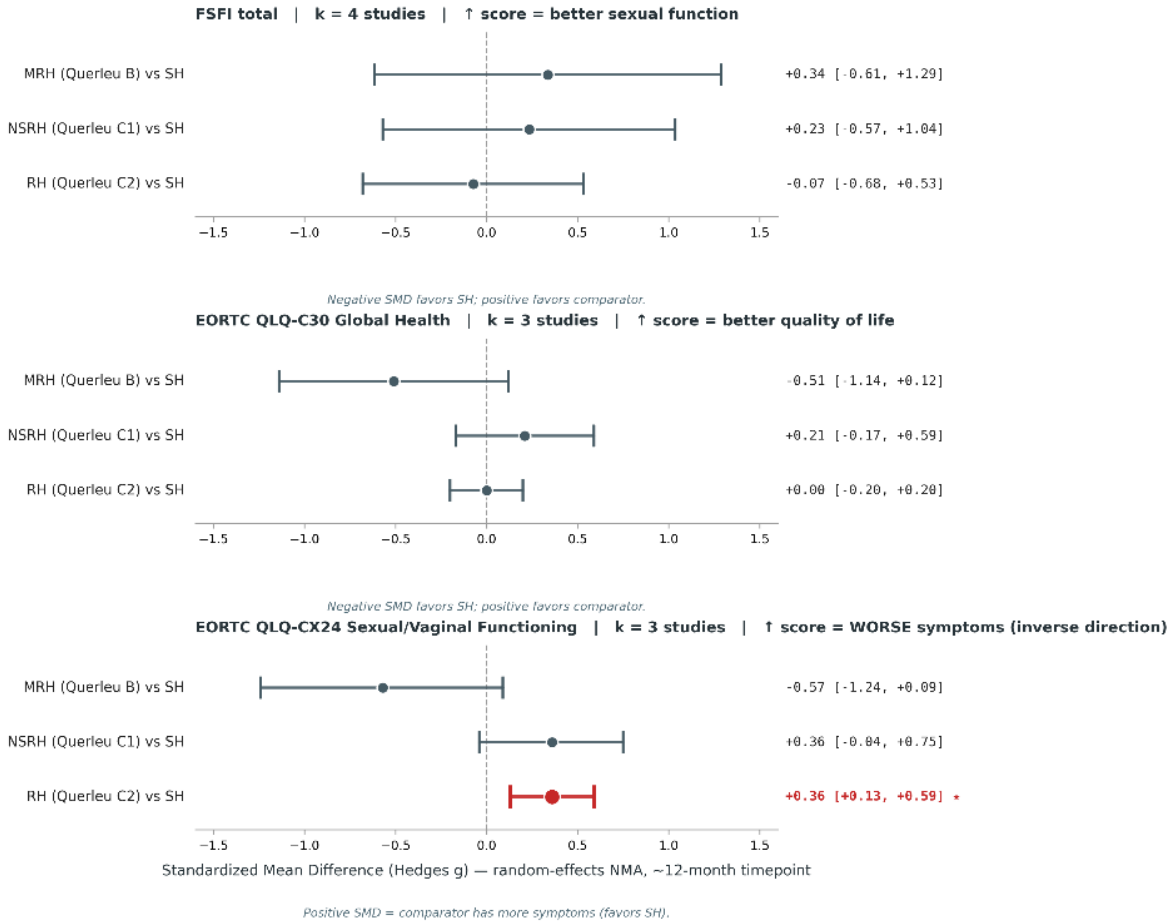
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**Introduction:** Radical hysterectomy (RH) is standard for low-risk early-stage cervical cancer (FIGO IA2–IB1, tumor  $\leq 2$  cm). SHAPE established non-inferiority of simple hysterectomy (SH); nerve-sparing radical hysterectomy (NSRH) preserves pelvic autonomic innervation. No synthesis has pooled validated patient-reported outcomes (PROs) or positioned NSRH separately. We performed a network meta-analysis (NMA) comparing SH, modified radical (MRH; Querleu B), NSRH (C1), and RH (C2).

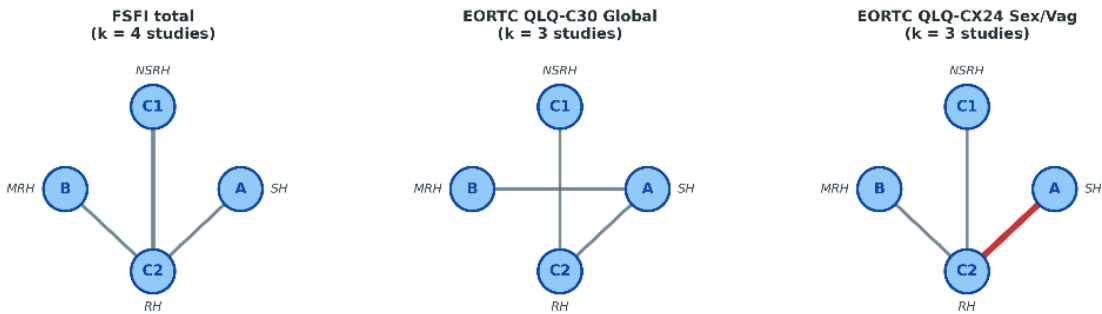
**Methods:** PRISMA-NMA review (PROSPERO CRD420261379817). PubMed, Embase, and CENTRAL were searched through April 2026 for FIGO IA2–IB1 cervical cancer, tumor  $\leq 2$  cm, with  $\geq 1$  validated PRO (FSFI, EORTC QLQ-C30/CX24, IPSS, FACT-Cx). Random-effects NMA in R (netmeta) used standardized mean differences (SMD) at 12 months. CINeMA assessed confidence. Five pre-specified sensitivity analyses.

**Results:** Ten studies (n=1,895; 5 RCTs including SHAPE 2025) formed a four-node network without closed loops. SH and RH were equivalent in EORTC QLQ-C30 Global Health (SMD 0.00, 95% CI -0.20 to +0.20; high confidence). RH increased EORTC QLQ-CX24 sexual-vaginal symptoms vs SH (SMD +0.36, +0.13 to +0.59; moderate confidence) — the only NMA estimate excluding the null. FSFI was comparable (SMD -0.07, -0.68 to +0.53). NSRH improved urinary function (IPSS SMD -1.12, single trial) and reduced labial-thigh numbness (RR 0.57 at 12m, 0.50 at 24m). The CX24 effect attenuated excluding cross-sectional studies.

NMA effect estimates of three patient-reported outcomes vs Simple Hysterectomy (SH)



Network geometry and key NMA estimates: PROs after surgical de-escalation for low-risk early-stage cervical cancer



Key NMA Estimates

| Outcome                | Comparison | SMD [95% CI]         | CiNEMA Confidence |
|------------------------|------------|----------------------|-------------------|
| EORTC QLQ-CX24 Sex/Vag | SH vs RH   | +0.36 [+0.13; +0.59] | Moderate          |
| EORTC QLQ-C30 Global   | SH vs RH   | 0.00 [-0.20; +0.20]  | High              |
| FSFI total             | SH vs RH   | -0.07 [-0.68; +0.53] | Low               |
| IPSS (single trial)    | NSRH vs RH | -1.12 [-1.58; -0.66] | Low (k=1)         |

Higher CX24 Sex/Vag = worse symptoms (positive SMD favors SH). Higher C30 Global = better QoL. Higher FSFI = better sexual function. Higher IPSS = worse urinary symptoms (negative SMD favors NSRH).  
Red edge in CX24 network — direct SHAPE comparison (SH vs RH), the only NMA estimate with a 95% CI excluding the null.

**Conclusion/Implications:** For FIGO IA2–IB1 cervical cancer (tumor  $\leq 2$  cm), SH preserves global QoL and produces lower disease-specific sexual-vaginal symptoms than RH. NSRH offers urological benefits over standard RH but with limited evidence for continuous sexual function. These findings support SH as the preferred approach in eligible patients.

## WHEN DOES RECURRENCE RISK BECOME NEGLIGIBLE IN EARLY-STAGE OVARIAN CANCER?

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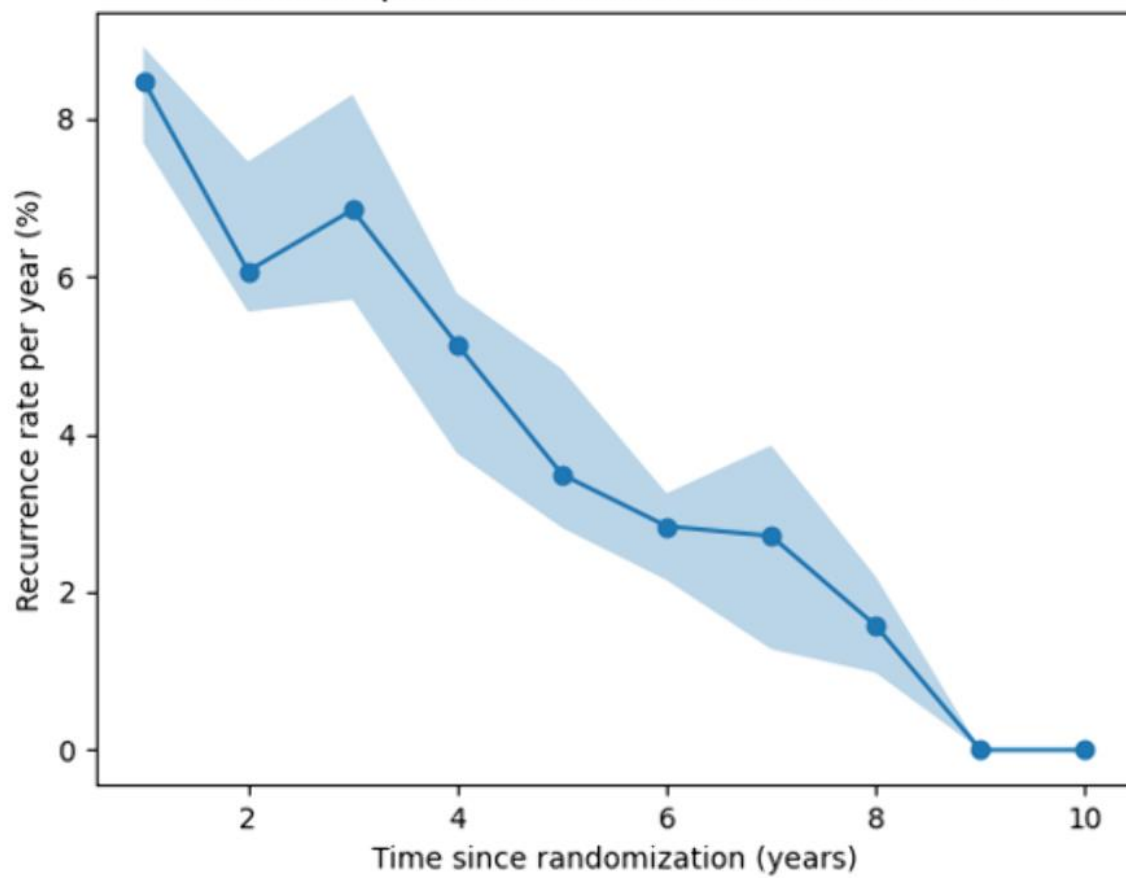
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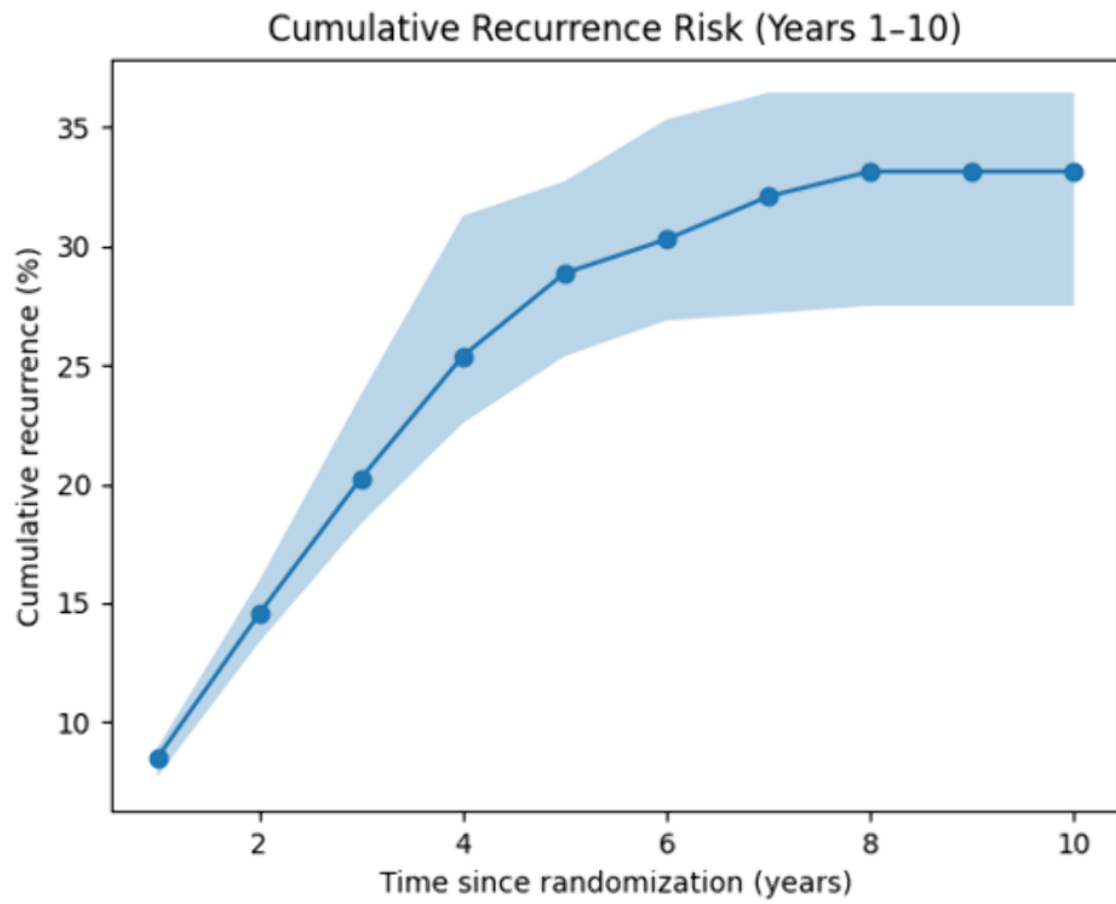
**Introduction:** The definition of cure in early-stage ovarian cancer (OC) remains unclear due to limitations in endpoints and follow-up, complicating patient communication regarding long-term outcomes. We aim to determine when recurrence of OC approaches 0% to better define.

**Methods:** This pooled analysis of eligible phase III randomized trials evaluated time to OC relapse in early stage, curative-intent patients. Kaplan-Meier Curves were reconstructed to estimate disease-free survival, allowing calculation of cumulative and yearly recurrence rates.

**Results:** Six randomized controlled trials were included; of those, two had 5-year follow up and four had longer follow up, with 2086 patients at risk of recurrence, treated between 1976 and 2006. 84.5% stage I disease, 14.5% stage II. 22.9% had endometrioid carcinoma, 29.7% serous carcinoma, 15.5% mucinous carcinoma, 3.0% adenosquamous carcinoma, and 20.1% clear cell carcinoma. Of the cohort, 66.7% classified as grade 1-2 and 33.3% as grade 3. Interval-specific recurrence rates were highest during the first year following randomization. The mean annual recurrence rate decreased from 8.5% in year 1 to 6.1% in year 2, followed by a gradual decline to 6.8% in year 3, 5.1% in year 4, and 3.5% in year 5, with rates approaching 2% in later years. Variability across studies was greatest in the early follow-up period and narrowed over time. Cumulative recurrence risk reached approximately 16% at 5 years and over 20% by 10 years.

Interval-Specific Recurrence Rate (Years 1-10)





**Conclusion/Implications:** Most recurrences occur within 5 years, after which annual rates decline to 2% or lower. This suggests a potential point to de-escalate surveillance, while maintaining long-term follow-up for rare late recurrences.

**Topic:** AS04. Patient-Centered Care / AS04c. Patient Advocacy & Survivorship

## **IMPLEMENTATION OF A WEB-BASED SHARED-DECISION-TOOL FOR OVARIAN CANCER MAINTENANCE THERAPY INTO CLINICAL PRACTICE**

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**Introduction:** Nuanced trade-offs between maintenance therapy or surveillance can make informed decisions challenging and time-consuming for ovarian cancer (OC) patients and their health care providers (HCP). We developed a web-based shared-decision-making tool for OC patients facing this decision and evaluated the tool in routine clinical care.

**Methods:** We developed a web-based shared-decision-making tool in accordance with international standards. The tool included key information to make an informed decision, along with interactive values clarification and outcomes by BRCA/HRD status from published trials. OC patients facing a decision about maintenance therapy were assigned to the control (usual care) or intervention group. The tool was provided to intervention group patients prior to discussion with providers. Pre/post-visit knowledge, decision quality, and acceptability of the tool were measured using validated instruments.

**Results:** Table 1 shows Participant Characteristics; Table 2 shows Outcome Measures. Knowledge scores increased significantly for the intervention ( $p < .0010$ ) and control groups ( $p = .01$ ). HCPs indicated a high degree of acceptance, appropriateness and feasibility of using the tool within routine clinical care (mean score 80% across measures of implementation success). Among intervention patients, 96% found the tool included sufficient information, 92% found it helpful in making their decision, 92% believed the values clarification questions were helpful and 84% felt the information was balanced between maintenance therapy and surveillance options.

Table 1. Participant Characteristics

|                                              | <b>Patients (n=50)<sup>1</sup></b>                                    |                            |
|----------------------------------------------|-----------------------------------------------------------------------|----------------------------|
|                                              | <b>Controls (n=25)</b>                                                | <b>Intervention (n=25)</b> |
| <b>Median age, yrs (mean) (range)</b>        | 65.3 (65.7) (44.5, 83.7)                                              | 64.1 (60.7) (39.4, 75.6)   |
|                                              | <b>n (%)</b>                                                          | <b>n (%)</b>               |
| <b>Race</b>                                  |                                                                       |                            |
| White                                        | 22 (88)                                                               | 22 (88)                    |
| Other                                        | 3 (12)                                                                | 3 (12)                     |
| <b>Hispanic, Latina or Spanish origin</b>    | 5 (20)                                                                | 4 (16)                     |
| <b>Marital status</b>                        |                                                                       |                            |
| Married/partnered                            | 22 (88)                                                               | 19 (76)                    |
| Widowed/divorced                             | 3 (12)                                                                | 6 (24)                     |
| <b>Highest education</b>                     |                                                                       |                            |
| ≤ High school degree                         | 3 (12)                                                                | 1 (4)                      |
| Some college                                 | 9 (36)                                                                | 8 (32)                     |
| College degree                               | 13 (52)                                                               | 16 (64)                    |
| <b>Employment<sup>2</sup></b>                |                                                                       |                            |
| Full-time                                    | 6 (24)                                                                | 6 (24)                     |
| Retired                                      | 12 (48)                                                               | 9 (36)                     |
| Other                                        | 6 (24)                                                                | 9 (36)                     |
| <b>Household income<sup>3</sup></b>          |                                                                       |                            |
| <\$75K                                       | 8 (32)                                                                | 4 (16)                     |
| \$75K or more                                | 9 (36)                                                                | 16 (64)                    |
| Prefer not to answer                         | 6 (24)                                                                | 5 (20)                     |
|                                              | <b>Health care providers (n=11)</b>                                   |                            |
| <b>Median age, yrs (mean) (range)</b>        | 40.8 (43.4) (32.4, 63.0)                                              |                            |
| <b>Years in practice, yrs (mean) (range)</b> | 5.0 (8.0) (1.0, 25.0)                                                 |                            |
| <b>Gender</b>                                | Male=6 (54.5%); Female=5 (45.5%)                                      |                            |
| <b>Role</b>                                  | Attending physician=8 (72.7%)<br>Advanced practice provider=3 (27.3%) |                            |

<sup>1</sup> All patients had advanced stage high grade epithelial ovarian cancer and received platinum-based chemotherapy

<sup>2</sup> One patient did not respond in each group

<sup>3</sup> Two patients in the control group did not respond

Table 2. Outcome Measures

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Patients (n=50)                                          |                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Controls (n=25)                                          | Intervention (n=25)                                                                                                                         |
| Knowledge scores at Time 1 and Time 2 (p-value)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Time 1 = 34.5%<br>Time 2 = 44.8%<br>p=.01                | Time 1 = 34%<br>Time 2 = 69%<br>p<.001                                                                                                      |
| Acceptance of tool by patients in intervention group <sup>2</sup><br><ul style="list-style-type: none"> <li>• Educational content rated "good" to "excellent"</li> <li>• Amount of information was "just right"</li> <li>• Felt options were presented in balanced manner</li> <li>• Found shared-decision-making tool useful in pt's own decision process</li> <li>• Believed shared-decision-making tool included sufficient information to help other patients in their decision-making process</li> <li>• Believed values clarification exercise ("what matters to you") were helpful</li> </ul> | N/A                                                      | <ul style="list-style-type: none"> <li>• 84% to 100%</li> <li>• 88%</li> <li>• 84%</li> <li>• 92%</li> <li>• 100%</li> <li>• 92%</li> </ul> |
| Decisional Conflict Scale <sup>3</sup><br><ul style="list-style-type: none"> <li>• Total score (p=0.021) <ul style="list-style-type: none"> <li>◦ Informed about alternatives, benefits/risks subscale (p=.023)</li> <li>◦ Values clarification subscale (p=.020)</li> <li>◦ Decision support/guidance subscale (p=0.019)</li> </ul> </li> </ul>                                                                                                                                                                                                                                                     | 25.0 (26.9)<br>25.0 (31.0)<br>25.0 (32.0)<br>25.0 (18.7) | 6.25 (13.2)<br>16.7 (14.0)<br>0.0 (11.7)<br>0.0 (8.7)                                                                                       |
| Providers (n=11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                          |                                                                                                                                             |
| Acceptability/feasibility of shared-decision-making tool by healthcare providers <sup>4</sup><br><ul style="list-style-type: none"> <li>• Acceptance of intervention</li> <li>• Intervention appropriateness</li> <li>• Feasibility of Intervention</li> </ul>                                                                                                                                                                                                                                                                                                                                       | 80<br>80<br>80                                           |                                                                                                                                             |

<sup>1</sup> Knowledge was assessed using the KnoMOR (knowledge measure); topics included ovarian cancer, maintenance therapy, risks/benefits, PFS, OS, and other information. Knowledge was assessed in both groups before (time 1) and after discussion with their physician about whether to pursue maintenance therapy or elect surveillance (time 2). Time 2 for the intervention group occurred after they used the shared-decision-making tool in preparation for discussion with their physicians. Higher scores reflect increased knowledge.

<sup>2</sup> Acceptance of tool was assessed by intervention patients using the Ottawa Acceptability Scale tailored for the decision of maintenance vs surveillance therapy. Educational topics included ovarian cancer, maintenance therapy, surveillance, explanation of BRCA/HRD status, definitions of progression-free and overall survival, benefits and risks of each option.

<sup>3</sup> Decisional Conflict Scale scores range from 0 to 100; higher scores represent higher decisional conflict

<sup>4</sup> Acceptability of Intervention Measure (AIM), Intervention Appropriateness Measure (IAM), & Feasibility of Intervention (FIM); scores range from 0 to 100; higher scores reflect stronger belief the intervention is acceptable, appropriate and feasible.

**Conclusion/Implications:** Incorporating an online shared-decision-making tool in the clinic setting is feasible, with high degrees of acceptance by providers and patients. Use of the tool significantly improved patient knowledge, allowing for more informed decision-making.

**Topic:** AS04. Patient-Centered Care / AS04c. Patient Advocacy & Survivorship

## **THE LIVED EXPERIENCE OF OVARIAN CANCER IN NIGERIA: FINDINGS FROM "THE EVERY WOMAN STUDY LOW- AND MIDDLE-INCOME COUNTRIES."**

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<sup>1</sup>Ahmadu Bello University Teaching Hospital, Zaria, Nigeria, <sup>2</sup>Federal Teaching Hospital, Gombe, Gombe, Nigeria, <sup>3</sup>Jos University Teaching Hospital, Jos, Nigeria, <sup>4</sup>University of Nigeria Teaching Hospital, Enugu, Nigeria, <sup>5</sup>University of Abuja Teaching Hospital, Abuja, Nigeria, <sup>6</sup>Usman Danfodio University Teaching Hospital, Sokoto, Nigeria, <sup>7</sup>University of Maiduguri Teaching Hospital, Maiduguri, Nigeria, <sup>8</sup>University College Teaching Hospital, Ibadan, Nigeria, <sup>9</sup>Benue State University Teaching Hospital, Makurdi, Nigeria, <sup>10</sup>University of Ilorin Teaching Hospital, Ilorin, Nigeria, <sup>11</sup>Kano Independent Research Centre Trust, Kano, Nigeria, <sup>12</sup>Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Nigeria, <sup>13</sup>World Ovarian Cancer Coalition, Toronto, Canada

**Introduction:** Ovarian cancer (OC) awareness and diagnostic pathways in low- and middle-income countries (LMICs) face substantial systemic challenges. This study, part of the 22-country Every Woman Study, examines the experiences of Nigerian women with OC, focusing on diagnosis, treatment, and socio-economic impact.

**Methods:** A cohort of 202 women diagnosed with OC within the preceding five years was recruited from 11 tertiary hospitals across the six geopolitical zones of Nigeria. Data were collected in four languages through structured interviews and surveys. Clinical records were reviewed for information on cancer type and stage. Descriptive analyses were conducted to assess awareness levels, diagnostic timelines, treatment access, and financial burden.

**Results:** Prior to diagnosis, 38.8% of participants had never heard of OC. Although 99.5% reported experiencing symptoms, the mean delay before seeking medical care was two months, and 25% experienced diagnostic delays exceeding nine months. Nine percent of women initially consulted local healers. Significant clinical gaps were identified, including high rates of unspecified epithelial ovarian cancer (25.7%) and unknown staging (19.2%), reflecting limited pathology capacity. While 86.6% of participants underwent surgery, only 56.7% received optimal cytoreductive procedures. The financial impact was severe: 90% depended on family support, 73.8% required external funding, and 61.2% reported major adverse effects on household finances. Psychological care was notably limited, with only 7.1% offered formal support.

## Sites



|                                                      |    |
|------------------------------------------------------|----|
| Bauchi - Abubakar Tafawa Balewa University TH        | 2  |
| Zaria-Ahmadu Bello University Teaching Hospital      | 17 |
| Benin City-University of Benin Teaching Hospital     | 21 |
| Enugu-University of Nigeria Teaching Hospital        | 32 |
| Jos-Jos University Teaching Hospital                 | 15 |
| Maiduguri-University of Maiduguri Teaching Hospital  | 2  |
| Sokoto-Usmanu Danfodiyo University Teaching Hospital | 9  |
| Gombe-Federal Teaching Hospital                      | 59 |
| Ibadan-University College Hospital                   | 15 |
| Ilorin-University of Ilorin Teaching Hospital        | 17 |
| Abuja-University of Abuja Teaching Hospital          | 13 |

WORLD  
OVARIAN  
CANCER  
COALITION

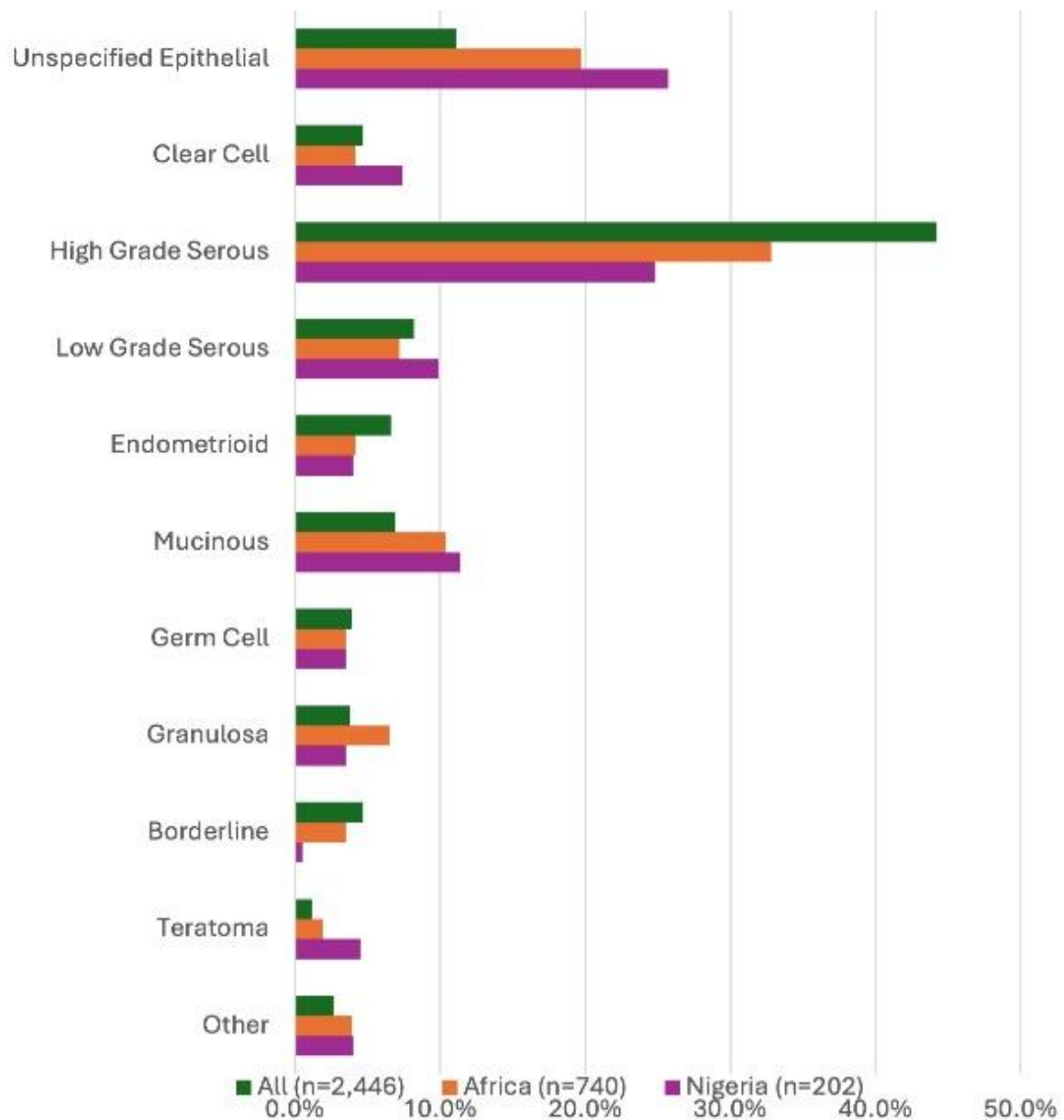
NO  
WOMAN  
LEFT  
BEHIND



[worldovariancancercoalition.org](http://worldovariancancercoalition.org)

The World Ovarian Cancer Coalition is a registered non-profit organization in the USA. It is a 501(c)(3) organization. TSOV00000000

## Different types of ovarian cancer in Nigeria, vs Africa and all EWS LMIC



**Conclusion/Implications:** Nigerian women with OC face prolonged diagnostic delays, inadequate diagnostic infrastructure, limited access to optimal treatment, and catastrophic out-of-pocket costs. Strengthening health insurance coverage, pathology and surgical capacity, and awareness initiatives is essential to improving outcomes.

**Topic:** AS04. Patient-Centered Care / AS04c. Patient Advocacy & Survivorship

## **HORMONE REPLACEMENT THERAPY IN HEREDITARY BREAST AND OVARIAN CANCER SYNDROME CARRIERS: INSIGHTS INTO FACTORS AFFECTING CHOICES AND ATTITUDES**

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**Introduction:** Individuals with Hereditary Breast-and-Ovarian-Cancer Syndrome (HBOCS) and early menopause may need treatment with Hormone Replacement Therapy (HRT), but use is suboptimal. We evaluated attitudes toward HRT, HRT use and associated factors in women with HBOCS.

**Methods:** We conducted a questionnaire-based study among women with HBOCS, collecting demographic and clinical characteristics, and attitudes toward and use of HRT. Participants were categorized as being in favor of HRT or having used HRT versus being against, undecided or never having used HRT. Logistic regression analysis identified factors associated with attitudes towards HRT and HRT use, including subgroup analyses by menopause status.

**Results:** Among 407 participants, 65% were menopausal and 35% premenopausal. 50% were in favor of or had used HRT. In the overall cohort being in a relationship and prior oral contraceptive (OCP) use were positively associated with favorable attitudes toward or use of HRT (adjusted odds ratio (aOR) 2.65, p=0.006; aOR 2.63, p=0.009, respectively), while breast cancer history was negatively associated (aOR 0.2, p<0.01). Among premenopausal participants, favorable attitudes were associated with being in a relationship (aOR 5.43, p=0.008) and higher education (aOR 4.78, p=0.035). Among menopausal participants, HRT use was negatively associated with breast cancer history (aOR 0.14, p<0.01) and positively associated with younger age and prior OCP use. Notably, 25% of women with premature menopause and no history of cancer were not using HRT.

**Conclusion/Implications:** HRT use and acceptance among women with HBOCS remains suboptimal. Decisions regarding HRT are influenced by clinical and sociodemographic factors, highlighting need for improved counseling and individualized risk–benefit discussions.

**Topic:** AS04. Patient-Centered Care / AS04c. Patient Advocacy & Survivorship

## **WHEN DOES RECURRENCE RISK BECOME NEGLIGIBLE IN EARLY-STAGE ENDOMETRIAL CANCER?**

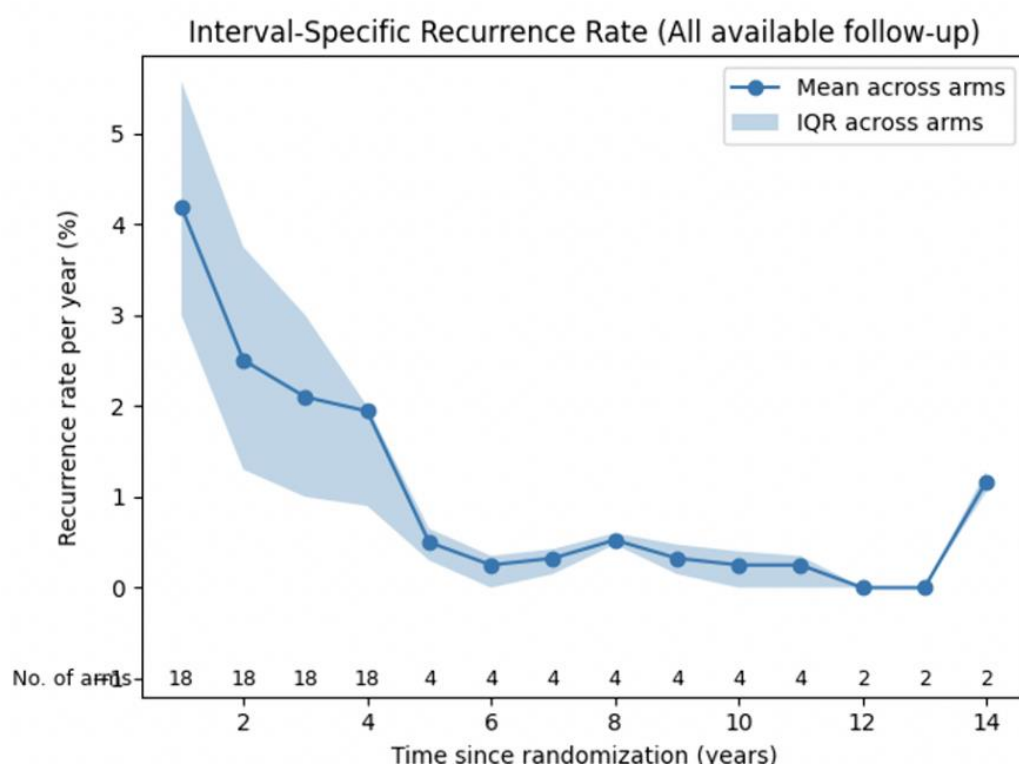
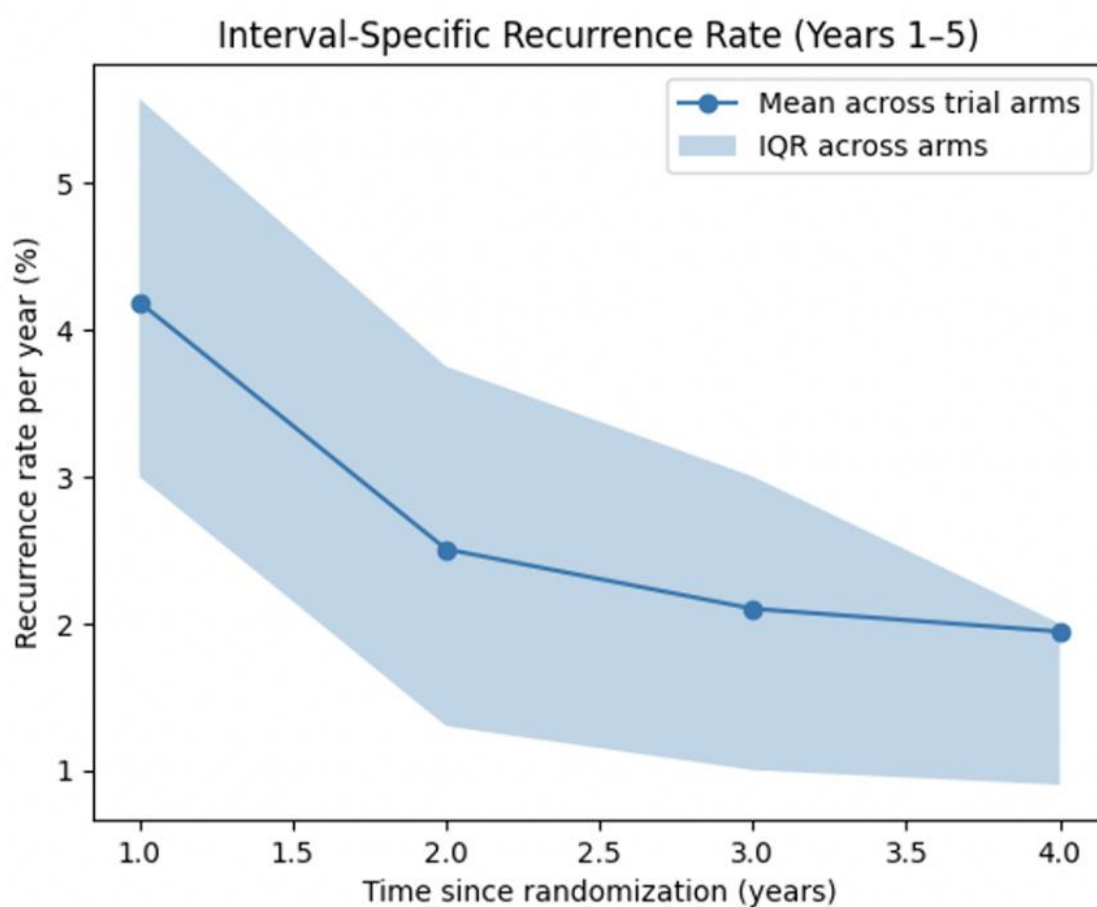
Samantha Taylor<sup>1</sup>, Gabriel Levin<sup>2</sup>, Lucy Gilbert<sup>2</sup>, Xing Zeng<sup>2</sup>, Shuk On Leung<sup>2</sup>, Laurence Bernard<sup>2</sup>, Reitan Ribeiro<sup>2</sup>

<sup>1</sup>McGill University, Obstetrics & Gynecology, Montreal, Canada, <sup>2</sup>McGill University Health Centre, Gynecologic Oncology, Montreal, Canada

**Introduction:** The definition of cure in early-stage endometrial cancer (EC) remains unclear due to limitations in conventional end points and follow-up duration. This uncertainty complicates patient counselling regarding long-term outcomes. We aimed to determine when recurrence risk approaches negligible levels to better define cure in this population.

**Methods:** We performed a pooled analysis of phase III randomized controlled trials evaluating curative-intent treatment for FIGO stage I to II EC. Eligible studies reported disease-free survival with high-quality Kaplan–Meier curves and numbers at risk, allowing for reconstruction of time-to-recurrence data. Reconstructed individual patient data were used to estimate cumulative recurrence and interval-specific recurrence rates at yearly time points.

**Results:** Nine trials comprising 4,748 patients were included. Seven trials had 5-year follow-up and two had extended follow-up. Stage distribution was 48.5% IA, 36.1% IB, 10.4% II, and 4.3% III. Most patients had endometrioid histology (85.5%) and grade 1 to 2 disease (85.0%). Recurrence risk was strongly time-dependent and concentrated within the first 4 years. Mean annual recurrence rates peaked at approximately 4% in year 1 and declined to approximately 2% by year 3. Beyond 5 years, recurrence risk fell below 1%, although late recurrences were observed.



**Conclusion/Implications:** Recurrence hazard declines substantially after 4 years and stabilizes at a low level. These findings support a risk-adapted surveillance strategy rather than fixed time-based follow-up, with individualized long-term monitoring, particularly for low-risk patients.

**Topic:** AS06. Tumor Types / AS06a. Cervical Cancer

## **DE-ESCALATED FERTILITY-SPARING SURGERY IN EARLY CERVICAL CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS**

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**Introduction:** De-escalated fertility-sparing surgery (cold-knife conization or simple trachelectomy with sentinel/pelvic nodal assessment) is redefining management of selected IA1-IB1 cervical cancer by replacing radical parametrectomy with biologically proportionate excision. We quantified whether cervical preservation delivers oncologic non-compromise and reproductive superiority against radical trachelectomy.

**Methods:** A PRISMA-aligned review searched PubMed, Embase, Web of Science, Cochrane Library and registries to March 2026. Studies of reproductive-age women with squamous, adenocarcinoma or adenosquamous IA1-IB1 disease undergoing fertility-sparing surgery were eligible. Random-effects meta-analysis pooled recurrence, death, pregnancy, miscarriage and preterm birth with 95%CI, heterogeneity, bias and GRADE certainty were assessed.

**Results:** Sixty-eight studies including 3,592 fertility-sparing patients informed qualitative synthesis. Sixty observational studies comprising 2,854 patients provided quantitative estimates: 17 evaluated de-escalated/conization surgery and 43 radical trachelectomy. De-escalated surgery achieved recurrence 0.4% (95%CI:0.0-1.4), mortality 0%, pregnancy 36.1% (95%CI:26.4-46.2), miscarriage 14.8% (95%CI:9.3-21.2) and preterm delivery 6.8% (95%CI:1.5-15.5). Radical trachelectomy showed recurrence 2.3% (95%CI:1.3-3.4), mortality 0.7% (95%CI:0.3-1.1), pregnancy 20.5% (95%CI:16.8-24.5), miscarriage 24.0% (95%CI:18.8-29.6) and preterm delivery 26.6% (95%CI:19.6-34.2). Stage-stratified conization recurrence remained below 1% for IA and IB disease. ConCerv low-risk prospective criteria yielded 3.5% two-year recurrence (95%CI:0.9-9.0), emphasizing negative margins, limited invasion and nodal negativity.

**Conclusion/Implications:** For rigorously selected low-risk early cervical cancer, de-escalated fertility-sparing surgery appears to preserve cure while improving pregnancy and reducing prematurity. Selection should prioritize tumors  $\leq 2$  cm, shallow invasion, negative margins and absent nodal disease. Multinational prospective registries should standardize sentinel-node algorithms, pathology thresholds, excision quality,

surveillance and patient-centered reproductive endpoints before broad implementation across diverse resource-variable health systems.

**Topic:** AS06. Tumor Types / AS06a. Cervical Cancer

**HYPOFRACTIONATED RADIOTHERAPY VERSUS CHEMORADIOTHERAPY FOR LOCALLY ADVANCED CERVICAL CANCER IN A HIGH-RISK POPULATION: A RETROSPECTIVE COHORT STUDY**

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<sup>1</sup>University of Pretoria, Radiation Oncology, Pretoria, South Africa, <sup>2</sup>University of Pennsylvania, Radiation Oncology, Pennsylvania, United States of America, <sup>3</sup>Rowan University, New Jersey, United States of America

**Introduction:** Hypofractionated radiotherapy (HFRT) is increasingly used in resource-constrained settings to improve access to treatment for locally advanced cervical cancer. However, comparative outcomes in high-risk populations remain unclear.

**Methods:** We conducted a retrospective cohort study of 333 patients treated with HFRT (n=179) or chemoradiotherapy (CRT, n=154). Baseline characteristics, treatment delivery, response, toxicity, and overall survival were evaluated. Multivariable Cox regression was used to adjust for baseline imbalances.

**Results:** HFRT was preferentially used in patients with poorer prognostic features, including higher rates of stage III disease (82.7% vs 55.8%), nodal involvement (15.2% vs 1.3%), hydronephrosis (54.8% vs 13.2%), renal impairment (54.8% vs 13.2%), and ECOG  $\geq 2$  (14.5% vs 2.6%) (all  $p < 0.01$ ). Despite this, early response rates were significantly higher with HFRT at 6 weeks (78.7% vs 48.2%) and 12 weeks (89.9% vs 57.4%) (both  $p < 0.001$ ). Grade  $\geq 3$  toxicities were low and comparable between groups. Unadjusted survival analysis favoured CRT ( $p < 0.001$ ); however, at 2 years, there was no difference in survival ( $p = 0.75$ ). After adjustment for baseline characteristics, the survival difference was attenuated and not statistically significant (HR 0.66, 95% CI 0.42–1.02;  $p = 0.063$ ).

**Conclusion/Implications:** In this high-risk population, HFRT achieved favourable early response and comparable toxicity despite being used in patients with significantly worse baseline characteristics. Similar 2-year survival outcomes suggest HFRT is a pragmatic strategy to expand access to treatment in resource-limited settings.

## ONCOLOGIC IMPACT OF THE LEARNING CURVE IN ROBOT-ASSISTED SURGERY FOR EARLY-STAGE CERVICAL CANCER: A MULTICENTER RETROSPECTIVE COHORT STUDY

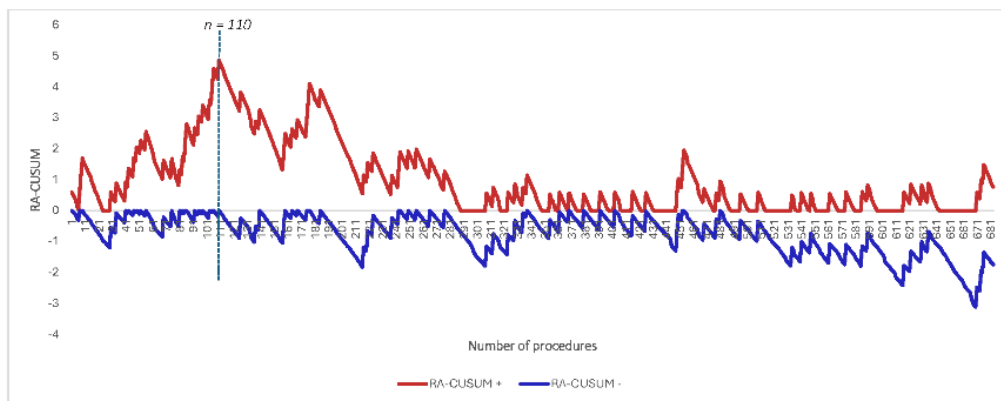
Alise De Jong<sup>1</sup>, Ilse Baeten<sup>1</sup>, Mariëlle Nobbenhuis<sup>2</sup>, Thomas Ind<sup>2</sup>, Jaap Hoogendam<sup>1</sup>, Ronald Zweemer<sup>1</sup>, Henrik Falconer<sup>3</sup>, Cornelis Gerestein<sup>1</sup>

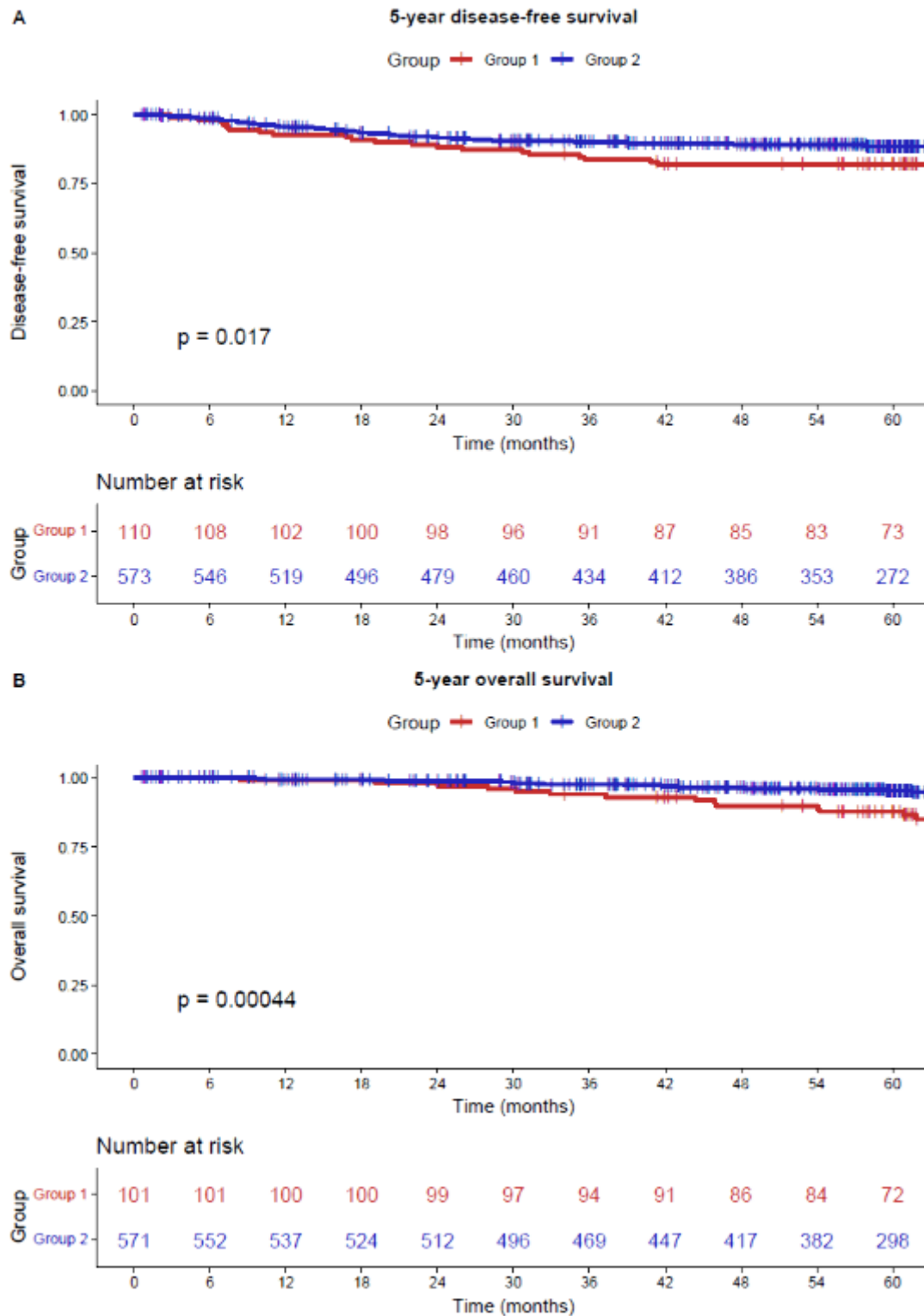
<sup>1</sup>University Medical Center Utrecht, Gynaecologic Oncology, Utrecht, Netherlands, <sup>2</sup>The Royal Marsden, Gynaecological Oncology, London, United Kingdom, <sup>3</sup>Karolinska University Hospital, Gynaecological Oncology, Stockholm, Sweden

**Introduction:** This study aimed to evaluate the impact of the learning curve associated with robot-assisted radical surgery on oncological outcomes in patients with early-stage cervical cancer.

**Methods:** We retrospectively identified all patients who underwent robot-assisted radical surgery as part of primary treatment for FIGO 2009 stage IA1–IIB squamous cell carcinoma, adenocarcinoma, or adenosquamous carcinoma of the cervix at three early adopting centres, from implementation of robot-assisted surgery until the end of 2021. Patients who underwent robot-assisted radical surgery, including radical hysterectomy and radical trachelectomy, were included in RA-CUSUM analysis to assess the learning curve based on cervical cancer recurrence. Descriptive data are reported as counts with percentages or medians with interquartile ranges (IQR). Kaplan–Meier analyses were performed to evaluate differences in disease-free and overall survival between the learning phase and experienced phase.

**Results:** In total, 683 patients were included in RA-CUSUM analysis. Most patients (91.9%) were preoperatively classified as FIGO 2009 stage IB1 or IIA, and the majority (73.8%) underwent radical hysterectomy. Median follow-up was 61.7 months (IQR 48.3–90.0). Based on cervical cancer recurrence, an initial learning phase of at least 110 procedures was observed, followed by a more experienced phase. Both disease-free and overall survival were significantly higher in the experienced phase compared with the learning phase (88.4% versus 81.8% and 95.3% versus 87.8%, respectively).





**Conclusion/Implications:** Implementation of robot-assisted radical surgery for early-stage cervical cancer is associated with a learning curve affecting oncologic outcomes.

**Topic:** AS06. Tumor Types / AS06a. Cervical Cancer

**IMPACT OF STAGING, OVERALL TREATMENT TIME AND BRACHYTHERAPY PRESCRIPTION ON OUTCOMES IN THE OUTBACK INTERNATIONAL RANDOMISED TRIAL(ANZGOG 0902/RTOG 1174/NRG 0274)**

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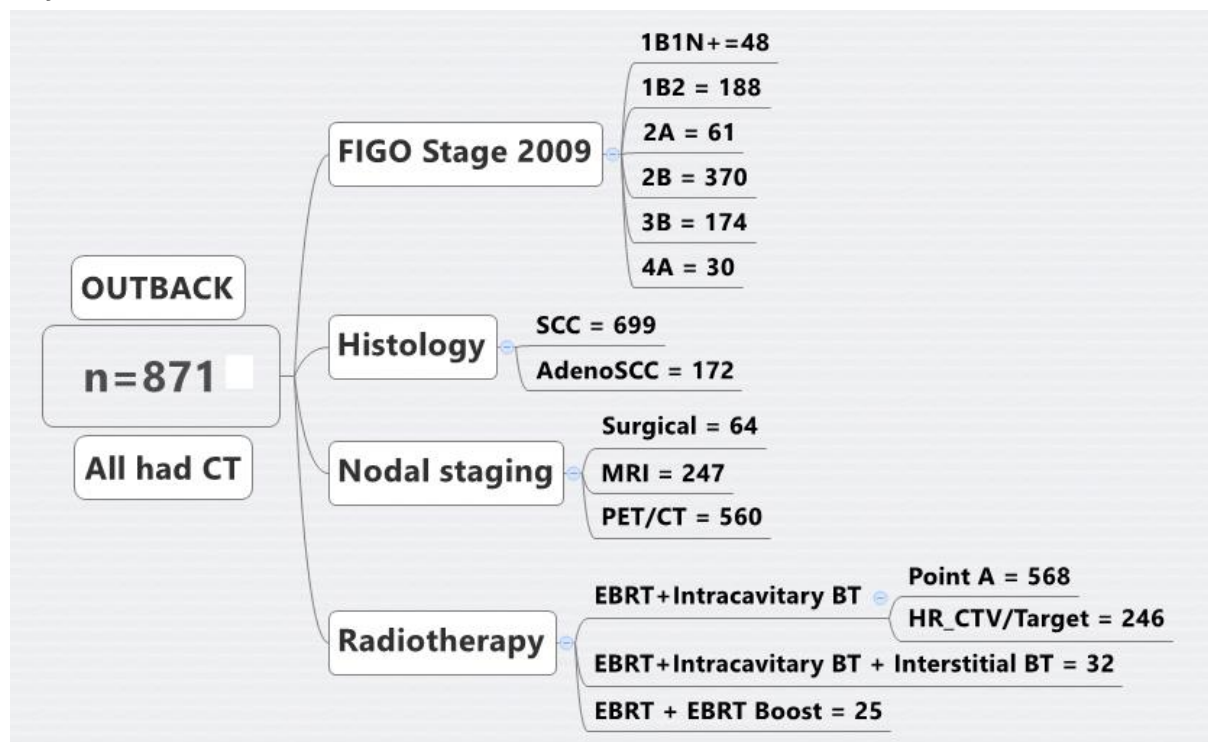
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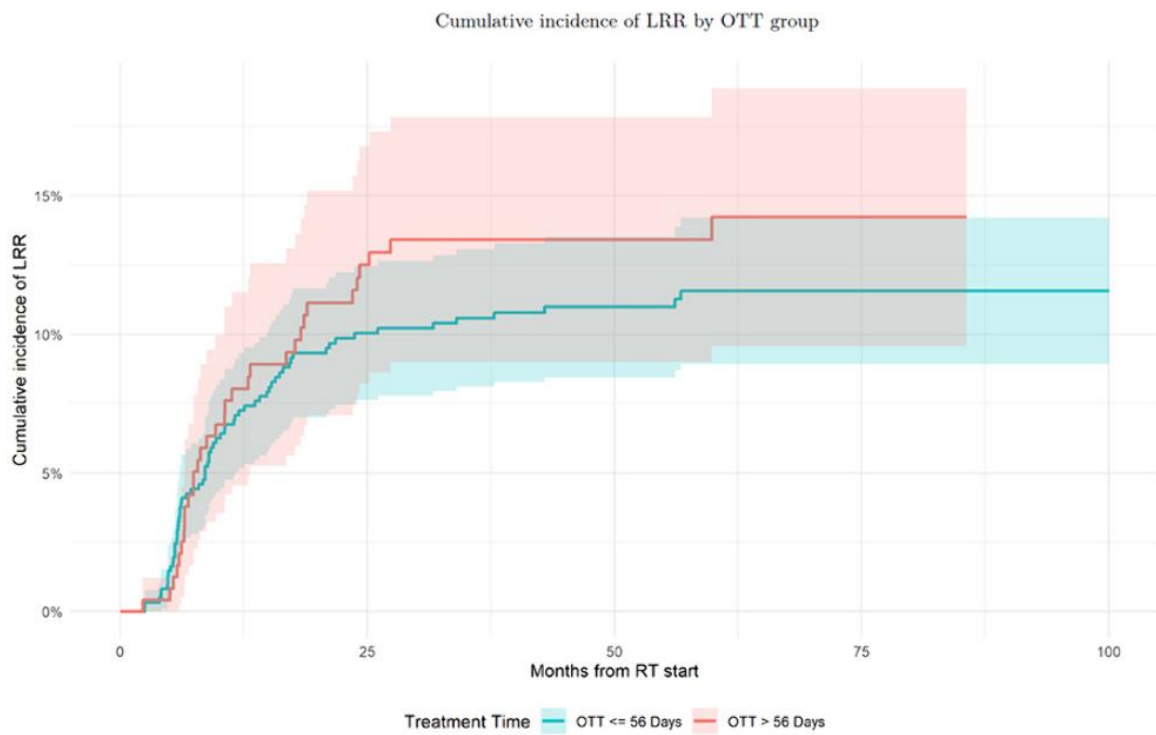
**Introduction:** The OUTBACK trial demonstrated that the addition of adjuvant chemotherapy to standard chemoradiotherapy (CCRT) did not improve survival in locally advanced cervical cancer(LACC). This secondary analysis examined the impact

of variations in staging modality, brachytherapy technique and overall treatment time (OTT) on disease control and toxicity.

**Methods:** Staging modality was grouped as CT/MRI versus PET-CT and/or surgical nodal assessment. Brachytherapy prescription was classified as point A versus high-risk clinical target volume (HR\_CTV)-based, with summed EQD2 to point A, pelvic control, and grade  $\geq 3$  late toxicity compared. OTT was categorised as  $\leq 50$ , 50–56, and  $>56$  days. Time-to-event outcomes were measured from start of radiotherapy and analysed using proportional hazards and competing-risk models.

**Results:** 871 participants with complete radiotherapy data were analysed. Staging with CT/MRI (N=247, 28%) versus other modalities (N=624, 72%) was not associated with improved pelvic control (OR 0.85,  $p=0.32$ ), progression-free survival (HR 0.93,  $p=0.58$ ), or overall survival (HR 0.87,  $p=0.34$ ). HR\_CTV-based brachytherapy delivered a lower point A EQD2 than point A prescription while maintaining comparable pelvic control (68% vs 66%) and grade  $\geq 3$  late toxicity (5% vs 7%) in node-negative participants. OTT  $>56$  days was associated with inferior OS and PFS. Among 621 participants completing OTT  $\leq 56$  days, OTT 50–56 days showed a nonsignificant trend toward worse outcomes compared with OTT  $<50$  days.





**Conclusion/Implications:** Prolonged OTT was associated with worse survival, whereas variability in staging did not compromise disease control, supporting the use of HR\_CTV-based brachytherapy and avoiding prolonged OTT in future LACC trials.

**Topic:** AS06. Tumor Types / AS06a. Cervical Cancer

**IMPACT OF INTERDIGITATION OF IMAGE-GUIDED BRACHYTHERAPY ON CLINICAL OUTCOMES IN CERVICAL CANCER PATIENTS TREATED WITH TWO APPLICATIONS AND MULTIPLE FRACTIONS: A PROPENSITY SCORE MATCHED ANALYSIS.**

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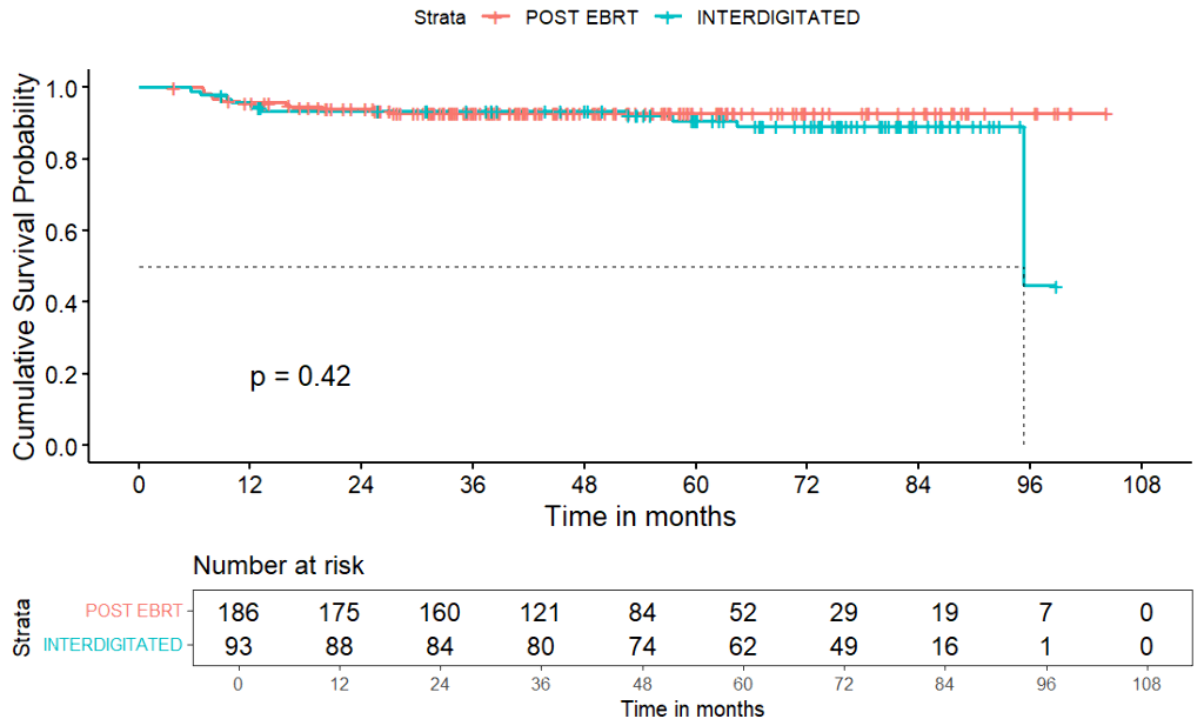
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**Introduction:** Chemoradiation (CRT) and image-guided brachytherapy (IGBT) delivery in < 50 days is critical to improve local control and outcomes in patients with locally advanced cervical cancer (LACC), however is challenging to achieve this overall treatment time in high volume centres worldwide. Deploying multiple brachytherapy fractions with two applications<sup>1</sup> and/or interdigitating brachytherapy after 4 weeks of external beam radiotherapy (EBRT) may facilitate earlier treatment completion. The outcomes of this combinatorial approach are unknown.

**Methods:** From 2016 - 2023, patients with FIGO stage IB2 - IVA treated with CRT and two-applications and multi-fractions IGBT were included. Brachytherapy was delivered either interdigitated during EBRT or sequentially. Planning objectives were D90 of > 85Gy EQD2<sub>10</sub> to high-risk clinical target volume and < 90Gy, < 75Gy and < 75Gy EQD2<sub>3Gy</sub> to 2cc bladder, rectum and sigmoid, respectively. Propensity score matching (1:2 matching, caliper 0.5) was performed, to balance baseline confounding characteristics.

**Results:** Following propensity matching, 279 patients were included (93 interdigitated, 186 sequential) (Table 1). At a median follow-up of 59.8 months, 5-year local control (LC) and disease-free survival (DFS) were not significantly different between interdigitated and sequential cohorts [LC: 90.7% vs. 92.8%, p = .42, DFS: 80.0% vs. 72.4%, p = .40] (Figure 1). Late grade 3 gastro-intestinal and genitourinary toxicities (CTCAE V5) were comparable between groups [9.7% vs. 16.1%, p = .147) and (4.3% vs. 2.7%, p = .476) respectively].

|                                              |                                         | Before Matching            |                                       |         | After Matching             |                                       |         |
|----------------------------------------------|-----------------------------------------|----------------------------|---------------------------------------|---------|----------------------------|---------------------------------------|---------|
| Category                                     | Sub-groups                              | Sequential IGBT<br>(n=591) | <u>Interdigitated</u><br>IGBT (n= 93) | p-value | Sequential IGBT<br>(n=186) | <u>Interdigitated</u><br>IGBT (n= 93) | p-value |
| Age                                          | < 40 years                              | 49 (8.3)                   | 13 (14.0)                             | .002    | 23 (12.4)                  | 13 (14.0)                             | .929    |
|                                              | 41 - 60 years                           | 413 (69.9)                 | 73 (78.5)                             |         | 149 (80.1)                 | 73 (78.5)                             |         |
|                                              | > 60 years                              | 129 (21.8)                 | 7 (7.5)                               |         | 14 (7.5)                   | 7 (7.5)                               |         |
| Histology                                    | Squamous cell carcinoma                 | 528 (89.5)                 | 84 (90.3)                             | .803    | 165 (89.7)                 | 84 (90.3)                             | .866    |
|                                              | Adenocarcinoma                          | 63 (10.5)                  | 9 (9.7)                               |         | 19 (10.3)                  | 9 (9.7)                               |         |
| Local stage<br>(FIGO 2009)                   | I-II                                    | 331 (56.0)                 | 72 (77.4)                             | .0001   | 144 (77.4)                 | 72 (77.4)                             | .100    |
|                                              | III-IV                                  | 260 (44.0)                 | 21 (22.6)                             |         | 42 (22.6)                  | 21 (22.6)                             |         |
| Nodal disease<br><br>(FIGO 2018)             | No nodes                                | 269 (45.5)                 | 49 (52.7)                             | .432    | 73 (39.2)                  | 49 (52.7)                             | .094    |
|                                              | Pelvic (IIIC1)                          | 266 (45.0)                 | 36 (38.7)                             |         | 89 (47.8)                  | 36 (38.7)                             |         |
|                                              | Para-aortic (IIIC2)                     | 56 (9.5)                   | 8 (8.6)                               |         | 24 (12.9)                  | 8 (8.6)                               |         |
| No. of concurrent<br>chemotherapy cycles     | < 4                                     | 117 (19.8)                 | 5 (5.4)                               | .0012   | 10 (5.4)                   | 5 (5.4)                               | .100    |
|                                              | ≥ 4                                     | 474 (80.2)                 | 88 (94.6)                             |         | 176 (94.6)                 | 88 (94.6)                             |         |
| EBRT Technique                               | IMRT                                    | 282 (47.7)                 | 70 (75.3)                             | <.0001  | 140 (75.3)                 | 70 (75.3)                             | .100    |
|                                              | Non-IMRT                                | 309 (52.3)                 | 23 (24.7)                             |         | 46 (24.7)                  | 23 (24.7)                             |         |
| HRCTV Volume                                 | Median (cc)<br>(IQR)                    | 33.2 (25.6 - 42.5)         | 29.4 (22.3 - 36.0)                    | .021    | 31.6 (24.2 - 38.8)         | 29.4 (22.5 - 36.0)                    | .230    |
|                                              | < 30 cc                                 | 158 (40.1)                 | 44 (49.4)                             | .135    | 66 (43.1)                  | 44 (49.4)                             | .414    |
|                                              | ≥ 30 cc                                 | 236 (59.9)                 | 45 (50.6)                             |         | 87 (56.9)                  | 45 (50.6)                             |         |
| HRCTV D90 EQD2 <sub>05</sub>                 | 85 Gy or less                           | 139 (37.7)                 | 14 (18.7)                             | .002    | 40 (30.1)                  | 14 (18.7)                             | .101    |
|                                              | > 85 Gy                                 | 230 (62.3)                 | 61 (81.3)                             |         | 93 (69.9)                  | 61 (81.3)                             |         |
| <u>Brachytherapy</u><br><br>application type | <u>Intracavitary</u>                    | 391 (66.6)                 | 65 (69.9)                             | .612    | 114 (61.3)                 | 65 (69.9)                             | .200    |
|                                              | <u>Intracavitary +<br/>Interstitial</u> | 196 (33.4)                 | 28 (30.1)                             |         | 72 (38.7)                  | 28 (30.1)                             |         |
| Overall<br><br>treatment time                | Median (days)<br>(IQR)                  | 55 (48 - 63)               | 46 (43 - 49)                          | <.001   | 51 (46 - 60)               | 46 (43 - 49)                          | <.001   |
|                                              | < 7 weeks                               | 181 (30.6)                 | 71 (76.3)                             | <.0001  | 75 (40.3)                  | 71 (76.3)                             | <.001   |
|                                              | 7 - 8 weeks                             | 154 (26.1)                 | 11 (11.8)                             |         | 50 (26.9)                  | 11 (11.8)                             |         |
|                                              | 8 - 9 weeks                             | 108 (18.3)                 | 6 (6.5)                               |         | 26 (14.0)                  | 6 (6.5)                               |         |
|                                              | > 9 weeks                               | 148 (25.0)                 | 5 (5.4)                               |         | 35 (18.8)                  | 5 (5.4)                               |         |
| CLINICAL OUTCOMES                            |                                         |                            |                                       |         |                            |                                       |         |
| 5-year Local Control                         | % (95% CI)                              |                            |                                       |         | 92.8 (89.1 - 96.6)         | 90.7 (84.8 - 97.1)                    | .420    |
| 5-year Disease-free Survival                 | % (95% CI)                              |                            |                                       |         | 72.4 (65.6 - 79.9)         | 80.0 (72.2 - 88.8)                    | .400    |
| 5-year Overall Survival                      | % (95% CI)                              |                            |                                       |         | 80.2 (74.1 - 86.9)         | 86.9 (80.2 - 94.1)                    | .260    |
| Late Grade ≥ 3 GI Toxicity                   | CTCAE V5                                |                            |                                       |         | 30 (16.1%)                 | 9 (9.7%)                              | .147    |
| Late Grade ≥ 3 GU Toxicity                   | CTCAE V5                                |                            |                                       |         | 5 (2.7%)                   | 4 (4.3%)                              | .476    |



**Conclusion/Implications:** Interdigitated BT achieves disease control and toxicity outcomes comparable to sequential brachytherapy, supporting its use as a practical alternative to optimize treatment scheduling in LACC.

**Topic:** AS06. Tumor Types / AS06a. Cervical Cancer

**DISCREPANCY BETWEEN MRI READING FOLLOWING DIAGNOSTIC LEEP/CONE AND FINAL PATHOLOGY OF THE HYSTERECTOMY SPECIMEN; AN EXPLORATORY ANALYSIS FROM THE CCTG CX.5/SHAPE TRIAL**

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**Introduction:** The objective was to evaluate the concordance between preoperative LEEP/cone margins, pelvic MRI and final pathology from the hysterectomy specimen in the CX.5/SHAPE trial

**Methods:** This exploratory analysis included patients who had preoperative LEEP/cone biopsy and pelvic MRI prior to hysterectomy. Primary outcomes included the correlation between pelvic MRI and final pathology: (1) “undercall” (no disease on MRI but disease on final pathology); (2) “overcall” (disease on MRI but none on final pathology), and (3) “concordance” (disease or no disease on both MRI and final pathology). Oncologic outcomes were evaluated according to the 3 MRI correlation groups.

**Results:** A total of 480 patients had preoperative LEEP/cone and pelvic MRI. There were 382 (79.6%) with and 98 (20.4%) without disease on MRI. The MRI undercall rate was 27.1% (95% CI 23.2-31.3%), overcall rate 8.5% (95% CI 6.2-11.4%), and concordance rate 64.4% (95% CI 59.5-68.7%). Higher MRI concordance was associated with negative compared to positive LEEP/cone margins (76.6% vs. 57.3%,  $p < 0.0001$ ). Adenocarcinoma was associated with lower PPV (41.9%) compared to squamous (66.2%) and adenosquamous (50%) ( $p = 0.04$ ). There were no differences between MRI

correlation groups and pelvic recurrence ( $p=0.09$ ) or deaths ( $p=0.16$ ), but patients with positive LEEP/cone margins and residual disease on MRI were more likely to require adjuvant treatment (13.0%) compared to negative margins and no disease on MRI (2.5%).

**Conclusion/Implications:** There was modest concordance between preoperative pelvic MRI and final hysterectomy pathology in the SHAPE trial, which was influenced by LEEP/cone margin status. However, MRI discrepancy was not significantly associated with oncologic outcomes

**Topic:** AS06. *Tumor Types / AS06a. Cervical Cancer*

**PEMBROLIZUMAB PLUS CONCURRENT CHEMORADIOOTHERAPY FOR HIGH-RISK  
LOCALLY ADVANCED CERVICAL CANCER: 5-YEAR FOLLOW-UP RESULTS FROM THE  
PHASE 3 ENGOT-CX11/GOG-3047/KEYNOTE-A18 STUDY**

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**Introduction:** In the phase 3 ENGOT-cx11/GOG-3047/KEYNOTE-A18 study (NCT04221945), pembrolizumab+concurrent chemoradiotherapy (CCRT) followed by

pembrolizumab led to statistically significant improvements in PFS and OS versus placebo+CCRT followed by placebo in participants with high-risk, locally advanced cervical cancer (LACC). Clinically meaningful benefits were maintained at final analysis (median follow-up, 41.9 months). We present 5-year follow-up results.

**Methods:** Eligible participants with newly diagnosed, previously untreated, high-risk LACC (FIGO 2014 stage IB2–IIB with node-positive disease or stage III–IVA regardless of nodal status) were randomized 1:1 to receive 5 cycles of pembrolizumab 200 mg or placebo Q3W+CCRT, then 15 cycles of pembrolizumab 400 mg or placebo Q6W. CCRT was 5 cycles (optional 6th dose) of cisplatin 40 mg/m<sup>2</sup> QW+external beam radiation therapy then brachytherapy. Primary endpoints were PFS per RECIST v1.1 by investigator or histopathologic confirmation and OS.

**Results:** Median follow-up was 54.5 months (range, 37.4–67.6). Median duration of pembrolizumab or placebo therapy was 22.8 months for a median of 20 cycles. Efficacy results show continued improvement in PFS and OS with pembrolizumab+CCRT, with consistent benefits in participants with FIGO 2014 stage III–IVA disease (**Table 1**). Grade ≥3 AEs occurred in 79.4% of the pembrolizumab+CCRT group vs 70.4% in the placebo+CCRT group (AEs leading to death, 1.1% vs 1.3%); treatment discontinuations due to AEs were generally similar between groups (**Table 2**).

**Conclusion/Implications:** After a median follow-up of 54.5 months, pembrolizumab+CCRT continued to show clinically meaningful improvements in PFS and OS versus placebo+CCRT in participants with high-risk LACC, with a manageable safety profile. The findings are consistent with previous analyses.

**Table 1. Summary of Efficacy**

|                                      | <b>ITT</b>           |                  | <b>FIGO 2014 Stage III–IVA</b> |                  |
|--------------------------------------|----------------------|------------------|--------------------------------|------------------|
|                                      | <b>Pembrolizumab</b> | <b>Placebo</b>   | <b>Pembrolizumab</b>           | <b>Placebo</b>   |
|                                      | <b>+ CCRT</b>        | <b>+ CCRT</b>    | <b>+ CCRT</b>                  | <b>+ CCRT</b>    |
|                                      | <b>n = 529</b>       | <b>n = 531</b>   | <b>n = 296</b>                 | <b>n = 305</b>   |
| <b>PFS</b>                           |                      |                  |                                |                  |
| Median (95% CI), months <sup>a</sup> | NR (NR–NR)           | 58.7 (41.5–NR)   | NR (50.1–NR)                   | 51.5 (29.2–NR)   |
| HR (95% CI) <sup>b</sup>             | 0.73 (0.61–0.89)     |                  | 0.65 (0.50–0.83)               |                  |
| 36-month rate (95% CI), %            | 64.7 (60.4–68.7)     | 55.9 (51.4–60.1) | 67.0 (61.2–72.2)               | 54.0 (48.1–59.6) |
| <b>OS</b>                            |                      |                  |                                |                  |
| Median (95% CI), months <sup>a</sup> | NR (NR–NR)           | NR (NR–NR)       | NR (NR–NR)                     | NR (NR–NR)       |
| HR (95% CI) <sup>b</sup>             | 0.77 (0.61–0.98)     |                  | 0.64 (0.47–0.87)               |                  |
| 36-month rate (95% CI), %            | 81.7 (78.1–84.8)     | 75.0 (71.0–78.4) | 81.9 (77.0–85.9)               | 71.3 (65.8–76.0) |
| 50-month rate (95% CI), %            | 75.2 (71.1–78.8)     | 69.9 (65.7–73.7) | 76.2 (70.7–80.8)               | 65.8 (60.1–71.0) |
| <b>PFS2<sup>c</sup></b>              |                      |                  |                                |                  |
| Median (95% CI), months <sup>b</sup> | NR (NR–NR)           | NR (NR–NR)       | NR (NR–NR)                     | NR (NR–NR)       |
| HR (95% CI) <sup>c</sup>             | 0.74 (0.59–0.92)     |                  | 0.62 (0.46–0.84)               |                  |

Data cutoff: January 26, 2026.

FIGO, International Federation of Gynecology and Obstetrics; NR, not reached.

<sup>a</sup>Based on Kaplan-Meier method for censored data.

<sup>b</sup>Based on Cox regression model.

<sup>c</sup>Time from randomization to subsequent disease progression after initiation of new anticancer therapy or death from any cause, whichever occurred first.

**Table 2. Summary of AEs (Safety Population)**

|                                  | <b>Pembrolizumab<br/>+ CCRT<br/>n = 528</b> | <b>Placebo<br/>+ CCRT<br/>n = 530</b> |
|----------------------------------|---------------------------------------------|---------------------------------------|
| All-cause AEs                    | 528 (100)                                   | 526 (99.2)                            |
| Grade $\geq 3$                   | 419 (79.4)                                  | 373 (70.4)                            |
| Led to treatment discontinuation | 112 (21.2)                                  | 79 (14.9)                             |
| Cisplatin                        | 67 (12.7)                                   | 62 (11.7)                             |
| Pembrolizumab/placebo            | 53 (10.0)                                   | 24 (4.5)                              |
| External beam radiation therapy  | 3 (0.6)                                     | 2 (0.4)                               |
| Brachytherapy                    | 2 (0.4)                                     | 2 (0.4)                               |
| All treatment                    | 1 (0.2)                                     | 2 (0.4)                               |
| Led to death                     | 6 (1.1)                                     | 7 (1.3)                               |
| Treatment-related AEs            | 512 (97.0)                                  | 513 (96.8)                            |
| Grade $\geq 3$                   | 368 (69.7)                                  | 326 (61.5)                            |
| Led to treatment discontinuation | 100 (18.9)                                  | 69 (13.0)                             |
| Cisplatin                        | 61 (11.6)                                   | 57 (10.8)                             |
| Pembrolizumab/placebo            | 45 (8.5)                                    | 15 (2.8)                              |
| External beam radiotherapy       | 0                                           | 1 (0.2)                               |
| Brachytherapy                    | 2 (0.4)                                     | 2 (0.4)                               |
| All treatment                    | 0                                           | 1 (0.2)                               |
| Led to death                     | 2 (0.4)                                     | 2 (0.4)                               |

Data cutoff: January 26, 2026.

Data are n (%).

**Topic:** AS06. Tumor Types / AS06a. Cervical Cancer

**TROFUSE-036/GOG-3123/ENGOT-CX22: A 2-PART, PHASE 3, RANDOMIZED STUDY OF FIRST-LINE MAINTENANCE SACITUZUMAB TIRUMOTECAN + PEMBROLIZUMAB ± BEVACIZUMAB VS STANDARD OF CARE FOR PD-L1-POSITIVE CERVICAL CANCER**

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**Introduction:** Sacituzumab tirumotecan (sac-TMT) is a TROP2-directed ADC with a unique, bifunctional linker that maximizes payload delivery to tumor cells. In a prior

phase 2 study, sac-TMT+pembrolizumab had promising antitumor activity (ORR, 58% [22/38]) in recurrent/metastatic cervical cancer that progressed on/after platinum-doublet chemotherapy (Wang J, et al. *Ann Oncol.* 2024;35[suppl 2]:S548-9). TroFuse-036/GOG-3123/ENGOT-cx22 (NCT07216703) is evaluating first-line maintenance sac-TMT+pembrolizumab±bevacizumab vs SoC in participants with cervical cancer.

**Objectives:** The primary endpoint is safety in part 1 and PFS per RECIST v1.1 by BICR and OS with maintenance therapy in part 2.

**Methods:** This 2-part, phase 3, randomized, open-label study is enrolling participants (≥18 y) with persistent, recurrent, or newly diagnosed stage IVB squamous cell carcinoma, adenosquamous carcinoma, or adenocarcinoma of the cervix that is not amenable to curative treatment (surgery/radiation) and PD-L1 CPS ≥1. In part 1 (safety run-in), ~20 participants who complete 6 cycles of induction therapy with pembrolizumab+platinum-doublet chemotherapy+bevacizumab without PD per investigator will receive maintenance sac-TMT+pembrolizumab+bevacizumab (**Table**). In part 2, ~1003 participants will receive 6 cycles of induction therapy (same doses as part 1) with pembrolizumab+platinum-doublet chemotherapy±bevacizumab. For randomization to maintenance therapy, participants must complete induction therapy and have CR/PR/SD per RECIST v1.1 by investigator at week 18; evaluable TROP2 expression; and resolution of any AEs to grade ≤1. After part 1 safety data review is complete, ~802 eligible participants will be randomized 1:1 to receive sac-TMT+pembrolizumab±bevacizumab or SoC with pembrolizumab±bevacizumab (**Table**).

|                      | Induction therapy (6 x 3-wk cycles)                                                                                                                                                         | Maintenance treatment (6-wk cycles)                                                                                                                                                                                                 |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part 1 safety run-in | Pembrolizumab 200 mg Q3W + paclitaxel 175 mg/m <sup>2</sup> Q3W + cisplatin 50 mg/m <sup>2</sup> (or carboplatin AUC 5 mg/mL/min) Q3W + bevacizumab 15 mg/kg Q3W                            | Sac-TMT 4 mg/kg Q2W for ≤14 cycles + pembrolizumab 400 mg Q6W for ≤14 cycles + bevacizumab 15 mg/kg Q3W until treatment discontinuation criteria are met                                                                            |
| Part 2               | Pembrolizumab 200 mg Q3W + paclitaxel 175 mg/m <sup>2</sup> Q3W + cisplatin 50 mg/m <sup>2</sup> (or carboplatin AUC 5 mg/mL/min) Q3W + bevacizumab 15 mg/kg Q3W at investigator discretion | <u>Arm A:</u> sac-TMT 4 mg/kg Q2W for ≤14 cycles + pembrolizumab 400 mg Q6W for ≤14 cycles ± bevacizumab 15 mg/kg Q3W <sup>a</sup><br><u>Arm B:</u> pembrolizumab 400 mg Q6W for ≤14 cycles ± bevacizumab 15 mg/kg Q3W <sup>a</sup> |

<sup>a</sup>Bevacizumab use is at investigator discretion and continues until treatment discontinuation criteria are met.

**Current Status & Future Directions:** Enrollment in part 1 began in November 2025 and is expected to include 113 sites in 17 countries.

**Topic:** AS06. Tumor Types / AS06a. Cervical Cancer

**DIAGNOSTIC UPGRADING IN CERVICAL PATHOLOGY: HIGH PREVALENCE OF CIN 3 AND INVASIVE CANCER IN PATIENTS WITH ASC-US AND LSIL CYTOLOGY IN NORTHERN CHILE.**

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**Introduction:** In the Atacama Region, cervical screening faces challenges due to high disease prevalence. The correlation between initial cytology and final pathology is vital to prevent undertreatment. This study evaluates the rate of diagnostic upgrading to CIN 3+ in low-risk cytological categories

**Methods:** Retrospective analysis of 222 cervical conizations (2025) at a regional hospital. Local referral criteria were standardized to the Bethesda System (ASC-US, LSIL) for comparative analysis. A Chi-square test was employed to evaluate the statistical association between referral cytology and definitive surgical histopathology.

**Results:** A total of 222 patients were analyzed: 37.8% (n=84) referred for ASC-US and 16.7% (n=37) for LSIL. A critical diagnostic upgrade was observed: 48.8% of ASC-US cases and 70.3% of LSIL cases were post-surgically confirmed as CIN 3. Notably, 9 cases of invasive squamous cell carcinoma were identified in patients whose initial referral was for minor atypia (7 in ASC-US and 2 in LSIL), representing a 7.4% malignancy rate in these sub-categories. In the ASC-H group, the rate of high-grade disease (CIN 2+) reached 89.7%.

**Conclusion/Implications:** The high frequency of CIN 3 and invasive cancer in patients with "minor" cytological atypia demonstrates that in high-prevalence areas, screening results significantly underestimate the severity of the lesion ( $p < 0.001$ ). These findings justify early surgical intervention and specialized triage in Northern Chile to ensure oncological safety and prevent progression to advanced cervical cancer.