IGCS 2024 Annual Global Meeting DUBLIN
OCTOBER16-18, 2024

IGCS 2024 Abstracts:

Featured Printed Poster Presentations (Poster Rounds with the Professors)

Featured printed posters will be presented in Poster Rounds with the Professors' sessions during the morning and afternoon coffee breaks on all three days of the meeting. For the exact presentation times, please check the interactive program regularly as changes may occur.

The printed posters will be displayed in the Poster Area on the ground floor of the meeting venue. In addition, featured poster presenters were requested to submit an E-Poster and a short audio file. Registered delegates will have access to all submitted E-Posters via the IGCS 2024 mobile application, IGCS 360 Educational Portal, and the onsite E-Poster Stations. Submitted audio files will be available together with their E-Posters via the IGCS 360 Educational Portal.

PR001 / #476

POSTER ROUNDS 01: ENDOMETRIAL CANCER I

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

GONADOTROPIN-RELEASING HORMONE AGONIST (GNRHA) PLUS LETROZOLE IN YOUNG WOMEN WITH EARLY ENDOMETRIAL CANCER: A PROSPECTIVE RANDOMIZED CONTROLLED TRIAL

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Introduction: It was aimed to compare gonadotropin-releasing hormone Agonist (GnRH-a) plus letrozole versus megestrol acetate (MA) on fertility-preserving treatment in young women with early endometrial cancer (EEC).

Methods: This was a single-center phase II study with a prospective, randomized, controlled trial (NCT05247268) conducted between March 2022 and October 2023 at the Obstetrics and Gynecology Hospital of Fudan University. A total of 42 patients with primary EEC were randomly assigned (1:1) to the GnRH-a plus letrozole (Gn+Le, N=21) or MA (N=21) groups, where the patients received intramuscular injection of GnRH-a (3.75 mg every 4 weeks) combined with oral letrozole (2.5 mg daily), or oral MA (160 mg daily), respectively. The primary endpoint was the complete response (CR) rate at 16 weeks of treatment. The secondary endpoints were CR rate at 28 weeks of treatment, adverse events, recurrence rate, and pregnancy outcomes.

Results: The 16-week CR rate was 63.2% (12/19) in the Gn+Le group and 36.8% (7/19) in the MA group, with median time to CR of 13.1 weeks (95% confidence interval [CI] 11.4-14.8 weeks) and 27.0 weeks (95% CI 11.5-42.5 weeks), respectively. One patient in the Gn+Le group experienced recurrence after CR, while no recurrence occurred in the MA group. Side effect of weight gain was more likely to observed in the MA group, while back pain was more likely to observed in the Gn+Le group.

Conclusion/Implications: GnRH-a combined with letrozole might be a standard treatment regimen for fertility-preserving treatment in patients with primary EEC. Further studies including sufficient sample-size are needed to validate the finding.

PR002 / #538

POSTER ROUNDS 01: ENDOMETRIAL CANCER I

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

SYNCHRONOUS ENDOMETRIAL AND OVARIAN CANCER (SEOC): REFINING PATHOLOGICAL AND MOLECULAR CONTEXT TO IDENTIFY ' LOW-RISK SEOC'

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Introduction: Despite demonstration of the shared clonal origin of synchronous endometrial and ovarian cancers (SEOC), the definition of SEOC used in clinical practice has been inconsistent. Our aim was to determine if using the WHO2020-recommended/FIGO-2023-definition of stage IA3 SEOC could identify a clinically relevant biologically indolent subset of patients.

Methods: Patients with stage IA3 SEOC, or with coexistent organ-confined endometrial and ovarian carcinomas were identified from a cohort of >2500 endometrial carcinomas (2001-2023), with clinicopathological, molecular, and outcome data compared.

Results: Multiple differences were demonstrated between patients with stage IA3 SEOC (n=87) and those with coexistent organ-confined endometrial and ovarian carcinomas (n=85), (**Table 1**). 65% of Stage IA3 SEOC were NSMP (10% *POLE*mut, 25% MMRd, no p53abn) and concordance with ovarian molecular subtype was high (94%). Improved progression-free survival for stage IA3 SEOC was observed (p=0.028)(**Figure 1**) with only 6 (7%) recurrences and 3 (3%) deaths from disease recorded (vs. 20% and 8% in non-FIGO coexistent endometrial and ovarian carcinomas). Of the 6 Stage IA3 with an event (recurrence+/-death) all but one were NSMP (1MMRd), and no patients had L1CAM overexpression, or were ER

Table 1: Clinicopathological and molecular characteristics and outcomes of the total cohort of endometrial and ovarian carcinomas comparing those defined by co-existent endometrial and ovarian-confined disease vs. FIGO-2023 criteria (stage IA3). Note: pathologic/molecular parameters are given for the endometrial carcinoma.

Parameter	Total cohort	Co-existent EC+OC	FIGO 2023 IA3	p-value
	N=172	N=85	N=87	
Age (years), mean	52	56	49	**<0.001**
BMI, mean	30	30	29	0.34
Grade 1	118 (70%)	47 (57%)	71 (83%)	
Grade 2	43 (20%)	19 (23%)	15 (17%)	**<0.001**
Grade 3	17 (10%)	17 (20%)	0	
Endometrioid	159 (93%)	72 (87%)	87 (100%)	
Serous	7 (4%)	7 (8%)	0	
Clear cell	2 (1%)	2 (2%)	0	**<0.001**
Carcinosarcoma	2 (1%)	2 (2%)	0	
Mixed EM/serous	1 (1%)	1 (1%)	0	
LVI Negative	135 (83%)	56 (71%)	79 (95%)	
LVI Focal	10 (6%)	9 (11%)	1 (1%)	**<0.001**
LVI Positive*	12 (8%)	9 (11%)	3 (4%)	
LVI Extensive	5 (3%)	5 (6%)	0	
Myoinvasion None	80 (47%)	29 (35%)	51 (59%)	
<50%	67 (39%)	32 (38%)	36 (41%)	**<0.001**
>50%	24 (14%)	23 (27%)	0	
ER IHC (Allred) pos	63 (93%)	27 (90%)	36 (95%)	0.65
ER IHC (Allred) neg	5 (7%)	3 (10%)	2 (5%)	
PR IHC pos	61 (90%)	25 (83%)	36 (95%)	0.23
PR IHC neg	7 (10%)	5 (17%)	2 (5%)	
L1CAM <10%	72 (94%)	34 (90%)	38 (97%)	0.2
L1CAM >10%	5 (7%)	4 (10%)	1 (3%)	
CTNBB1 Wildtype	18 (55%)	11 (79%)	7 (37%)	**0.033**
CTNBB1 Mutated	15 (45%)	3 (21%)	12 (63%)	
Molecular subtype				
POLE mut	10 (7%)	2 (3%)	8 (10%)	
MMRd	44 (29%)	25 (33%)	19 (25%)	**<0.001**
NSMP	87 (57%)	37 (49%	50 (65%)	
p53abn	11 (7%)	11 (15%)	0	
Adjuvant therapy				
None	68 (40%)	18 (21%)	50 (58%)	
VB	2 (1%)	1 (1%)	1 (1%)	**<0.001**
EBRT +/- VB	4 (2%)	3 (4%)	1 (1%)	
Chemo + RT	47 (28%)	34 (41%)	13 (15%)	
Chemo alone	49 (29%)	28 (33%)	21 (25%)	
Dis Recurrence	20 (14%)	14 (20%)	6 (7%)	0.052
Death from Dis	10 (6%)	7 (8%)	3 (3%)	0.21

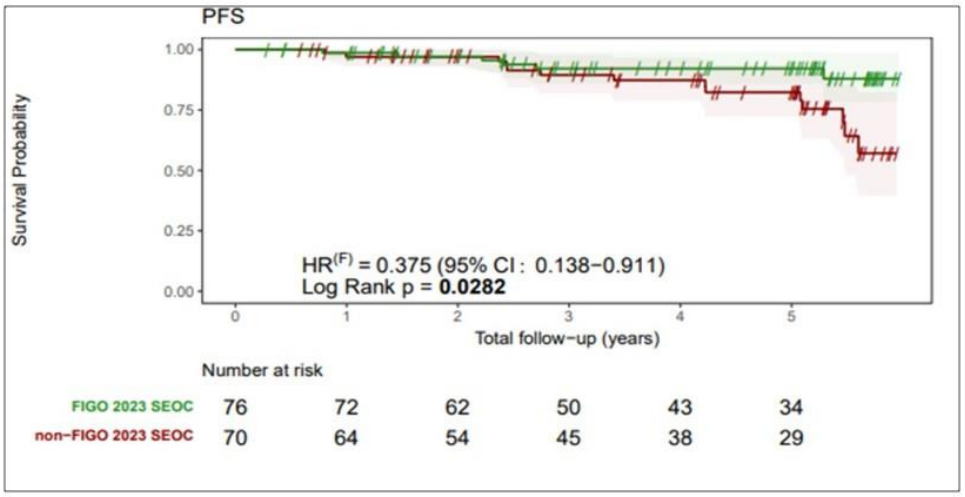
*Not specified if focal or substantial

Note: pathologic/molecular parameters are given for the endometrial carcinoma.

Note: total cases within each parameter measured may be less than total numbers due to missing data.

negative.

Figure 1: Kaplan-Meier survival analysis demonstrating significantly improved progression-free survival in WHO-2020/FIGO-2023 criteria (stage IA3) synchronous endometrial and ovarian cancers.



Conclusion/Implications: FIGO stage IA3 criteria defines a subset of **low-risk SEOC** that have a very indolent clinical course, behaving like Independent low-risk primary tumours and who are candidates for de-escalation of therapy. More work is needed to see if this **low-risk SEOC** definition can be safely expanded (e.g. inclusion of bilateral ovarian involvement, *POLE*mut high grade EC/OC or deep myoinvasion) or refined (e.g.,exclusion of low grade endometrioid p53abn, MMRd).

PR003 / #552

POSTER ROUNDS 01: ENDOMETRIAL CANCER I

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

ASSESSING THE ESSENTIAL PARAMETERS OF RACE, ETHNICITY AND GEOGRAPHY IN ENDOMETRIAL CANCER AND THE IMPACT ON TREATMENT AND OUTCOMES

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Introduction: Race, ethnicity, and geography have been associated with differences in access to cancer treatment and survival, but are vastly understudied.

Methods: We collected clinicopathologic data, race and ethnicity, postal code and molecular subtype on endometrial cancer (EC) patients in our catchment (5.1 million people/ 945,000km^2), testing for associations with management and outcomes.

Results: Ethnicity data from 687 EC patients demonstrated a lower-than-expected proportion of Indigenous patients, and marked differences in molecular subtype (**Table 1**). Assessment of White-European descent (W-E) (424;62%) vs. non-W-E/visible minorities (VM) (263;38% including 17% East Asian, 9% South Asian, 6% Southeast Asian, 3% Indigenous and 2% Middle Eastern) revealed VM were younger (49 vs.62y, $p<0.001$), had lower BMI (25 vs.33kg/m^2, $p<0.001$), had more clear cell histology ($p=0.002$) and L1CAM overexpression ($p=0.01$). There were no differences in stage, LVI, myoinvasion, Lynch syndrome, treatment, *CTNNB1*, *PTEN, ARID1A* mutations or ER/PR status. There was a trend towards worse outcomes for VM patients with MMRd and p53abn ECs as compared to W-E. Geographic parameters, including rural (n=530) vs. urban (n=249), distance from a cancer center, and city size/population were not associated with time to surgery, stage, treatment, outcomes or molecular subtypes. Most indigenous EC patients came from rural sites and East, South and Southeast Asian patients mostly

urban(p<0.001).

Table 1: Distribution of molecular subtypes in different ethnic groups and geographic variation of endometrial cancer patients

Ethnicity	**Total ECs N=687**	**BC 2021 census**	***POLE*mut**	**MMRd**	**NSMP**	**p53abn**
White-European Descent	424 (62%)	60%	32 (8%)	104 (25%)	186 (45%)	90 (22%)
East Asian	119 (17%)	14%	8 (8%)	13 (13%)	60 (61%)	18 (18%)
South Asian	59 (9%)	10%	3 (6%)	12 (25%)	23 (48%)	10 (20%)
Southeast Asian	41 (6%)	2%	3 (8%)	9 (26%)	14 (42%)	8 (16%)
Indigenous	21 (3%)	6%	0	8 (42%)	8 (42%)	3 (16%)
Middle Eastern	13 (2%)	1%	4 (33%)	5 (42%)	1 (8%)	2 (17%)
Latino	7 (1%)	1%	0	2 (29%)	4 (57%)	1 (14%)
Black	1 (<1%)	1%	0	0	0	1 (100%)
Geography	**Total ECs N= 779**					
Site		**Urban**	**Rural**			
	779	530 (68%)	249 (32%)			
Driving distance*		**<1 hour**	**1-3 hours**	**>3 hours**		
	779	520 (67%)	63 (8%)	196 (25%)		
City pop. size		**>100K**	**30-100K**	**<30K**		
	779	456 (59%)	150 (19%)	173 (22%)		

*Driving distance from cancer centre for surgical care

Conclusion/Implications: Distribution of the four EC molecular subtypes differs by ethnicity, with previous publications representing W-E only. In patients with MMRd and p53abn EC there was a trend towards worse outcomes among VM. Geographic distance and rurality were not associated with EC treatment access or outcomes.

PR004 / #631

POSTER ROUNDS 01: ENDOMETRIAL CANCER I

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

LAPAROSCOPIC TREATMENT OF EARLY-STAGE ENDOMETRIAL CANCER: BENEFITS OF SENTINEL LYMPH NODE MAPPING AND IMPACT ON LOWER EXTREMITY LYMPHEDEMA

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Introduction: To evaluate the lymphatic-specific morbidity, specifically lower extremity lymphedema, associated with laparoscopic management of early-stage endometrial cancer using the sentinel lymph node (SLN) algorithm.

Methods: A prospective study was conducted on consecutive patients with apparent early-stage endometrial cancer, who underwent laparoscopic staging according to the National Comprehensive Cancer Network SLN algorithm at a single institution from January 2020 to August 2023. Data on patient characteristics, surgical details, and postoperative complications were collected. Lymphedema was determined using a validated questionnaire.

Results: A total of 239 patients were analyzed, with a questionnaire response rate of 85.4%. The study population was grouped based on the actual surgical staging received: hysterectomy + SLN (54.8%), hysterectomy + systematic pelvic lymphadenectomy (27.2%), and hysterectomy only (18%). Lymphedema prevalence was significantly lower in the hysterectomy + SLN group compared to the hysterectomy + systematic pelvic lymphadenectomy group (21.4% vs. 44.6%, p=0.003) (Figure). Multivariable analysis revealed a threefold increase in the risk of lymphedema for the hysterectomy+ systematic pelvic lymphadenectomy group (compared to hysterectomy + SLN): Odds Ratio 3.11, 95%CI 1.47-6.58 (Table). No significant associations were found between lymphedema and other patient's or tumor's characteristics.

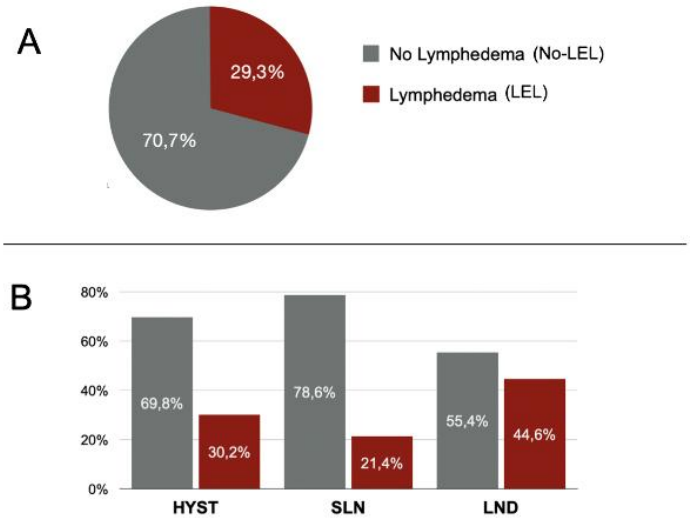

Figure 1 Rates of reported significant lower extremity lymphedema (LEL). A: rates of reported significant LEL in the overall study population. B: rates of LEL by actual surgical strategy: hysterectomy only (HYST). hysterectomy + sentinel lymph node (SLN); hysterectomy + systematic pelvic lymphadenectomy (LND)

Predictors of Lower Extremity Lymphedema.

	Univariate analysis			Multivariable analysis	
	No-LEL n=169	LEL n=70	P-value	Odds ratio (95% CI)	P-value
Age (years)	67 (36-89)	65 (42-84)	0.20	0.96 (0.91 – 1.00)	0.09
Post menopause	148 (87.6%)	59 (84.3%)	0.50		
BMI (Kg/m)	27.8 (19-47)	29.2 (19-40)	0.43		
Nulliparous	31 (18.3%)	17 (24.3%)	0.70		
Charlson Comorbidity Index	3 (0-9)	3 (0-8)	0.54	1.0 (0.76 -1.50)	0.68
ASA Score			0.41		
- ASA 1	17 (10.1%)	5 (7.1%)			
- ASA 2	100 (59.2%)	48 (68.6%)			
- ASA 3	48 (28.4%)	15 (21.4%)			
- ASA 4	2 (1.2%)	0 (0%)			
Missing data	*2 (1.2%)*	2 (2.9%)			
Previous abdominal surgery	68 (40.2%)	30 (42.9%)	0.76		
Missing data	2 (1.2%)	0 (0.0%)			
Actual staging procedure(s) performed			**0.01**	*Actual staging procedure(s) performed:*	
HYST (hysterectomy only)	30 (17.8%)	13 (18.6%)		*HYST (vs.SLN)*: 2.12 (0.91 - 4.94)	0.08
SNL (hysterectomy + SLN)	103(60.9%)	28 (40.0%)		*LND (vs.SLN)*: 3.11 (1.47 -6.58)	**0.01**
LND (hysterectomy + LND)	36 (21.3%)	29 (41.4%)			
Operative time (mins)	75 (36-101)	82 (61-154)	0.76	0.99 (0.99 - 1.00)	0.31
Number of nodes removed	5 (0-35)	9 (0-45)	**0.01**		
Omentectomy	16 (9.5%)	7 (10.0%)	0.90		
Conversion to open surgery	3 (1.8%)	4 (5.7%)	0.10		
Estimated blood loss (mL)	135 (10-2 800)	120 (10- 1300)	0.62	0.99 (0.99 - 1.00)	0.52
Intraoperative blood transfusion	2 (1.2%)	3 (4.3%)	0.13		
Intraoperative complications	1 (0.6%)	1 (1.4%)	0.51		
Missing data	0 (0.0%)	1 (1.4%)			
Postoperative complications	6 (3.6%)	5 (7.1%)	0.23		
Tumor histology			**0.02**		
- Endometrioid	144 (85.2%)	58 (82.9%)			
- Serous	16 (9.5%)	4 (5.7%)			
- Mucinous	7 (4.1%)	4 (5.7%)			
- Clear Cell	0 (0.0%)	4 (5.7%)			
Others / Undifferentiated	2 (1.2%)	0 (0.0%)			
Non-endometrioid histology	25 (14.8%)	12 (17.1%)	0.65		
FIGO tumor grade			**0.04**		
- G1	17 (10.1%)	12 (17.1%)			
- G2	112 (66.3%)	34 (48.6%)			
- G3	40 (23.7%)	24 (34.3%)			
FIGO low grade tumor (G1-G2)	129 (76.3%)	46 (65.7%)	**0.09**	*High grade (vs Low grade)*: 1.50 (0.73 - 1.39)	0.24
Positive LVSI	47 (27.8%)	14 (20.0%)	0.23		
Missing data	0 (0.0%)	1 (1.4%)			
Myometrial Invasion > 50%	68 (40.2%)	32 (45.7%)	0.43		
FIGO stage (2009)			0.56		
- *IA*	89 (52.7%)	36 (51.4%)			
- *IB*	43 (25.4%)	23 (32.9%)			
- *II*	17 (10.1%)	6 (8.6%)			
- *IIIA*	4 (2.4%)	3 (4.3%)			
- *IIIB*	1 (0.6%)	0 (0.0%)			
- *IIIC*	11 (6.5%)	1 (1.4%)			
- *IV*	4 (2.4%)	1 (1.4%)			
Adjuvant Treatment (A.T.)	93 (55.0%)	42 (60.0%)	0.52	*A.T. vs (no A.T.)*: 1.03 (0.50- 2.13)	0.10
- *Brachytherapy*	36 (21.3%)	19 (27.1%)			
- *EBRT*	45 (26.6%)	20 (28.6%)			
- *Chemotherapy +/- EBRT*	35 (20.7%)	12 (17.1%)			
Missing data	*4 (2.4%)*	*1 (1.4%)*			

LEL: Lower Extremity Lymphedema. Data is expressed as median and range for continuous variables, and absolute number and percentage for categorical variables EBRT, external beam radiation therapy; FIGO, International Federation of Gynecology and Obstetrics, 2009; LVSI, Lymph-vascular space invasion; HYST, hysterectomy only; SLN, hysterectomy + sentinel lymph node sampling; LND, hysterectomy + pelvic lymphadenectomy.

Conclusion/Implications: In the setting of a laparoscopic approach for early-stage endometrial cancer surgery, SLN is associated with a significant reduction in lymphatic complications when compared to a systematic lymph node dissection. Our findings provide additional evidence endorsing the adoption of SLN mapping during laparoscopic surgery for endometrial cancer. This technique ensures comparable diagnostic accuracy and minimizes complications.

PR005 / #724

POSTER ROUNDS 01: ENDOMETRIAL CANCER I

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

COMPREHENSIVE MOLECULAR PROFILING OF TUMORS FROM A PHASE II, RANDOMIZED, DOUBLE-BLIND, STUDY OF THE USE OF RUCAPARIB VS. PLACEBO MAINTENANCE THERAPY IN METASTATIC AND RECURRENT ENDOMETRIAL CANCER

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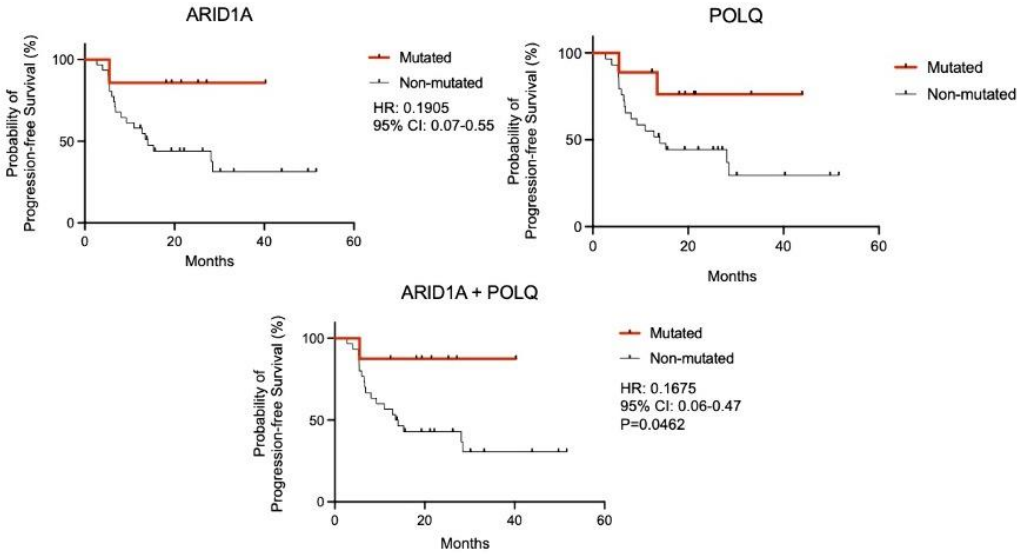
Introduction: The placebo-controlled trial of rucaparib maintenance therapy in metastatic and recurrent endometrial cancer (NCT03617679) recently demonstrated an improvement in median progression-free survival (PFS) by 19.4 months (HR 0.45 [95%CI 0.26-0.80]). We aim to define molecular attributes of recurrent and metastatic endometrial tumors, including homologous recombination repair (HRR) pathway genes, and correlate attributes to clinical rucaparib response.

Methods: DNA/RNA sequencing on tumors of 79 patients participating in clinical trial NCT03617679. An RNA-validated panel assessed HR deficiency (HRD). Descriptional molecular characteristics and those associated with rucaparib response were evaluated.

Results: HRD was present in 17% of tumors. 13.3% of tumors carried mutations in the HRR pathway - ATM (6.7%), CHEK2 (3.3%), ATRX (3.3%) were the top genes mutated. 25 of 39 patients had response to therapy (PFS> 12 months), 20% were HRD, 40% were HR proficient, and 40% were unknown. HRD score was not different between non-responders (23.4 +/- 10.3) and responders (27.6 +/- 9.7). Based on gene expression, no HR pathway gene predicted response. Mutations in ARID1A (40%) and POLQ (25%) improve PFS with greatest significance by coexpression (HR 0.17 [95%CI 0.06-0.47]), median PFS NR vs 14 months. Gene expression analysis showed that responders had significantly higher expression of *PLCE1 and lower expression of WDR91*, a negative regulator of PI3K.

Conclusion/Implications: ATM, CHEK2, and ATRX are the predominant HR pathway genes mutated in endometrial cancers from this trial. In exploratory analysis, HRD did not predict response. Mutation/copy number loss of ARID1A, POLQ, elevated PLCE1 expression, and downregulation of WDR91 correlated with improved rucaparib response.



PR006 / #1009

POSTER ROUNDS 01: ENDOMETRIAL CANCER I

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

EMERGING TRENDS IN EARLY-ONSET ENDOMETRIAL CANCER: A COMPREHENSIVE GLOBAL ANALYSIS

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Introduction: Endometrial cancer (EC) primarily affects post-menopausal women, with the median age at diagnosis being 61 years. However, a significant subset of cases (2-14%) arises in younger women, categorized as early-onset endometrial cancer (EOEC). The incidence of EOEC has been increasing globally, necessitating comprehensive research into its epidemiology and associated risk factors.

Methods: We conducted an epidemiological analysis using data from the Global Cancer Observatory (GLOBOCAN) to estimate age-standardized incidence rates (ASIR) for EOEC (aged 20-49) across 185 countries. Additionally, a retrospective case-control study utilizing the UK Biobank database assessed early-life factors influencing EOEC risk. Seven variables, including ethnicity, breastfeeding, maternal smoking, body size at age 10, age at menarche, handedness, and being part of a multiple birth, were analyzed through multivariate logistic regression.

Results: Globally, the ASIR for EOEC has increased, with notable variations among different regions. Developed regions such as the Americas and Europe exhibited higher ASIRs, while Africa showed lower rates. In terms of early-life factors, British ethnicity was associated with decreased EOEC risk, while being breastfed in infancy and later menarche were protective factors. Conversely, a "plumper" body size at age 10 increased EOEC risk.

Conclusion/Implications: The incidence of EOEC is on the rise globally, especially in developed regions. Early-life exposures play a critical role in influencing EOEC risk, highlighting the importance of lifestyle, reproductive patterns, and genetic factors. Comprehensive research and targeted public health interventions are necessary to address these factors and mitigate EOEC's impact worldwide.

PR007 / #830

POSTER ROUNDS 02: PALLIATIVE AND SUPPORTIVE CARE

Topic: *AS07. Global Health/Economic Challenges*

IMPLEMENTING TECHNOLOGY THAT DISRUPTS HEALTH SYSTEMS BUT NOT QUALITY OF CARE: THE POCKET COLPOSCOPE

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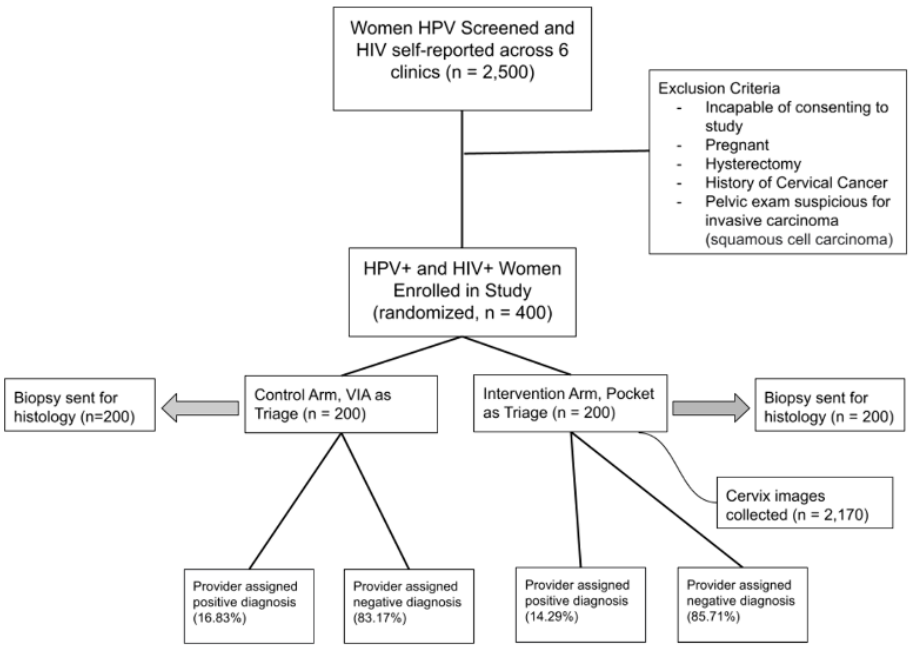
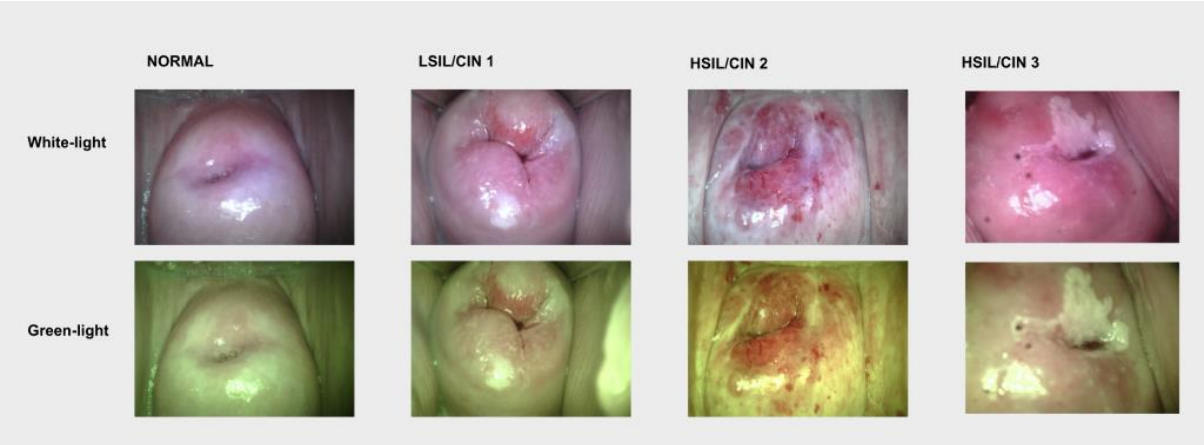
Introduction: Invasive cervical cancer affects 500,000 women worldwide each year. Unlike most cancers, it is highly preventable through the screening, diagnosis and treatment of cervical precursor lesions.

Methods: Our team conducted a multi-site clinical implementation study (n=400) consisting of self-HPV sampling, screening with Pocket Colposcopy, and treatment with thermal ablation. This was a randomized controlled trial to evaluate the use of the Pocket Colposcope as a point-of-care triage step in contexts with limited resources for cervical cancer detection and treatment. All studies were conducted under IRB approval. A biopsy was taken at two locations to establish concordance between each triage method and histopathology, regardless of the visual diagnosis a participant receives from the provider. All participants receive treatment with thermoablation, per WHO recommendations.

Results:



a) Clinical enrollment for each arm



b) The Pocket Colposcope provides high-quality white-light and green-light imaging of precancerous lesions on the cervix for each grade of disease shown on four patient images.

Conclusion/Implications: Work done during this study emphasizes the complex and subjective nature of making a visual diagnosis, even with advanced clinical imaging tools like the Pocket. The Pocket Colposcope provides an opportunity to make high quality diagnostic technology more accessible at a cheaper price for more people. Often, disruptive technology in low-income settings is expected to increase access at the cost of reducing quality. In the case of the Pocket Colposcope, the disruptive

technology is significantly cheaper than existing technology, but is still high quality enough to succeed.

PR008 / #179

POSTER ROUNDS 02: PALLIATIVE AND SUPPORTIVE CARE

Topic: *AS11. Palliative Care*

PREDICTORS OF SPECIALIST PALLIATIVE CARE ACCESS AND IMPACT ON AGGRESSIVENESS OF END-OF-LIFE CARE: A POPULATION-BASED STUDY OF GYNECOLOGIC CANCER DECEDENTS IN ONTARIO, CANADA FROM 2006-2018

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Introduction: Prior research suggests that specialist palliative care (SPC) consultation is underutilized in gynecologic oncology. We examined predictors of SPC access in gynecologic cancer decedents and impact on end-of-life (EOL) care intensity.

Methods: Population-based, retrospective cohort study of gynecologic cancer decedents in Ontario from 2006-2018 using ICES linked administrative health care data. Multivariable logistic regression analyses evaluated predictors of SPC and the relationship between timing of SPC and EOL metrics.

Results: Of 16,237 decedents, 52.9% received SPC. At 6 weeks prior to SPC consultation, the most prominent moderate-severe ESAS symptoms (score ≥4) were tiredness (37.7%), global wellbeing (36.1%), poor appetite (31.3%) and pain (29.9%). Predictors of receiving SPC included oncologic survival ≥3mo, comorbidities, stage III-IV disease, and living in an urban community. Patients ≥60yo were significantly less likely to receive SPC, and most likely to initiate SPC only in the final 3 months of life. Those who received early SPC (≥6mo before death) *vs.* late SPC were 25% less likely to receive aggressive EOL care (HR 0.73, 95% CI 0.60-0.90), and 35% less likely to die in hospital (HR 0.66, 95% CI 0.57-0.76). Compared to those who received only late SPC, those who received no palliative care were more likely to receive aggressive EOL care, be admitted to ICU in the final 30d of life, and receive late chemotherapy.

Conclusion/Implications: Specialist palliative care is associated with less aggressive EOL care, particularly if initiated early. Strategies to increase access to early SPC and improve equitable access for rural and older patients are warranted.

PR009 / #201

POSTER ROUNDS 02: PALLIATIVE AND SUPPORTIVE CARE

Topic: *AS11. Palliative Care*

ASSOCIATION BETWEEN A PROGNOSTIC NOMOGRAM AND MORTALITY IN PATIENTS WITH MALIGNANT BOWEL OBSTRUCTION: SWOG1316, A PROSPECTIVE COMPARATIVE EFFECTIVENESS TRIAL FOR MALIGNANT BOWEL OBSTRUCTION ANCILLARY ANALYSIS

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Introduction: Malignant bowel obstructions (MBO) are common and morbid complications of advanced or recurrent metastatic abdominal and pelvic malignancies. The primary objective of this study was to assess the accuracy of a previously developed nomogram risk score to predict 30-day mortality.

Methods: Clinical data, including imaging findings, management, and survival outcomes, from the Prospective Comparative Effectiveness Trial for Malignant Bowel Obstruction (SWOG S1316) trial were utilized. One point was assigned for each of the following: complete versus partial obstruction, carcinomatosis, leukocytosis, hypoalbuminemia, and ascites. A composite risk score of 0-5 was determined based on the sum of the points. Associations between the score and 30-day mortality were determined in the overall population.

Results: A total of 199 subjects with MBOs were included; 105 (53%) and 94 (47%) underwent non-operative and operative management, respectively. The majority of patients had a diagnosis of gynecological (82; 41%) or colorectal (58; 29%) malignancy. On multivariate analysis, albumin $\leq$3g/dL (Odds Ratio (OR) = 3.3, p= 0.0018) and carcinomatosis (OR=2.4; p=0.04) were significantly associated with increased 30-day mortality. 30-day mortality increased with increasing risk points, from 9% with 0 risk points to 36% with 4 risk points.

Conclusion/Implications: Clinical variables, including poor nutritional status and carcinomatosis, as well as a high composite risk score, are associated with increased incidence of 30-day mortality among patients with MBOs. The risk score may be clinically useful when counseling patients on prognosis and providing intervention recommendations.

PR010 / #449

POSTER ROUNDS 02: PALLIATIVE AND SUPPORTIVE CARE

Topic: *AS11. Palliative Care*

PALLIATIVE CARE AVAILABILITY AND IMPLEMENTATION FOR OVARIAN CANCER IN LOW- AND MIDDLE-INCOME COUNTRIES: A SCOPING REVIEW

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Introduction: Low- and middle-income countries (LMICs) experience the highest mortality from gynecologic cancer globally. Previous literature has focused on the palliative management of cervical cancer and identified interventions that improve quality of life (QoL). There is limited research on the palliative management of ovarian cancer in LMICs, where high symptom burden and inconsistent access to healthcare present different challenges. This scoping review describes the state of palliative care for ovarian cancer in LMICs to highlight areas for future research.

Methods: A scoping review per PRISMA-ScR guidelines identified articles describing ovarian cancer burden and palliative symptom management in low and lower-middle income countries. Four databases (PubMed, Embase, Web of Science, CABI) were searched with terms developed by a health-sciences librarian.

Results: 34 articles from nine LMICs were selected for full-text review. Four themes were identified in LMICs when compared to higher resource settings: (1) ovarian cancer frequently presents at advanced stages with poor disease-specific, functional, and social QoL, (2) access to comprehensive, multidisciplinary health systems, technology, and treatments is limited, (3) cost-conscious, home-based palliative care services can improve ovarian cancer patients' QoL, and (4) there are key differences in palliative treatment algorithms and the use of palliative medications for advanced or recurrent ovarian cancer.

Conclusion/Implications: Ovarian cancer poses an increased burden to patients in LMICs. When available, palliative care has effectively improved QoL; however, there are key differences in symptom management when compared to higher resource settings. Future work in LMICs should target cost-conscious, evidence-based, and standardized approaches to palliative care for ovarian cancer patients.

PR011 / #760

POSTER ROUNDS 02: PALLIATIVE AND SUPPORTIVE CARE

Topic: *AS11. Palliative Care*

REPORTED BARRIERS TO PALLIATIVE CARE FOR CERVICAL CANCER VARIES BY COUNTRY INCOME STRATA

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Introduction: Recognition of the burden of cervical cancer globally and the inequity of resources across low-, middle-, and high-income countries prompted the development of resource-stratified clinical practice guidelines from diagnosis to palliative care.

Methods: A mixed-methods survey was developed addressing five major survey domains including diagnostics, surgery, radiation, treatment, and palliative care. The IRB-approved survey was disseminated to practicing members of oncology treatment teams in low-and middle-income countries and SPSS software was utilized for data analysis.

Results: Of the survey respondents (n=52), 68% percent were from a low- or middle-income country. Only respondents from middle- and high-income countries indicated palliative care services were a part of their standard practice and palliative clinicians were included on multidisciplinary tumor board discussions. Of the barriers to palliative care services, significance ($p < .05$) by income strata was seen for service availability and pain/symptom management. Palliative care was ranked as having lowest importance for clinician education yet, was one of two survey domains rated with the highest frequency of challenges. Survey respondents identified the greatest site/team challenges as lack of qualified/trained staff (56%), lack of established protocols (50%), and limited/no access. Patient challenges to palliative care were identified by survey respondents as patient lack of knowledge (61%) and affordability of services (44%).

Conclusion/Implications: The study identified challenges and barriers to palliative care self-reported by oncology team members practicing in low- and middle-income countries. Palliative care services and accessibility differed based on country income stratification which can inform future interventions to address system-based challenges.

PR012 / #955

POSTER ROUNDS 02: PALLIATIVE AND SUPPORTIVE CARE

Topic: *AS21. Symptom Management/Supportive Cancer Care*

PSILOCYBIN ASSISTED PSYCHOTHERAPY FOR PATIENTS WITH OVARIAN CANER: A SUBSET ANALYSIS OF A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, PHASE II CLINICAL TRIAL

Daniel Spinosa[1], Stacy Fischer[2], Richard Zeifman[3], Carolyn Lefkowits[1], Petros Petridis[3], Stephen Ross[3]
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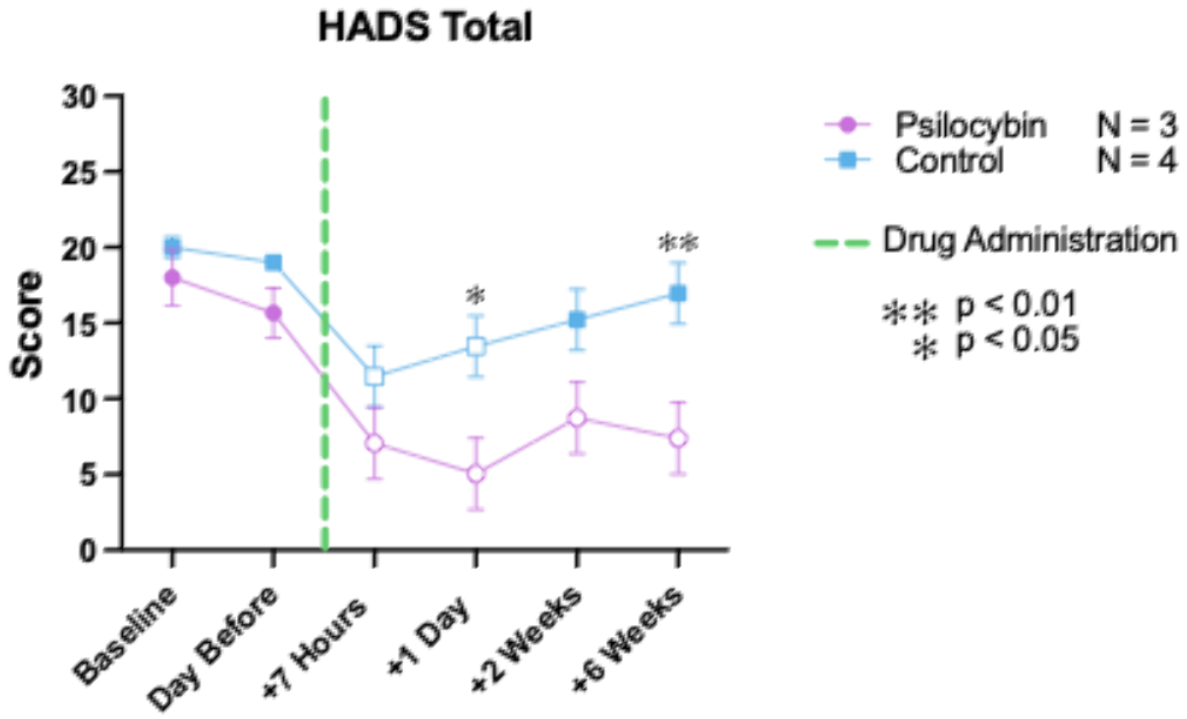
Introduction: Anxiety and depression are common treatment-refractory sequelae of ovarian cancer. The objective of our analysis was to evaluate whether psilocybin, the psychoactive component in magic mushrooms, could alleviate affective symptoms patients with ovarian cancer.

Methods: 7 patients with ovarian cancer were identified from a randomized, double-blind, placebo-controlled, phase II, clinical trial of psilocybin-assisted psychotherapy (PAP) for treating cancer-related anxiety and depression (NCT00957359). 3 patients received psilocybin (21 mg/70 kg) and 4 patients received control (250mg niacin). Psychotherapy preceded and followed drug administration for all participants. The primary outcome measure was Hospital Anxiety and Depression Scale (HADS), a composite measure of anxiety and depression. Data was collected for 6 weeks after dosing. A mixed-effects repeated measures model with fixed baseline covariates was conducted in SPSS.

Results: Patients who received psilocybin reported significantly less anxiety and depression than control (Fig 1). Composite measure of HADS after dosing was higher for the control vs treatment group (mean [SD], 14.3 [±2.6] vs. 7.1 [±2.7]; mean difference, -7.2; 95% CI, -12.5 to -1.9, p = 0.015). The benefit relative to control was apparent the day following dosing and became more pronounced by week 6. As indicated by unfilled symbols, HADS score was significantly lower than the baseline visit at all time points post-dosing in the treatment group, while the benefit was transient in the control group. There were no serious adverse events in either

arm.



Conclusion/Implications: PAP significantly improved anxiety and depression in patients with ovarian cancer over 6 weeks relative to placebo.

PR013 / #1209

POSTER ROUNDS 02: PALLIATIVE AND SUPPORTIVE CARE

Topic: *AS21. Symptom Management/Supportive Cancer Care*

REMOTE MONITORING AND CONTINUOUS CARE PROGRAM IMPROVES PATIENT EXPERIENCE AND OUTCOMES IN PATIENTS ON SYSTEMIC TREATMENT FOR GYNECOLOGIC MALIGNANCIES.

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Introduction: Extended patient survival has shifted focus in oncology to patient experience and quality-of-life, measured through patient-reported outcome (PROM) instruments. Increasing use of oral therapies and the advent of digital technologies allow scaling back in-person encounters with healthcare teams. Building on pandemic-driven experience, we developed a remote monitoring platform (RMCC) for gyn oncology patients on systemic treatment, aimed to provide a comprehensive, continuous care experience and optimize outcomes.

Methods: Patients beginning systemic treatment for gynecologic cancers at a tertiary cancer center are offered enrollment. Following initial multidisciplinary evaluation, patients are monitored with wearable devices for physiological measures and digitally collected PROMs for disease- and treatment-associated symptoms and toxicities. A case-manager follows a virtual dashboard and manages patient symptoms and concerns with guidance from responsible physicians. Pre-defined outcomes, including clinical and functional measures, patient experience and healthcare services consumption are collected.

Results: Over four months since initiation, 23 patients were enrolled (14 ovarian, 7 uterine, 2 cervix). 18/23 (78%) were receiving 1st line systemic chemotherapy. 1922 system alerts were triggered: 37% by PROMs, 16% by physiologic measures and 42% self-initiated. EORTC PATSAT questionnaires demonstrated high participant satisfaction in healthcare team-dependent domains. Patients enrolled in RMCC had fewer ER visits and unplanned admissions, and more planned supportive ambulatory encounters (nursing, psychology, nutrition, social work, complementarymedicine) than patients receiving standard care.

Conclusion/Implications: The use of remote monitoring systems improves patient experience, reduces consumption of emergency medical services, and could expand access to tertiary services in remote communities. Longer-term outcomes will be assessed over time.

PR014 / #1146

POSTER ROUNDS 02: PALLIATIVE AND SUPPORTIVE CARE

Topic: *AS18. Social Inequities and Impact on Cancer Outcomes*

ADVANCING GYNECOLOGIC CANCER CARE EQUITY: APPLICATIONS OF THE ECHO MODEL

Susan Ralph[1], Dona Chakraborty[1], Ellen Baker[2], Melissa Varon[2], Thomas Randall[3], Joseph Ng[4], Mila Salcedo[5], Kathleen Schmeler[5], Clayton Richards[6], Sanjeev Arora[6]

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Introduction: Much of the global cancer burden stems from conditions that are preventable and/or treatable. Dissemination of specialized expertise to the front lines of cancer care is urgently needed. Strengthened training interventions, such as those employing the ECHO Model, can support improved prevention, screening, and management of gynecologic cancers.

Methods: In 2016, Project ECHO launched the Cancer ECHO Initiative, employing the ECHO Model to enhance local healthcare providers' capability across the full continuum of cancer care. Through virtual, collaborative learning, experts from major cancer care organizations employ an "all teach all learn" approach to mentor local physicians, nurses, CHWs, and others in the healthcare workforce. We utilized a central data repository to evaluate the initiative's reach and impact on gynecologic cancer care.

Results: Between December 2016 and March 2024, over 30 organizations leveraged the ECHO Model to improve gynecologic cancer care delivery across over 70 ECHO programs. Program foci include cervical cancer prevention, treatment (surgery, chemotherapy, radiotherapy, etc.), and survivorship. The International Gynecologic Cancer Society (IGCS), for example, operates over 22 ECHO programs as the virtual training component of the Global Gynecologic Oncology Fellowship Program. From 2017-2023, gynecologic oncology fellows from 19 countries logged 1073 patient cases across 695 ECHO sessions. With ECHO as one component of a multi-modal training, IGCS fellows performed 11,018 surgical procedures.

Conclusion/Implications: The ECHO Model is employed in diverse settings to improve gynecologic cancer care delivery by helping local providers to master complexity and improve their confidence at preventing, diagnosing, and managing gynecologic cancers, even under intense resource constraints.

PR015 / #664

POSTER ROUNDS 03: OVARIAN CANCER I

Topic: *AS10. Ovarian Cancer*

ASSESSMENT OF SURVIVAL OF PATIENTS WITH OVARIAN PAPILLARY SEROUS CYSTADENOCARCINOMA BASED ON AN ACCELERATED FAILURE TIME MODEL APPROACH: DEVELOPMENT AND INTERNAL VALIDATION USING SEER DATABASE.

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Introduction: Ovarian cancer is prevalent and prediction of survival is important. This study assesses the clinical characteristics that may contribute to overall (OV) and cancer-specific (CS) survival of Ovarian Papillary Serous Cystadenocarcinoma (PSCOC) using the novel accelerated failure time(AFT) approach.

Methods: The SEER (Surveillance, Epidemiology, and End Results) database compiled data from cancer registries in the United-States. Patients with PSCOC from the database were randomly allocated into the training data cohort and the validation data cohort. Multivariate analysis was conducted for 1, 3, and 5-year OV and CS survival through an AFT model with the Type I Generalized Half Logistic Distribution (TIGHLD) as a baseline. The models' performances were evaluated using the C-index, AIC, BIC, and calibration curve and compared to the Cox proportional hazard model.

Results: 13,599 patients with PSCOC were included in the study and the median survival months for the groups (OV and CS) remained consistent throughout all cohorts at 46months (IQR; 22-91 months) for OV and 34months (IQR; 19-58months) for CS. Multivariable analysis using the TIGHLD AFT model revealed all the tested variables except chemotherapy treatment are significant to 1-,3-, and 5-year OV-PSCOC. The new OS and CS models revealed lower AIC and BIC values and higher C-index values compared to the Cox PH model result.

Conclusion/Implications: AFT models may be superior to the Cox PH model in predicting prognosis for PSCOC in model fit, discrimination, and calibration. Race, stage, total in-situ tumor, metastasis, and grade are significant determinants of survival for PSCOC

PR016 / #982

POSTER ROUNDS 03: OVARIAN CANCER I

Topic: *AS10. Ovarian Cancer*

DEVELOPMENT AND VALIDATION OF 18F-FDG PET/CT-BASED MODELS PREDICTING COMPLETE CYTOREDUCTION DURING SECONDARY CYTOREDUCTIVE SURGERY IN PLATINUM-SENSITIVE RECURRENT OVARIAN CANCER

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Introduction: To develop an 18F-FDG PET/CT-based model predicting complete cytoreduction during secondary cytoreductive surgery (CRS) for platinum-sensitive recurrent ovarian cancer.

Methods: We retrospectively identified patients with platinum-sensitive recurrent ovarian cancer who underwent secondary CRS between 2014 and 2022 at two tertiary institutional hospitals. Patients from each hospital were assigned to training and test sets. The abdominopelvic cavity was divided into 3 sections, and data for the PET/CT-derived parameters were collected. Various prediction models were constructed by combining clinicopathologic characteristics and PET/CT-derived parameters. The test set was used for external validation of the developed models. The predictive performance of the models was measured using area under the receiver operating characteristic curve (AUC) analyses.

Results: The training and test sets included 83 and 50 patients, respectively. The median age of patients in the test set was 55 years; 78.3% underwent complete cytoreduction. The number of metastatic lesions in the abdomen and total lesion glycolysis (TLG) above the upper margin of the renal vein (area A) were selected among the PET/CT parameters. The best predictive multivariable model, consisting of serum CA-125 levels at the recurrence (<50 or ≥50 IU/mL), number of metastatic lesions in the abdomen (<2 or ≥2), and metabolic tumor volume of area A, predicted complete cytoreduction with an AUC of 0.857. Validated using a test set, its predictive performance yielded an AUC of 0.841.

Conclusion/Implications: We successfully developed and validated a preoperative model to predict complete cytoreduction in platinum-sensitive recurrent ovarian cancer. This model can facilitate patient selection for secondary CRS in clinical practice.

PR017 / #164

POSTER ROUNDS 04: ENDOMETRIAL CANCER II

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

ADDING TRASTUZUMAB TO CARBOPLATIN AND PACLITAXEL IMPROVES OVERALL SURVIVAL IN ADVANCED-STAGE HER2/NEU OVEREXPRESSING UTERINE SEROUS CARCINOMA OR CARCINOSARCOMA

Ting-Fang Lu, Sun Lou, Yu-Hsiang Shih, Yen-Fu Chen, Chun Ting Fan, Shao-Jing Wang, Shih-Tien Hsu, Chin-Ku Liu, Sheau-Feng Hwang, Chien-Hsing Lu
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Introduction: Uterine serous carcinomas and uterine carcinosarcomas are aggressive forms of endometrial cancer with poor survival outcomes. Trastuzumab (T), a HER2-directed monoclonal antibody, has demonstrated tumoricidal efficacy. However, no clinical trials or retrospective reports on the utility of trastuzumab in uterine carcinosarcoma have been published. This retrospective study examined the efficacy and safety of adding T to the carboplatin and paclitaxel (CP) regimen as a frontline treatment for advanced-stage HER2-overexpressing uterine serous carcinoma and carcinosarcoma.

Methods: We used de-identified data from electronic health records sourced from the TriNetX Research Network. Participants were identified using ICD codes, and HER2 positivity was confirmed using immunohistochemistry or Fluorescence in-situ hybridization (FISH) testing. Propensity score matching (PSM) was employed to reduce confounders; survival outcomes and adverse events were assessed.

Results: Following PSM, 280 patients with advanced HER2-positive uterine serous carcinoma or carcinosarcoma were analyzed. The CP+T cohort had significantly improved the median overall survival compared with the CP cohort (41 months vs. 25.2 months, HR=0.51, p=0.002). The survival benefit was significantly higher for uterine carcinosarcoma (HR=0.39, p<0.0001) than for uterine serous carcinoma (HR=0.56, p=0.04). However, patients receiving trastuzumab experienced higher rates of

hypertension, diarrhea, and left ventricular systolic dysfunction.

Figure 1

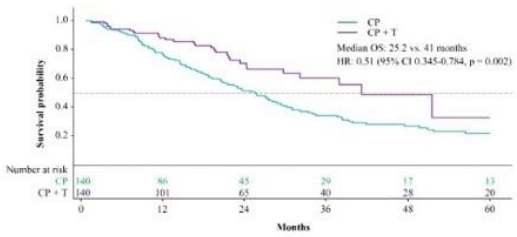


Figure 2

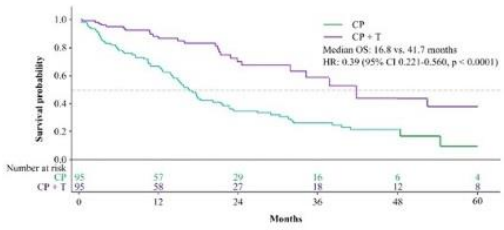
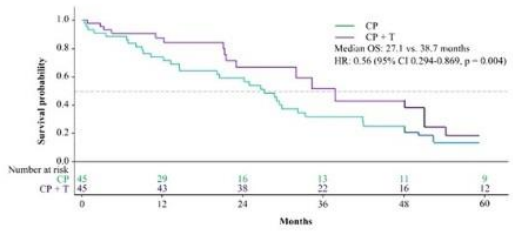


Figure 3



Conclusion/Implications: Trastuzumab addition to frontline chemotherapy is effective for HER2-overexpressing uterine serous carcinoma or uterine carcinosarcoma, particularly uterine carcinosarcoma. However, careful monitoring of adverse cardiac events is required.

PR018 / #500

POSTER ROUNDS 04: ENDOMETRIAL CANCER II

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

UTERINE SARCOMA - INCIDENCE, TREATMENT, AND OVERALL SURVIVAL IN SWEDEN (2010-2020)

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Introduction: Uterine sarcomas account for 3-5% of uterine malignancies, and have an overall poor prognosis. Stage and morphology are important prognostic factors. Surgery is the keystone in treatment and adjuvant treatment have effect in selected patients. The purpose of this study was to investigate the survival of patients with uterine sarcomas in Sweden 2010-2020 according to morphology, stage and treatment modalities.

Methods: A total of 618 patients with uterine sarcoma were identified in the Swedish Quality Registry for Gynecologic Cancer (SQRGC) from 2010 to 2020. Survival was analyzed according to stage, morphology and given treatment.

Results: Overall survival (OS) after 1 and 5 years was 76% and 44% respectively. Survival was greatly impacted by stage and morphology. Endometrial stroma sarcoma had a 5-year OS of 84%, adenosarcoma 65%, leiomyosarcoma (LMS) 37%, undifferentiated uterine sarcomas 34 % and unspecified sarcoma 12 %. The 5-year OS for stage I LMS with primary open surgery was 53% (95% CI: 43 – 62), and for minimally invasive surgery (MIS) 77% (95% CI: 50 – 91). In LMS of all stages OS for surgery plus chemotherapy vs. surgery did not differ, HR 1.11 (CI 0.75 – 1.66). In patients with FIGO stage I, there was a reduced survival rate in patients that received chemotherapy in addition to surgery (p=0.015).

Conclusion/Implications: Adjuvant chemotherapy do not improve survival in uterine sarcoma patients, neither in localized nor spread disease. MIS in early stage uterine sarcomas seems to be safe compared to open surgery.

PR019 / #625

POSTER ROUNDS 04: ENDOMETRIAL CANCER II

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

TUMOR MICROENVIRONMENT CELL DECONVOLUTION AND CELL SPECIFIC DNA METHYLATION ALTERATIONS IN ENDOMETRIOID ADENOCARCINOMA

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Introduction: DNA methylation (DNAm) alterations are known to occur early in carcinogenesis. DNAm is crucial in cellular differentiation, resulting in distinct patterns by cell type that can be leveraged to deconvolute cell types in DNAm data from tumor tissue. Epigenome-wide association studies (EWAS) of bulk DNAm endometrial adenocarcinoma tumor tissue, to date, have not adjusted for cell type to provide more precise biological insight into DNAm alterations and cell types associated with carcinogenesis.

Methods: We analyzed uterine corpus endometrial carcinoma (UCEC) DNAm data from The Cancer Genome Atlas (TCGA, n=277) and applied hierarchical tumor immune microenvironment epigenetic deconvolution (HiTIMED). We fit EWAS linear models adjusted for age, race, and stage, with and without cell type proportions (tumor, lymphocyte, myeloid, endothelial, epithelial). CellDMC was applied to identify cell-specific DNAm alterations. eFORGE TF was used to test for enrichment of genomic features among significantly differentially methylated loci ($P \leq 1x10e-08$).

Results: Cell type unadjusted and adjusted linear models demonstrate a reduction in hypermethylated loci (12453 to 120) and hypomethylated loci (17683 to 8028). Hypomethylated loci in tumor tissue after adjustment for age, race, cancer stage, and cell type were significantly associated ($P \leq 1x10e-20$) with the following genes: *STK33, BLCAP, NCOR2, EOMES,* and *MAGI*. We identified differential methylation of lymphocytes, with loci significantly associated with *ZEB1* transcription factor.

Conclusion/Implications: Cell type adjustment identified DNAm alterations in endometrioid adenocarcinoma with cancer-associated DNA hypomethylation of multiple genes and specific alterations to *ZEB1* in infiltrating lymphocytes, a known marker of aggressive disease in endometrial cancer.

PR020 / #1096

POSTER ROUNDS 04: ENDOMETRIAL CANCER II

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

STAGE SHIFT FROM FIGO 2009 TO THE FIGO 2023 CARCINOMA ENDOMETRIUM – EFFECTS ON ADJUVANT TREATMENT AND SURVIVAL

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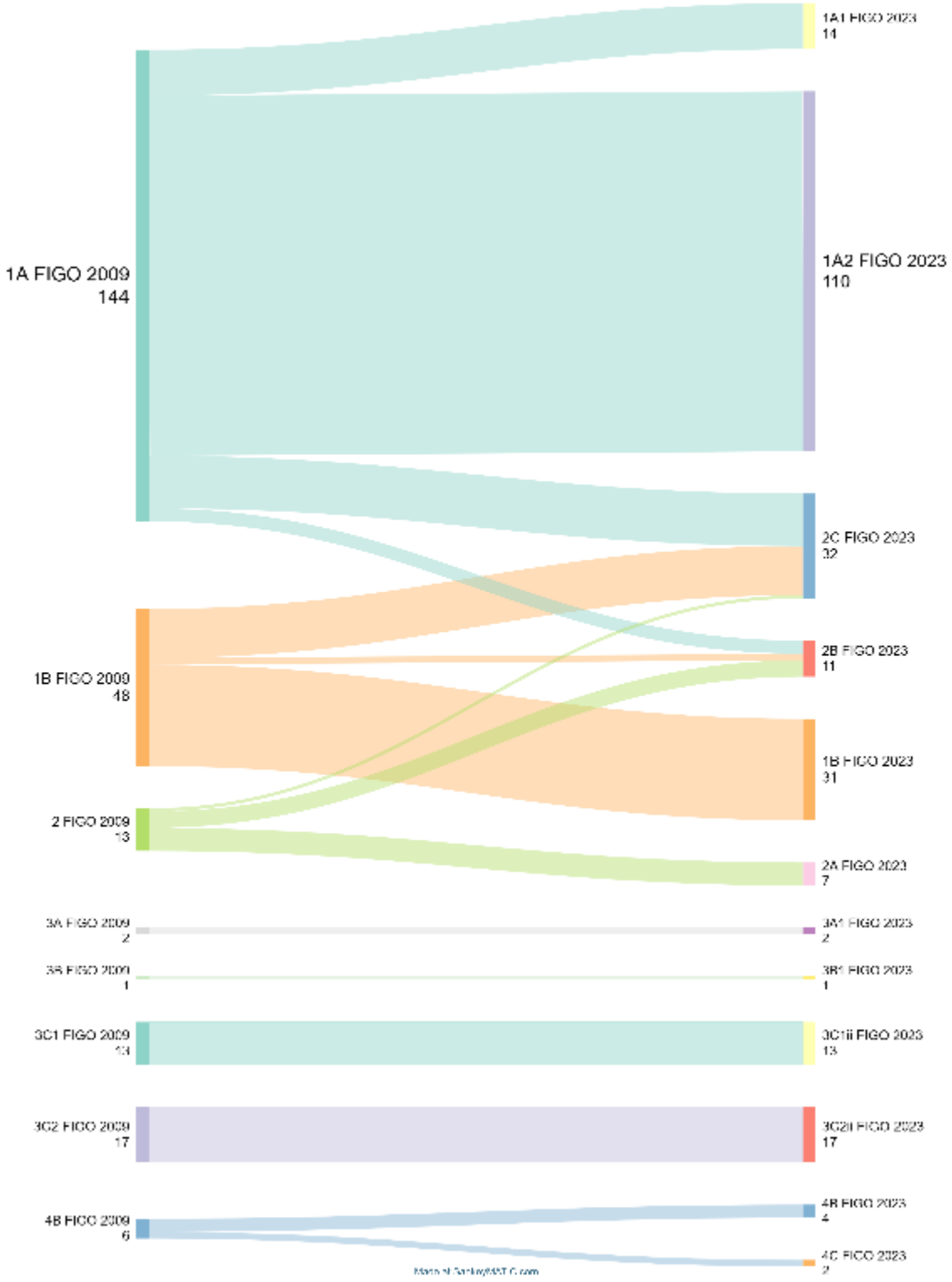
Introduction: The aim of this study was to investigate the impact of the stage shift from FIGO 2009 to FIGO 2023 on the adjuvant management and survival of carcinoma endometrium.

Methods: Data of patients with endometrial cancer from January 2018 to December 2020 treated at a single institution in Southern India was anlased looking at variables such as demographic data as well as stage distribution according to FIGO 2009 and FIGO 2023 criteria. The treatment received (surgery, radiation, chemotherapy), and survival rates (overall survival and disease-free survival) were investigated

Results: Of the 244 patients during the study period, the stage distribution according to 2009 FIGO staging was IA (59%), IB (20%), II (5%), IIIA (1%), IIIB (0.5%), IIIC1(5%), IIIC2(7%), IVB (2.5%). Upon re-assigning of stage as per FIGO 2023 staging ,43(17.6%) was upstaged from stage IA (2009) to IIB in 4 (1.5%) and IIC in 16 (6.5%). Amongst the stage IB (2009), 2(0.8%) were upstaged to IIB and 15(6.1%) were upstaged to IIC. In stage II the upstaging was to IIB in 5 (2.1%) and IIC in 1 (0.4%). Among those upstaged there were no cases which were undertreated as our institutional protocol included aggressive treatment for deep myometrial invasion and significant LVSI even in early stages. The median OS was 61.2 mths and RFS was 59 months.

Conclusion/Implications: The new staging draws attention to finer detail to the tumour aspects such as LVSI, myometrial invasion and tumour type. FIGO 2023 staging has a

role in adjuvant treatment decisions and hence survival FIGURE 1



PR021 / #195

POSTER ROUNDS 05: CERVICAL CANCER I

Topic: *AS03. Cervical Cancer*

MINIMALLY INVASIVE VERSUS OPEN SURGERY IN PATIENTS WITH LOW RISK CERVICAL CANCER WHO UNDERWENT SIMPLE HYSTERECTOMY; AN EXPLORATORY ANALYSIS FROM THE CCTG CX.5/SHAPE TRIAL CX.5/SHAPE TRIAL

Marie Plante[1], Sven Mahner[2], Alexandra Sebastianelli[3], Paul Bessette[4], Eric Lambaudie[5], Frederic Guyon[6], Jurgen Piek[7], Ramon Smolders[8], John Tidy[9], Karin Williamson[10], Lars Hanker[11], Frederic Goffin[12], Irina Tsibulak[13], Brynhildur Eyjolfsdottir[14], Noreen Gleeson[15], Jung-Yun Lee[16], Janice Kwon[17], Sarah Ferguson[18], Dongsheng Tu[19], Lois Shepherd[19]
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Introduction: The LACC demonstrated that minimally invasive radical hysterectomy was associated with poorer outcomes among women with early-stage cervical cancer. It is unknown whether this applies to patients with simple hysterectomy (SH).

Methods: Univariate and multivariate Cox models were used to assess association of minimum invasive surgery (MIS) versus open surgery and other variables (age, race, ECOG status, BMI, stage, histologic type and grade, diagnostic procedure, region and time period of enrolment, margin status and lymph vascular space invasion before surgery and on final pathology, and positive nodes, residual disease, and lesions > 2 cm on final pathology) with clinical outcomes, including pelvic and extrapelvic recurrence free survival (PRFS and EPRFS), recurrence free survival (RFS), and overall survival (OS), among patients who underwent SH in SHAPE.

Results: With a median follow up of 4.5 years, a total of 12 (4.3%) recurrences were observed in 281 patients having MIS versus 3 (5.3%) in 57 having open surgery SH. Significant difference between patients receiving MIS and open surgery was found in histological type (p=0.005) and the time period of enrolment (p<0.001). Significantly less patients treated by MIS had residual disease in the hysterectomy specimen compared to open surgery (43.1 vs. 57.9%; p=0.04). No statistically significant difference between MIS and open surgery in any clinical outcome was found (PRFS, EPRFS, RFS or OS).

Conclusion/Implications: For patients with SH, there was no statistical evidence on the association of MIS with poorer clinical outcomes. Longer follow-up is needed to confirm these results because of small number of events observed.

PR022 / #197

POSTER ROUNDS 05: CERVICAL CANCER I

Topic: *AS03. Cervical Cancer*

DIAGNOSTIC PERFORMANCE OF PELVIC ULTRASONOGRAPHY FOR ASSESSMENT OF STAGING IN STAGE IB1-IIA CERVICAL CANCER

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Introduction: To explore the diagnostic performance of pelvic ultrasonography (pUS) compared with clinical pelvic examination (PV) and computerized tomography of whole abdomen (CTWA) for preoperative staging in women with cervical cancer (CC)

Methods: This cross-sectional study was conducted on women with clinical stage IB1-IIA CC who underwent elective surgery at Rajavithi Hospital between September 2021 and May 2022. Within 48-hour before the operation, PV was evaluated by gynecologic oncologists, and pUS using two-dimension/thee-dimension/Doppler flow by transvaginal/transrectal/transabdominal routes was executed by Yanaranop M. CTWA was reviewed by Srisakorn P. FIGO staging of CC (2018) was assessed.

Results: Totally 48 women with clinical stage IB1-IIA CC were enrolled, 20 stage IB1, 20 stage IB2, 7 stage IB3, and 1 stage IIA1. Based on surgical staging, the accuracy of CC staging by pUS, PV, and CTWA was 68.7%, 58.3%, and 22.9%, respectively. For detecting tumor size < 2 cm, accuracy was 89.6% with pUS, 91.7% with PV, and 70.8% with CTWA. In comparison, the detection of tumor size > 4 cm., accuracy was 93.7%, 87.5%, and 70.8%, respectively. For detection of vaginal involvement and parametrial invasion, accuracy was 93.8% and 95.8% with pUS, 97.9% and 93.8% with PV, and 72.9% and 93.2% with CTWA, respectively. Moreover, pUS had an accuracy of 77.1% for the detection of deep stromal
invasion.

Table 1: Distribution of the cervical cancer staging by PV, pUS, and CTWA based on surgical staging (n=48)

Staging		Pathology					Total
		IB1	IB2	IB3	IIA1	IIIC	
Pelvic examination	IB1	16	2	1	0	1	20
	IB2	3	9	2	0	6	20
	IB3	0	4	2	0	1	7
	IIA1	0	0	0	1	0	1
	Total	19	15	5	1	8	48
Pelvic US	IB1	15	0	0	0	0	15
	IB2	4	12	0	0	3	19
	IB3	0	1	5	0	3	9
	IIA1	0	1	0	1	0	2
	IIB	0	1	0	0	2	3
	Total	19	15	5	1	8	48
CTWA	IA	5	0	0	0	1	6
	IB1	4	2	0	0	0	6
	IB2	4	3	1	1	0	9
	IB3	3	1	2	0	3	9
	IIA1	0	5	1	0	1	7
	IIA2	1	1	1	0	0	3
	IIB	1	2	0	0	1	4
	IIIC	1	1	0	0	2	4
	Total	19	15	5	1	8	48

Table 2: ***Diagnostic performance of PV, pUS, and CTWA in the evaluation of tumor size, depth of stromal invasion, parametrial invasion, upper vaginal invasion, and pelvic lymph node metastasis***

Parameters	Sensitivity	Specificity	PPV	NPV	Accuracy	Kappa coefficient (95% CI)
Tumor ≤ 2 cm (%)						
PV (%)	83.3%	96.7%	93.8%	90.6%	91.7%	0.82 (0.73-0.90)
pUS (%)	77.8%	96.7%	93.3%	87.9%	89.6%	0.77 (0.67-0.87)
CTWA (%)	38.9%	90.0%	70.0%	71.1%	70.8%	0.32 (0.18-0.45)
Tumor > 4 cm (%)						
PV (%)	25.0%	100.0%	100.0%	87.0%	87.5%	0.36 (0.17-0.54)
pUS (%)	75.0%	97.5%	85.7%	95.1%	93.7%	0.76 (0.63-0.89)
CTWA (%)	62.5%	72.5%	31.3%	90.6%	70.8%	0.25 (0.11-0.39)
Deep stromal invasion (%)						
pUS (%)	89.5%	69.0%	65.4%	90.9%	77.1%	0.55 (0.43-0.66)
Parametrial invasion (%)						
PV (%)	0.0%	100%	0.0%	93.8%	93.8%	0.00
pUS (%)	66.7%	97.8%	66.7%	97.8%	95.8%	0.64 (0.41-0.88)
CTWA (%)	0.0%	91.1%	0.0%	93.2%	93.2%	0.08 (0.05-0.11)
Upper vaginal invasion (%)						
PV (%)	50.0%	100%	100%	97.9%	97.9%	0.66 (0.34-0.98)
Pelvic US (%)	50.0%	95.7%	33.3%	97.8%	93.8%	0.37 (0.08-0.65)
CTWA (%)	50.0%	73.9%	7.7%	97.1%	72.9%	0.07 (0.00-0.17)
Pelvic lymph node metastasis (%)						
CTWA (%)	25.0%	97.5%	66.7%	86.7%	85.4%	0.30 (0.11-0.49)

Abbreviations: CTWA: computerized tomography of whole abdomen; NPV: negative predictive value, PV: pelvic examination; PPV: positive predictive value; pUS: pelvic Ultrasonography

Conclusion/Implications: Preoperative pUS may be a good modality for cervical cancer staging and has advantages for the detection of tumor mass > 4 cm, parametrial invasion, and deep stromal invasion. Nevertheless, pUS cannot assess nodal or distant metastasis.

PR023 / #544

POSTER ROUNDS 05: CERVICAL CANCER I

Topic: *AS03. Cervical Cancer*

FEASIBILITY AND ONCOLOGIC OUTCOMES OF LAPAROSCOPIC RADICAL HYSTERECTOMY INCORPORATING MODIFIED TUMOUR-FREE TECHNIQUES: A PROPENSITY SCORE WEIGHTED COHORT STUDY

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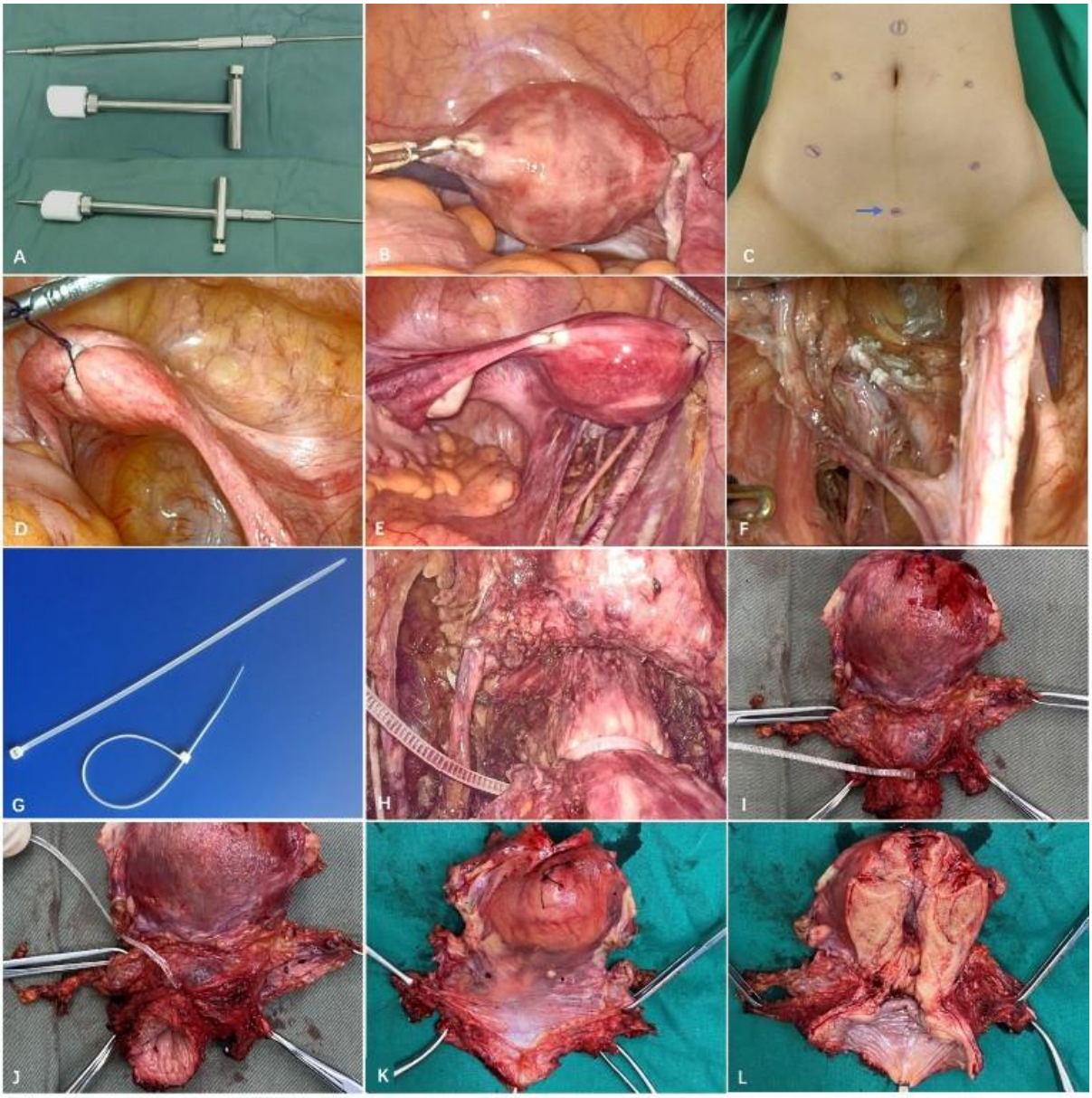
Introduction: It remains unclear whether modifying laparoscopic radical hysterectomy (LRH) to adopt tumour-free principles can improve oncologic outcomes in patients with early-stage cervical cancer (ESCC).

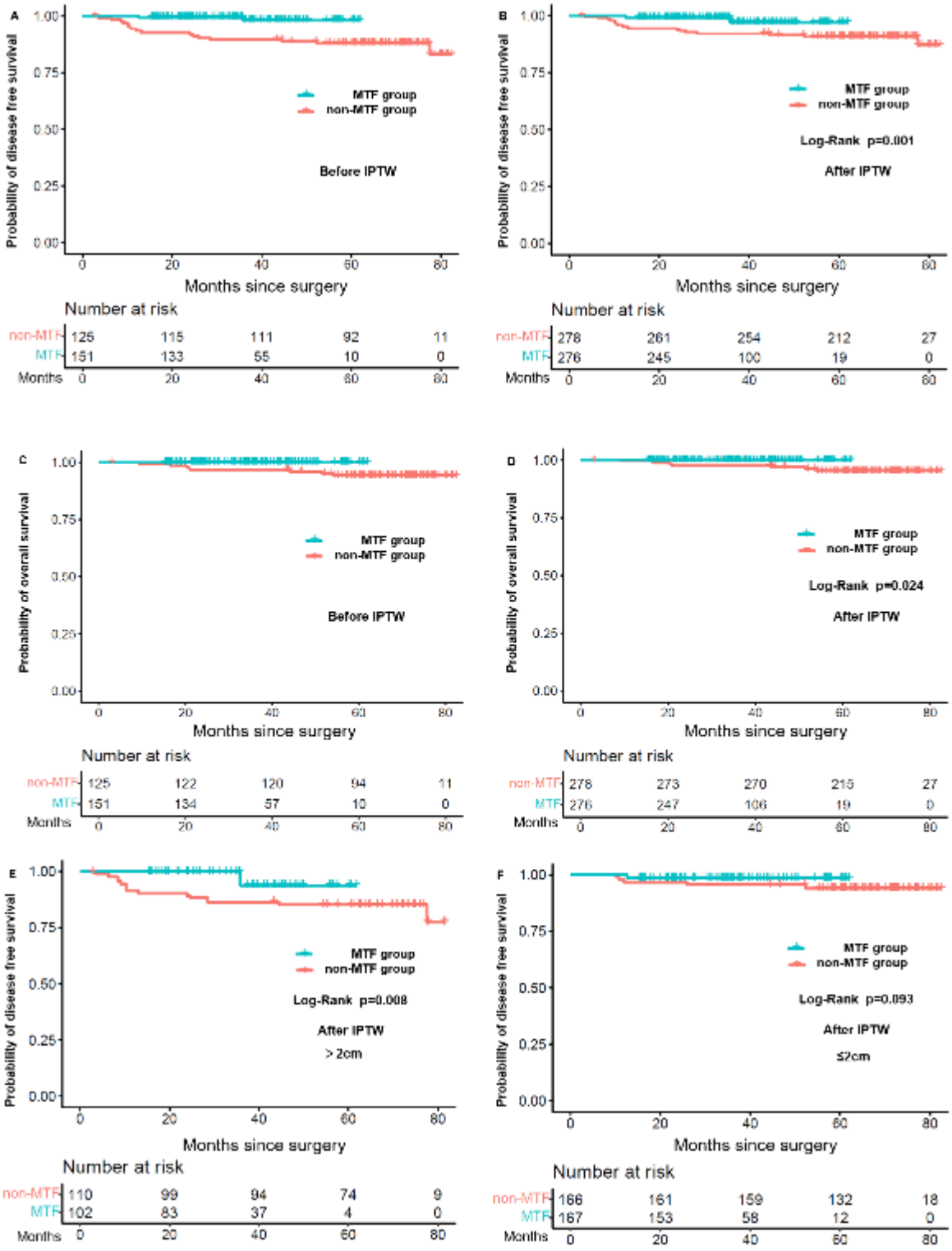
Methods: We performed a retrospective cohort study of 276 patients with ESCC treated between January 2017 and January 2023, including 151 who underwent LRH incorporating MTF techniques and 125 who underwent conventional LRH with a uterine manipulator and unprotected intracorporeal colpotomy. Oncologic outcomes and perioperative results were analyzed using multivariate analysis and inverse probability treatment weighting

(IPTW).



Results: The MTF group had a shorter length of hospital stay (6 vs. 7 days) than the non-MTF group. However, there were no significant differences in operative time, haemoglobin decrease and complications. After a median follow-up of 36.0 (range: 15.3–62.0) months for the MTF group and 66.8 (range: 3.0–82.5) months for the non-MTF group, recurrence was observed in 2 (1.3%) and 16 (12.8%) of the patients, respectively. The 2-, and 3-year DFS rate in the MTF group was 99.3%, and 98.0%, while the 2-, 3-, and 4.5-year DFS rates in the non-MTF group were 91.9%, 89.5%, and 87.8%, respectively. Adjusted multivariate analysis showed that MTF was an independent predictor of longer DFS (HR: 0.136, p=0.010). After IPTW, patients in the MTF group had more favorable DFS than those in the non-MTF group (log-rank

p=0.001).



Conclusion/Implications: LRH incorporating MTF techniques is a feasible treatment for patients with ESCC. Oncologic outcomes of individuals who underwent this procedure were similar to those of open approach, which was more favorable than those of conventional LRH.

PR024 / #890

POSTER ROUNDS 05: CERVICAL CANCER I

Topic: *AS14. Pre-Invasive Disease*

PERFORMANCE OF AN ARTIFICIAL INTELLIGENCE MODEL FOR EVALUATION OF COLPOSCOPIC IMAGES COMPARED TO DIGITAL COLPOSCOPY AND COLPOSCOPISTS IMPRESSION

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Introduction: Colposcopy has limited sensitivity for identification of Cervical intraepithelial Neoplasia in need of preventive treatment (CIN2+) even in skilled hands and when digital technologies are used. Artificial Intelligence models offer the potential to enhance diagnostic accuracy and reduce the dependence on trained colposcopists.

Methods: We recorded colposcopies by the Dysis Digital Colposcope from women with a Transformation Zone type 1 or 2. Images were mapped with location of 3-4 biopsies: - Biopsy at the colposcopist's discretion (CD) - Biopsy marked by the Dysis Color Map (DCM) indicating low or high-grade lesions - Two random biopsies Biopsies were histologically analyzed separately and classified as Class 1 (normal, inflammation, CIN1) or Class 2 (CIN2+: CIN2/3,AIS or Carcinoma). A Cervix-AID-NET model was developed and tested on this material.

Results: The median age of the 178 women was 30 years. Colposcopy indications were low grade cytology (n=80), high grade cytology (n=57), follow-up on CIN2 (n=31) and other reasons (n=10). The diagnostic accuracy of Cervix-AID-NET for CIN2+ was 99.8% compared to 58.4% for DCM and 55.1% for CD. The sensitivity, specificity and negative predictive value (NPV) of the AI model for CIN2+ were 99,9%, 99,8% and 99.9%. respectively.

Conclusion/Implications: Conclusion and implication: Cervix-AID-NET demonstrated superior accuracy in detection of CIN2+ lesions compared to the performance of a digital colposcope and the subjective evaluation by the colposcopist. The high diagnostic accuracy support a “See and Treat” strategy in patients with a Class 2 colposcopy. Women with a Class 1 colposcopy could be safely managed without biopsies.

PR025 / #326

POSTER ROUNDS 06: OVARIAN CANCER II

Topic: *AS10. Ovarian Cancer*

VALIDITY OF CA-125 ELIMINATION RATE CONSTANT K FOR INDICATING PROGNOSIS AND THERAPEUTIC SELECTION AMONG JAPANESE PATIENTS WITH HIGH-GRADE SEROUS OVARIAN CARCINOMA: A SINGLE-CENTER RETROSPECTIVE STUDY.

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Introduction: CA-125 ELIMination rate constant K (KELIM), a biomarker for assessing prognosis in high-grade serous ovarian carcinoma (HGSOC), was rarely analyzed among Japanese patients. Meanwhile, dose-dense paclitaxel plus carboplatin (ddTC) is reportedly superior to conventional paclitaxel plus carboplatin (cTC) in patients with poor prognosis defined by KELIM and surgical outcomes. Therefore, we investigated the utility of KELIM among Japanese HGSOC patients.

Methods: We included patients with HGSOC at our institution in 2012-2021. KELIM was calculated by CA-125 trend within first 100 days of adjuvant chemotherapy (AC)/neo-adjuvant chemotherapy (NAC) and classified favorable (≥1.0) or unfavorable (<1.0). We further defined two cohorts: patients with favorable KELIM and complete surgical outcome (Good), and patients with unfavorable KELIM or residual tumors (Poor). Progression-free survival (PFS)/overall survival (OS) were assessed.

Results: Of 259 eligible patients with HGSOC, 152 and 107 patients underwent primary debulking surgery (PDS) with AC and interval debulking surgery (IDS) after NAC, respectively. AC/NAC included cTC (n=84) or ddTC (n=175). Favorable KELIM significantly contributed to longer PFS/OS than unfavorable KELIM ($p<0.05$). Unfavorable KELIM in NAC correlated with residual tumor at IDS (Odds Ratio, 4.53; 95% CI, 1.71-12). Furthermore, 129 and 130 patients were in Good and Poor cohorts which had significantly different PFS/OS ($p<0.01$). Among Poor cohort, ddTC after PDS showed longer PFS/OS than cTC (HRs, 0.595/0.604; 95% CIs, 0.354-0.998/0.319-1.143), but not in those underwent IDS.

Conclusion/Implications: KELIM would indicate prognosis in Japanese patients with HGSOC. Moreover, ddTC might be effective in HGSOC patients with poor survival potential predicted by KELIM and surgical outcomes.

PR026 / #477

POSTER ROUNDS 06: OVARIAN CANCER II

Topic: *AS10. Ovarian Cancer*

DIAGNOSTIC PERFORMANCE OF DW-MRI IN ADVANCED OVARIAN CANCER: FIRST RESULTS OF THE DUTCH PROSPECTIVE MULTICENTER MISSION TRIAL

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Introduction: Achieving a complete cytoreductive surgery (CRS) is crucial in ovarian cancer patients, making preoperative assessment of surgical feasibility essential. MRI has shown promising results in predicting the peritoneal cancer index (PCI) and the extent of peritoneal disease. We aimed to prospectively determine the performance of MRI in predicting PCI and feasibility of complete CRS.

Methods: The MISSION study (ClinicalTrial registry, NCT03399344) was a prospective, multicentre trial conducted in four Dutch referral hospitals. Inclusion criteria were aged > 18 years and newly diagnosed Stage III/IV ovarian cancer. Two readers scored the mrPCI. The predictive performance of DW-MRI for the PCI and resectability is investigated based on Youden's index in terms of positive predictive value, negative predictive value and bootstrapped area under the receiver operating characteristic curve (AUC), as well as intraclass correlation coefficients for inter-observer reproducibility. The surgical PCI (sPCI) and result of CRS were used as reference standard.

Results: Between June 2018 and June 2023, 270 patients were recruited, of whom 220 (193 interval and 27 primary CRS) were eligible for the current analysis. The mrPCI and sPCI were strongly correlated (ICC=0.71, $p<0.0001$). The AUC for predicting a complete primary CRS or interval CRS were 0.9 and 0.83 respectively. A very strong correlation was found between both readers for the mrPCI (ICC=0.81, $p<0.0001$).

Conclusion/Implications: MRI is an accurate and robust tool for predicting the extent of peritoneal metastases and is able to predict whether complete CRS can be achieved in patients with advanced ovarian cancer.

PR027 / #503

POSTER ROUNDS 06: OVARIAN CANCER II

Topic: *AS10. Ovarian Cancer*

VISTA+TUMOR-ASSOCIATED NEUTROPHILS PROMOTE PLATINUM RESISTANCE BY INHIBITING CD8+T CELLS INFILTRATION IN HIGH-GRADE SEROUS OVARIAN CANCER

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Introduction: Neutrophil-to-lymphocyte ratio (NLR) and tumor-associated neutrophils (TANs) have been proved to be associated with the platinum chemoresistance and poor outcome in high-grade serous ovarian cancer (HGSOC) patients, but the underlying biological mechanisms governing platinum resistance remain elusive.

Methods: We retrospectively analyzed untreated patients with HGSOC from April 2016 to March 2023 at our institution. Patients were randomly divided into the discovery and external validation cohort. Baseline NLR and various inflammatory markers were assessed. Logistic regression and Cox survival analyses were conducted. Mass spectrum analysis of tumor tissue proteins was performed in 4 pairs of platinum-resistant and platinum-sensitive patients. Specific TANs subgroups were identified using the transcription data from TCGA database, single cell sequencing data from GEO database, and multiple immunohistochemistry staining of clinical samples. HALO platform was utilized for cellular spatial relation analysis. The efficacy of combining VISTA antibody with platinum-based chemotherapy was verified in a mouse model.

Results: We identified NLR as a common independent risk factor in both cohorts and VISTA+TANs as being associated with platinum chemoresistance in HGSOC. The VISTA+TANs subgroup and CD8+T cells exhibited intense intercellular communication but spatial separation, with a negative correlation of the infiltration density. In vivo, the combined administration of VISTA antibody enhanced the sensitivity of platinum chemotherapy by regulating the proportion of TANs and CD8+T cell infiltration within tumor tissues.

Conclusion/Implications: Our findings provided a potential biological basis for the prognostic value of NLR and reveal a mechanism by which VISTA+TANs promote platinum resistance in HGSOC.

PR028 / #558

POSTER ROUNDS 06: OVARIAN CANCER II

Topic: *AS10. Ovarian Cancer*

DEVELOPING UNSUPERVISED DRUG RESPONSE PROFILES TO CLUSTER HIGH GRADE SEROUS OVARIAN CANCER CELL LINES AND PERSONALISE THE TREATMENT OF HIGH-GRADE SEROUS OVARIAN CANCER

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Introduction: High-grade serous ovarian cancers (HGSOCs) are recalcitrant and difficult to treat cancers. Despite ongoing efforts to develop new therapies, patients, both existing and newly diagnosed, still confront relapse and poor outcomes. High-throughput screening approaches of existing drugs could identify unexplored drug response profiles and provide stratification biomarkers to tailor existing treatment options for patients.

Methods: The FDA-approved drugs and their pairwise combinations were screened in 2D cultures of 5 HGSOC cell lines using cell toxicity or viability assays. Drug synergy was analysed using the Bliss independence, the multidimensional and the Loewe additivity models. A further high throughput screening approach was optimised to test drug responses in 3D spheroid cultures derived from the HGSOC cell lines or the ascitic fluid of ovarian cancer (OC) patients.

Results: The hierarchical clustering of 112 drugs' responses successfully differentiated chemo-sensitive from chemo-resistant cell lines. The drug combination screens revealed synergy between anti-cancer drugs targeting DNA repair and the cell cycle pathways in chemotherapy-sensitive cell lines, while combinations of inhibitors of PI3K and the mevalonate pathways exhibited synergistic cytotoxicity in chemo-resistant cell lines. Preliminary 3D drug screening using CellTOX Green and PrestoBlue assays enabled simultaneous detection of cell death and viability for 100 drugs.

Conclusion/Implications: Our ongoing research focuses on elucidating molecular features of novel drug responses in HGSOC and developing a rapid protocol for culturing cancer spheroids from OC patient ascitic fluid. High throughput drug screening approaches, if applied to patient-derived samples, could uncover an actionable cytotoxic drug response profile of a patient's disease.

PR029 / #943

POSTER ROUNDS 06: OVARIAN CANCER II

Topic: *AS10. Ovarian Cancer*

A PHASE 3, RANDOMIZED TRIAL EVALUATING AVUTOMETINIB PLUS DEFACTINIB COMPARED WITH INVESTIGATOR'S CHOICE OF THERAPY IN PATIENTS WITH RECURRENT LOW-GRADE SEROUS OVARIAN CANCER: GOG-3097/ENGOT-OV81/NCRI/RAMP 301

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Introduction: Low-grade serous ovarian cancer (LGSOC) is a rare and distinct cancer broadly driven by the RAS/MAPK pathway, which lacks specifically approved therapies. Avutometinib (RAF/MEK clamp) + defactinib (FAK inhibitor) demonstrated a 45% objective response rate (ORR) in recurrent LGSOC (ENGOT-ov60/GOG-3052/RAMP 201 Part A; NCT04625270), consistent with earlier data (FRAME, NCT03875820) that led to FDA breakthrough therapy designation.

Methods: GOG-3097/ENGOT-ov81/NCRI/RAMP 301 (RAMP 301; NCT06072781) is a Phase 3, randomized, open-label study comparing avutometinib + defactinib versus investigator's choice of therapy (ICT) in recurrent LGSOC that has progressed on platinum-based therapy. Approximately 270 patients will be enrolled at ~75 sites in North America, Europe, and Asia Pacific. Patients with recurrent LGSOC, prior treatment with ≥1 platinum-based regimen, ≥1 measurable lesion per RECIST v1.1, and ECOG PS ≤1 are eligible. Prior treatment with chemotherapy, hormonal therapy, bevacizumab, and MEK/RAF inhibitors are allowed. Patients will be randomized 1:1 to either 3.2 mg avutometinib PO BIW 3/4 weeks + 200 mg defactinib PO BID 3/4 weeks or

ICT (pegylated liposomal doxorubicin, paclitaxel, topotecan, letrozole, or anastrozole). ICT arm may cross over to the avutometinib + defactinib arm after BICR confirmed disease progression. Randomization is stratified by *KRAS* mutation status, geography, and number of therapies. Primary endpoint: progression-free survival by RECIST v1.1 per blinded independent central review. Secondary endpoints: investigator-assessed PFS, overall survival, ORR, duration of response, disease control rate, safety, tolerability, pharmacokinetics, and quality of life.

Results: N/A (Trial In Progress)

Conclusion/Implications: N/A (Trial in Progress)

PR030 / #1014

POSTER ROUNDS 06: OVARIAN CANCER II

Topic: *AS10. Ovarian Cancer*

ORIGANOID MODELS FOR PREDICTING DRUG RESPONSE IN HIGH GRADE SEROUS OVARIAN CANCER

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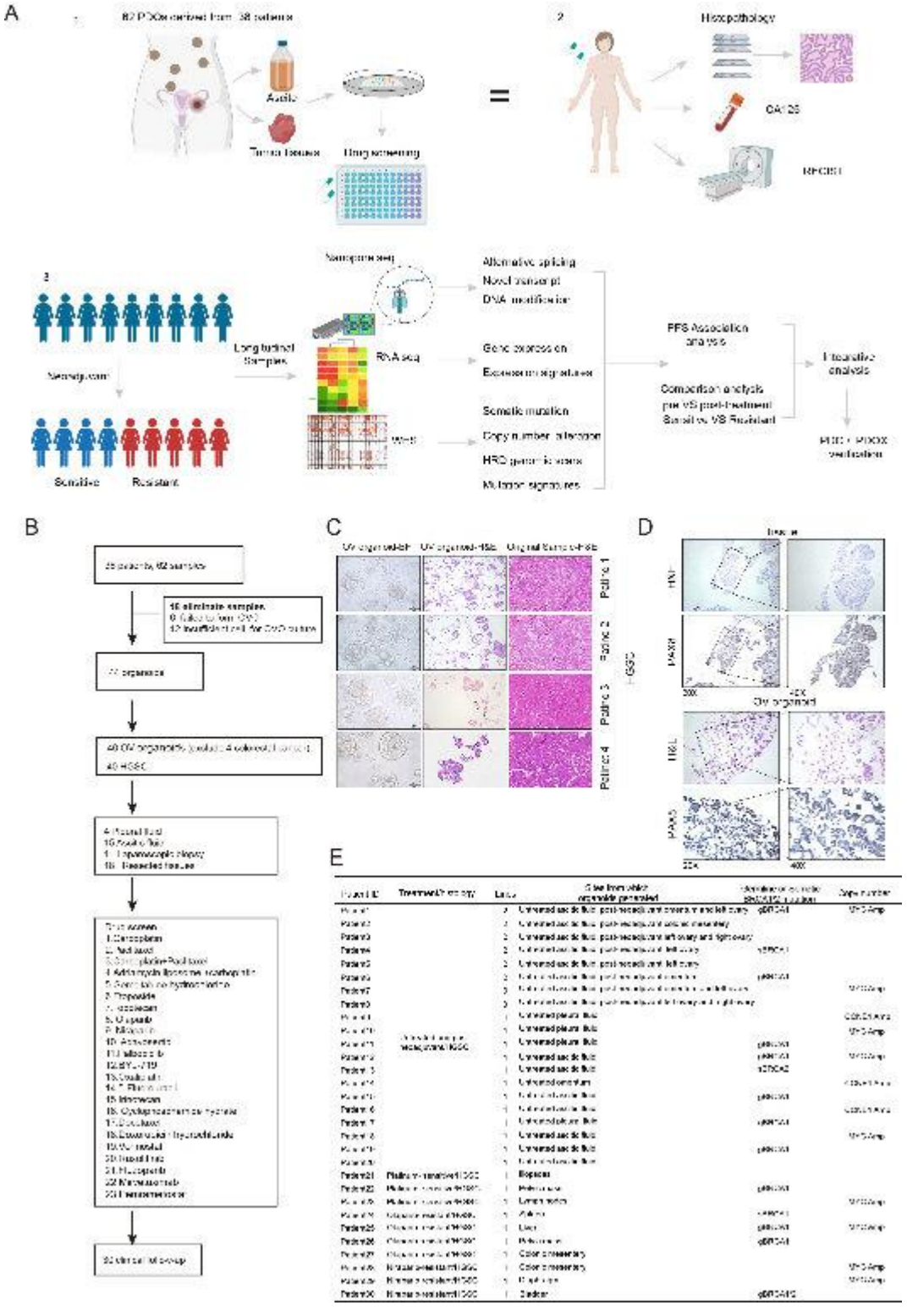
Introduction: Utilizing patient-derived organoids (PDOs) as pragmatic way to assess the effectiveness of new drugs and to identify most efficacious treatment regimens for individual patinets.

Methods: Establishment of patient-derived organoid models: obtain tumor tissue from several sites (ovary, omentum, diaphragm,ect) or ascites from surgery of ovarian cancer patients in shanghai cancer center. **Drug screening for organoids:** Grown organoids were dissociated and re-seeded on the 384-well plated; 23 drug treatment regimens were selected including carboplatin,oxaliplatin,doxorubicin hydrochloride, olaparib, niraparib, fluzoparib, gemcitabine hydrochloride, topotecan, paclitaxel, docetaxel, Adriamycin liposome, Etoposide, Wee1 inhibitor (adavosertib), CDK4/6 inhibitor(palbociclib), BYL-719(PI3Kα inhibitor), 5-Fluorouracil, Irinotecan, Cyclophosphamide hydrate, Vorinostat (HDACi), Ruxolitinib(JAK1/2 inhibitor), Mirvetuximab, Pemrametostat (PRMT5 inhibitor). **Clinical characteristic data:** clinical response was also measured by histopathological (chemotherapy response score [CRS]), biochemical (normalization of the serum biomarker CA-125), and radiological (RECIST) responses. **Mechanism of platinum resistance:** long-read transcriptomes for accurate identification of known and novel isoforms.

Results: These PDO drug responses showed a statistically significant correlation ($p < 0.05$) with clinical response, as measured by CRS, CA-125, and RECIST in OV neoadjuvant patients. The capability of PDOs derived from 10 patients, including 3 platinum- sensitive, 8 PARPi-resistant recurrent OV patients to discriminate between clinically sensitive or resistant patients was determined using dose-effect curve analysis (carboplatin, olaparib, niraparib). The concordances of response were 100% (3 of 3), 75% (3 of 4) and 100% (4 of 4),

respectively.

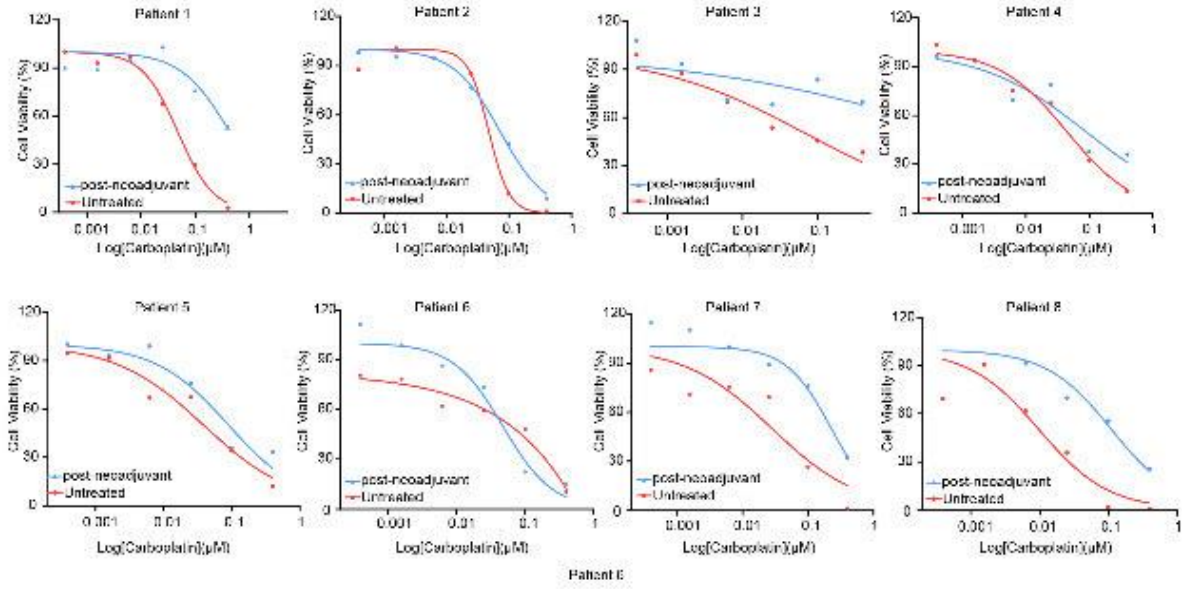


Conclusion/Implications:

A

	Organoids Response		Clinical Response			
Patient ID	Untreated / post-neoadjuvant (Carboplatin IC50 μM)	Histopathological Chemotherapy Response Score	Biochemical CA-125 normalization	Radiological RECIST	Progress Free Survival (>6 months)	Overall Survival (>18 months)
Patient1	0.46/4.34	CRS-1	NO	SD	NO	NO
Patient2	0.52/0.78	CRS-2	YES	PR	YES	YES
Patient3	1.81/>20	CRS-1	NO	SD	NO	NO
Patient4	0.47/0.80	CRS-2	NO	PR	YES	YES
Patient5	0.42/0.91	CRS-2	YES	PR	YES	YES
Patient6	0.58/1.18	CRS-2	YES	PR	YES	YES
Patient7	0.01/0.24	CRS-1	NO	SD	YES	YES
Patient8	0.07/0.98	CRS-1	NO	PR	NO	YES

B



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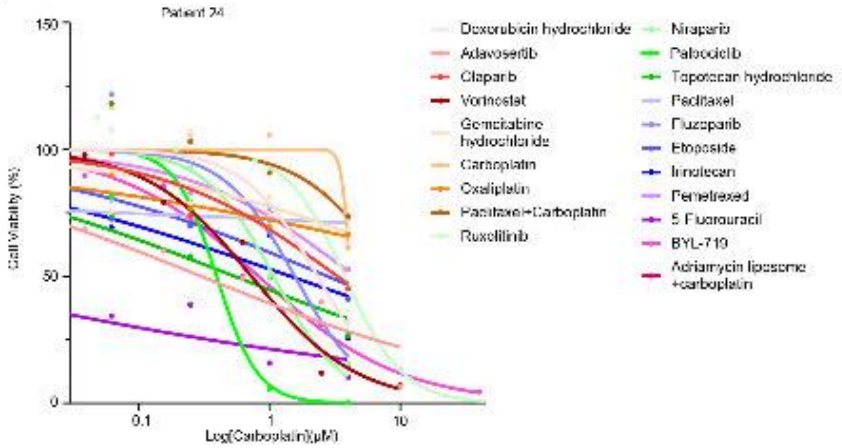

Conclusion: Clinical applications of PDOs for personalized monitoring of tumor reoccurrence and in vitro drug sensitivity profiling. Palbociclib may be a better treatment option for PARPi-resistant recurrent patients.

PR031 / #1199

POSTER ROUNDS 06: OVARIAN CANCER II

Topic: *AS10. Ovarian Cancer*

PHASE I, TWO-PART, MUTLICENTER, FIRST-IN-HUMAN (FIH) STUDY OF TORL-1-23, A NOVEL CLAUDIN 6 (CLDN6) TARGETING ANTIBODY DRUG CONJUGATE (ADC) IN PATIENTS WITH ADVANCED SOLID TUMORS.

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Introduction: TORL-1-23 is a first-in-class ADC targeting the oncofetal protein CLDN6, with expression limited to early stages of development and aberrant expression in several cancers, including ovarian, endometrial, and testicular cancers.

Methods: Part 1 (escalation) and part 2 (expansion) will enroll subjects with advanced solid tumors. TORL-1-23 is administered as a 30-minute IV infusion Q3W. Study objectives include evaluation of safety, tolerability, DLTs, RP2D, and antitumor activity. Part 1: subjects received escalating doses of TORL-1-23 across 10 dose levels (0.2 to 4.0 mg/kg). Part 2: subjects with CLDN6-expressing cancers will be evaluated to confirm the RP2D(s) in ovarian cancer, NSCLC, and other CLDN6-expressing cancers using a CLDN6 IHC companion diagnostic.

Results: As of 31-Jan-2024, Part 1 enrolled 45 subjects with ovarian (n=33), testicular (n=5), and endometrial (n=7) cancers. Median prior lines of systemic therapy were 4 (1-9). Treatment-related adverse events (TRAE) occurred in 86% of subjects. G1/2 TRAEs (>20%) included fatigue (41%), peripheral neuropathy (39%), alopecia (39%), nausea (37%), anemia (24%), WBC count decrease (24%), and arthralgia (22%). The most common (≥10%) G3+ TRAE was neutropenia (20%). Ocular toxicity and ILD were not observed. The ORR across all dose levels was 29% (12/41, all PRs: 10 ovarian, 1 testicular, 1 endometrial), 75% (3/4) at 2.4 mg/kg, and 40% (4/10) at 3.0 mg/kg.

Conclusion/Implications: TORL-1-23 is well tolerated with promising preliminary antitumor activity in heavily-pretreated patients with CLDN6-expressing ovarian, endometrial, and testicular cancers. Dose expansion is ongoing to optimize the dose for

subsequent development.

Clinical trial information: NCT05103683. Sponsor: TORL Biotherapeutics.

PR032 / #594

POSTER ROUNDS 07: OVARIAN CANCER III

Topic: *AS10. Ovarian Cancer*

REAL-WORLD MONITORING OF PLATELET COUNTS AMONG PATIENTS WITH EPITHELIAL OVARIAN CANCER RECEIVING FIRST-LINE MAINTENANCE NIRAPARIB IN THE UNITED STATES: THE ACTIV1ZE STUDY

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Introduction: PRIMA trial results demonstrated efficacy and safety of niraparib first-line maintenance (1LM) in patients with epithelial ovarian cancer (EOC) who had a complete or partial response to first-line (1L) platinum-based chemotherapy. The ACTIV1ZE study used real-world laboratory data to describe platelet count testing frequency and time to decreased platelet count (DPC) among patients with EOC after 1LM niraparib initiation.

Methods: This retrospective study used the nationwide Flatiron Health electronic health record-derived deidentified database. Adults with EOC diagnosed on/after 01Jan2015, who initiated 1LM niraparib monotherapy (01Apr2020–03Jun2023) were included. Incidence of any-grade (<100,000/mcL) and grade ≥3 (<50,000/mcL) DPC were described during the index period (index date [1LM niraparib initiation] through the earliest of 30 days post-1LM niraparib completion or 2L treatment start).

Results: Among 543 patients (median age, 67 years; 83.6% with advanced EOC at initial diagnosis), 24.9% had a DPC between 1L chemotherapy initiation and the index date. During the index period, 88.2% of patients had ≥1 platelet count test result; 36.8% and 21.7% of patients had any-grade or grade ≥3 DPC, respectively (Table). Among patients who experienced a DPC, most (60.0%) any-grade DPCs initially occurred within 30 days of niraparib initiation. Median (IQR) time-to-any-grade DPC was 28 (22-44) days. Any-grade DPCs resolved in 98.0% of patients (median [IQR] time-to-resolution, 15 [12-22]

days).

		Among patients with DPC occurrence, time from start of 1LM to first DPC[a]				
Parameter, n (%)	All patients (N=543)	<14 days	15-30 days	31-60 days	61-90 days	>90 days
Any-grade[b] DPC	200 (36.8)	7 (3.5)	113 (56.5)	58 (29.0)	9 (4.5)	13 (6.5)
Grade ≥3[c] DPC	118 (21.7)	4 (3.4)	77 (65.3)	31 (26.3)	4 (3.4)	2 (1.7)
No DPC	279 (51.4)					
No valid platelet count test result during 1LM[d]	64 (11.8)					

1LM, first-line maintenance; 2L, second-line; DPC, decreased platelet count.
[a]Percentages were calculated based on the respective number of patients in the 'All patients' column, ie, for any-grade DPC (n=200) and for grade ≥3 DPC (n=118).
[b]Any-grade DPC defined as <100,000/mcL.
[c]Grade ≥3 DPC defined as <50,000/mcL.
[d]Includes 43 patients who received a platelet count test during the index period, but test results were missing and 21 patients who did not have evidence of receiving a platelet count test during the index period.

Conclusion/Implications: DPC was likely to occur in patients with EOC within 30 days of initiation of 1LM niraparib monotherapy and resolved quickly. Results from this real-world study are consistent with findings from the PRIMA trial.

PR033 / #737

POSTER ROUNDS 07: OVARIAN CANCER III

Topic: *AS10. Ovarian Cancer*

PROGNOSTIC IMPACT OF AGE AND ETHNICITY IN PRIMARY MUCINOUS OVARIAN CANCER: INSIGHTS FROM A MULTICENTRE STUDY

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Introduction: Our recent pilot study indicated that South Asian ethnicity, young-age, and fertility-sparing surgery were risk factors for poor prognosis in primary mucinous ovarian cancer. This national multicentre study further investigates the prognostic impact of these factors.

Methods: A retrospective study of women treated at 5 UK gynaecological oncology centres diagnosed with primary mucinous ovarian cancer confirmed by specialist gynaecological-histopathologist. Statistical analyses were performed using R-integrated development environment, with survival assessed by Cox Proportional Hazards models.

Results:

	Death (n/N)	Median Survival (IQR)	Univariate Analysis HR (95% CI)	Multivariable Analysis HR (95% CI)
Age Continuous			1.03 (1.01, 1.05)	1.03 (1.00, 1.05)
Age ≤45 years	6/84	50 (26, 102)	0.44 (0.17, 0.94)	0.44 (0.15, 1.10)
Reference: >45 years	45/191	65 (32, 116)		
Fertility Sparing Surgery	5/52	58 (35, 108)	1.40 (0.70, 2.59)	1.92 (0.97, 3.54)
Reference: Traditional Staging Surgery	41/218	64 (31, 114)		
FIGO stage IC	21/119	77 (40, 118)	2.54 (1.27, 5.29)	2.27 (1.12, 4.78)
Reference: FIGO Stage IA	15//128	53 (27, 97)		
Infiltrative Invasion	21/82	53 (18, 94)	2.02 (1.12, 3.64)	1.97 (1.04, 3.71)
Reference: Expansile Invasion	23/150	73 (33, 128)		
Age ≤45 years and Infiltrative Invasion	5/20	41 (15, 63)	8.59 (1.51, 89.86)	8.33 (1.45, 87.69)
Reference: Age>45 and Expansile Invasion	22/100	75 (37, 130)		
Age ≤45 years and Fertility Sparing Surgery	5/50	58 (33, 106)	2.27 (0.32, 25.78)	3.07 (0.43, 35.32)
Reference: Age>45 and Traditional Staging Surgery	40/184	66 (35, 117)		
Infiltrative Invasion and Fertility Sparing Surgery	5/13	40 (17, 49)	4.01 (1.14, 15.56)	2.44 (0.87, 8.18)
Reference: Expansile Invasion and Traditional Staging Surgery	21/116	74 (35, 128)		
South Asian Ethnicity	7/25	40 (16, 73)	2.08 (0.87, 4.37)	1.67 (0.63, 3.80)
Reference: White Ethnicity	32/156	75 (36, 128)		
South Asian and Age ≤45 years	3/14	21 (11, 45)	8.88 (1.24, 77.52)	7.81 (1.06, 69.64)
Reference: White and age>=45	30/114	73 (37, 125)		
South Asian ethnicity and Fertility Sparing Surgery	3/8	38 (13, 48)	3.91 (0.66, 24.50)	10.07 (1.37, 89.70)
Reference: White ethnicity and Traditional Staging Surgery	28/127	75 (37, 126)		
South Asian ethnicity and FIGO Stage IC	3/14	43 (19, 75)	1.11 (0.51, 2.60)	0.95 (0.43, 2.22)
Reference: White ethnicity and FIGO Stage IA	11/81	86 (49, 124)		
South Asian ethnicity and Infiltrative Invasion	3/7	40 (26, 92)	1.01 (0.18, 5.71)	0.58 (0.10 – 3.44)
Reference: White and Expansile	17/97	90 (42, 140)		

275 patients were analysed; median age at diagnosis was 54 years (range; 16-92), 90% were FIGO stage I and 30% demonstrated infiltrative invasion. South Asian women were more likely to be diagnosed ≤45 years (relative risk [RR] 2.08, 95% CI 1.35-3.21) and more likely to undergo fertility-sparing surgery (RR 2.65, 95% CI 1.52-4.61) compared to White counterparts. Infiltrative invasion was associated with poor prognosis 2.02 (hazard ratio

for death [HR] 95% CI 1.12-3.64), as is fertility-sparing surgery (HR 1.40, 95% CI 0.70-2.59). Infiltrative invasion was particularly detrimental in women aged ≤45 years (HR 8.59, 95% CI 1.51-89.86) and those who underwent fertility-sparing surgery (HR 4.01, 95% CI 1.14-15.56). South Asian women ≤45 years were at increased risk of poor prognosis (HR 8.8, 95% CI 1.24-77.52).

Conclusion/Implications: Our study highlights Infiltrative invasion, has a greater detrimental impact in young women and those undergoing fertility-sparing surgery. South Asian women ≤45 years in-particular experienced poor outcomes. Careful consideration should be given to the use of fertility-sparing surgery in those with infiltrative invasion, especially in South Asian women.

PR034 / #875

POSTER ROUNDS 07: OVARIAN CANCER III

Topic: *AS10. Ovarian Cancer*

FERTILITY SPARING SURGERY IN PATIENTS WITH ADVANCED BORDERLINE OVARIAN TUMORS: ONCOLOGIC AND FERTILITY OUTCOMES OF A LARGE SINGLE-INSTITUTION COHORT

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Introduction: Fertility-Sparing-Surgery (FSS) is a valid alternative to demolitive surgery in early-stage borderline ovarian tumors (BOTs), with excellent prognosis and fertility outcomes. Instead, its role in the treatment of advanced BOTs is controversial.

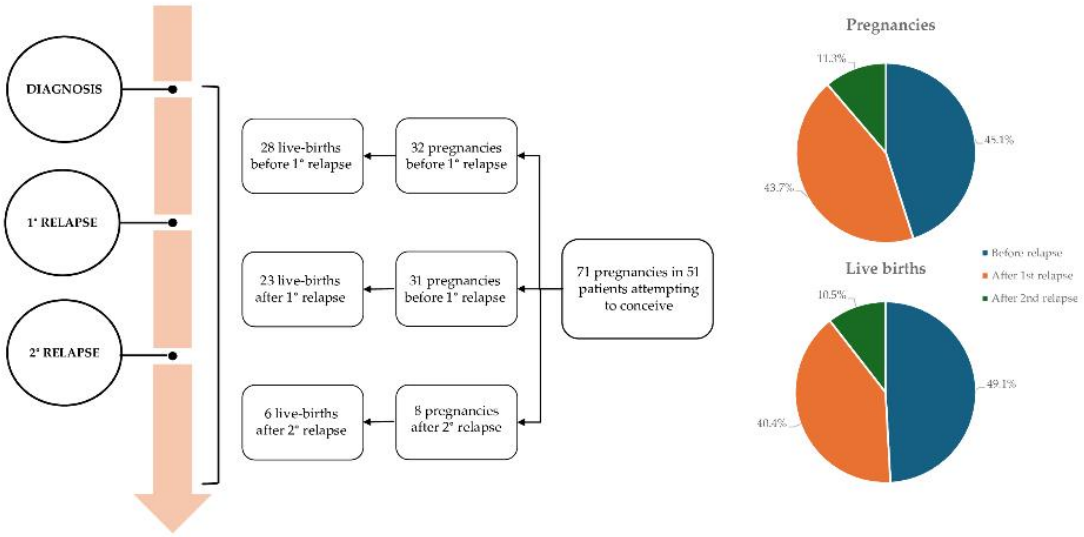
Methods: This single-institution retrospective series explores oncologic and fertility outcomes of all consecutive patients with pathologically confirmed FIGO IIA-IIIC BOTs treated in 1985-2018. Patient's clinicopathological data were retrieved from internal clinical records.

Results: Eighty-nine patients were recruited. The majority had serous histology (92.1%), bilateral ovarian involvement (61.8%), and stage III disease (55.1%) with non-invasive implants (79.8%). Ovarian cystectomy with/without contralateral adnexectomy was the preferred surgical procedure (71.9%).
Sixty-two patients experienced recurrence; of these, 32 patients relapsed more than once. The median time to first relapse and the median time to subsequent recurrence were 30.6 months and 32.4 months, respectively. Ovaries were the most prevalent site of recurrence at both first and second recurrence (93.5%, 87.5%). 80,6% and 71,9% of patients received FSS at 1st and 2nd recurrence, respectively.
Among the 57.3% of patients who attempted to conceive, 71 pregnancies and 57 live-births occurred. Of these, 31 pregnancies and 23 live-births occurred after 1st recurrence, and 8 pregnancies and 6 live-births occurred after 2nd recurrence.
After a median follow-up of 171 months, 86 patients were alive without disease and only one patient died of
disease.

Table 1. Clinicopathological characteristics and oncologic outcomes of patients.

Clinicopathological characteristics of patients				
Age	Median (IQR)		29	(25 - 33)
BMI (Kg/mq)	Median (IQR)		21.5	(19.9 – 24.0)
Previous Pregnancy [n. (%)]	Yes		22	(24.7%)
	No		63	(70.8%)
	NA		4	(4.5%)
Hystology [n. (%)]	Serous BOT		82	(92.1%)
	Non-serous BOT		7	(7.9%)
FIGO Stage [n. (%)]	IIA-IIB		40	(44.9%)
	IIIA-IIIC		49	(55.1%)
Ovarian involvement [n. (%)]	Monolateral		32	(36.0%)
	Bilateral		55	(61.8%)
Implants [n. (%)]	Invasive		18	(20.2%)
	Non-invasive		71	(79.8%)
PCI	Median (range)		1,5	1-10
Surgical approach [n. (%)]	LPS		24	27.0%
	LPT		65	73.0%
Adnexal procedure [n. (%)]	Ovarian cystectomy(ies) +/- contralat. adnexectomy		64	(71.9%)
	Monolateral adnexectomy		21	(23.6%)
	Bilateral adnexectomy		4	(4.5%)
Residual Disease [n. (%)]	0		78	(87.6%)
	0-1		10	(11.2%)
	>1		1	(1.1%)
Adjuvant CHT [n. (%)]	Yes		24	(27.0%)
	No		65	(73.0%)
Follow-up				
Median FUP [months]	Median (IQR)		171	(120 – 246)
Median time to 1st pregnancy [months]	Median (IQR)		40,8	18,4 – 66,4
First relapse [n. (%)]	No		27	(30.3%)
	Yes		62	(69.7%)
	Time to first relapse	Median (IQR)	30,6	(10.4 – 67.1)
	Site of first relapse	Ovary (ies)	58	(93.5%)
		Pelvic peritoneum	13	(21.0%)
		Extrapelvic peritoneum	3	(4.8%)
	Surgical treatment at first relapse	PSS	50	(80.6%)
		Demolitive surgery	12	(19.4%)
Second relapse [n. (%)]	No		57	(64.0%)
	Yes		32	(36.0%)
	Time from first to second relapse (months)	Median (IQR)	32.4	(16.1 – 55.7)
	Site of second relapse	Ovary (ies)	28	(87.5%)
		Pelvic peritoneum	10	(28.1%)
		Extrapelvic peritoneum	2	(6.3%)
	Surgical treatment at first relapse (n. 31)	PSS	23	(74.2%)
		Demolitive surgery	8	(25.8%)
Status at last FUP [n. (%)]	NED		86	(96.7%)
	AWD		2	(2.2%)
	DOD		1	(1.1%)

Figure 1. Fertility outcomes of patients



Conclusion/Implications: Despite the high recurrence rate, our series showed that FSS has excellent oncologic and fertility outcomes in the management of both advanced and recurrent BOTs and should not be reserved only for early-stage disease.

PR035 / #1309

POSTER ROUNDS 07: OVARIAN CANCER III

Topic: *AS10. Ovarian Cancer*

NATIONAL OVARIAN CANCER AUDIT IN ENGLAND AND WALES – ESTABLISHING HEALTHCARE IMPROVEMENT GOALS AND QUALITY PERFORMANCE INDICATORS

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Introduction: The National Ovarian Cancer Audit (NOCA) for England and Wales was established in 2023 following the Ovarian Cancer Audit Feasibility Pilot (OCAFP). NOCA uses linked routine registration data to report on quality performance indicators mapped to healthcare improvement goals.

Methods: Building on quality metrics used in the OCAFP and suggested by the British Gynaecological Cancer Society, the NOCA, following stakeholder engagement exercise including clinical reference group, patients, and charities, developed 5 improvement goals mapped to 7 performance indicators. These metrics applied to every woman in England diagnosed with ovarian cancer at any National Health Service Trusts. Although international metrics exist, they do not adjust for confounders such as ability to pay for care, comorbidities, patient referral pathways and are restricted to women treated at certain centres only. Here we present a population-based approach.

Results: The following improvement goals were identified for the NOCA and are mapped to performance indicators deriving from national guidelines/standards (Table):
1. Increase the proportion of patients receiving timely diagnosis and treatment decisions.
2. Increase the proportion of patients receiving molecular diagnostics.
3. Increase the proportion of patients receiving surgery.
4. Increase the proportion of patients receiving chemotherapy.
5. Improve rates of survival and reduce variation in survival.
The performance indicators are adjusted for potential confounders and aim to identify

positive outliers.

Healthcare improvement goal	Performance indicators	National guidance/standards
Increase the proportion of patients receiving timely diagnosis and treatment decisions.	Proportion of patients with ovarian cancer who were diagnosed via an emergency presentation.	Patients can be diagnosed late with advanced disease and a poor performance status due to delays in presenting for medical care, delays in primary care, delays between primary and secondary care or delays in secondary care. The OCAFP showed that women diagnosed via an emergency presentation were 4 times more likely to die within two months of diagnosis than those diagnosed via the two-week wait referral system[1].
Increase the proportion of patients receiving molecular diagnostics.	Proportion of patients with epithelial ovarian cancer on histology receiving germline panel testing.	Patients with BRCA mutations have a substantial progression-free survival benefit when receiving PARP-inhibitors[2]. Testing is also recommended by the BGCS. Additionally, it offers the opportunity for cascade testing of family members, allowing for preventative treatment for both breast and ovarian cancer. NICE guidelines on managing familial and genetic risk were published in March 2024.
	Proportion of patients with advanced stage (stage III/IV or unstaged) high grade epithelial ovarian cancer on histology receiving HRD testing (BRCA 1/2 and/or genomic instability).	
Increase the proportion of patients receiving surgery.	Proportion of patients with stage II-IV or unstaged ovarian cancer who receive cytoreductive surgery.	Surgical treatment is the cornerstone of ovarian cancer management[3]. NICE guidelines recommend maximal cytoreductive surgery for advanced ovarian cancer. That involves the removal of all identifiable disease. The OCAFP shows that on average only 51% of women with FIGO Stage II-IV and unstaged ovarian cancer will receive cytoreductive surgery in England in the nine months following diagnosis[4].
Increase the proportion of patients receiving chemotherapy.	Proportion of patients with high grade epithelial, stage II or above or unstaged, ovarian cancer who receive platinum-based chemotherapy.	First line chemotherapy treatment in ovarian cancer should include a platinum based compound, either in combination or as a single agent. Carboplatin is the platinum agent most commonly used, alone or in combination with paclitaxel, when the potential benefits outweigh the potential toxicity that paclitaxel is associated with[3].
	Proportion of patients with stage II-IV or unstaged ovarian cancer who receive any type of treatment (surgery and/or chemotherapy).	The OCAFP showed that 20.3% of patients did not have any treatment recorded between 1 month prior and 9 months following diagnosis[1]. Those patients were also more likely to die within 2 months following diagnosis (56.9%). This could have been because patients presented with advanced disease, high burden of comorbidity or poor performance status, have limited treatment options.
Improve rates of survival and reduce variation in survival.	Proportion of patients with ovarian cancer who are alive 1 year after the diagnosis.	Significant variation in 1-year survival across Cancer Alliances was highlighted in the OCFAP[1]. The 1-year survival was estimated to be 69% (which lags behind similar countries). That means that almost 1 in 3 women will die within 12 months following diagnosis and 14% within 2 months[1].

[1] Group OCAFP. Short-term mortality in ovarian, fallopian tube and primary peritoneal carcinomas across England. 2022.

[2] Tattersall A, Ryan N, Wiggans AJ, Rogozińska E, Morrison J. Poly(ADP-ribose) polymerase (PARP) inhibitors for the treatment of ovarian cancer. Cochrane Database Syst Rev. 2022;2(2):Cd007929.

[3] British Gynaecological Cancer Society (BGCS). Tubo-ovarian Cancer Guidelines: Recommendations for Practice Update 2024.

[4] Group OCAFP. Disease Profile in England: Incidence, mortality, stage and survival for ovary, fallopian tube and primary peritoneal carcinomas. 2020.

Conclusion/Implications: Real world population-based data can be used to establish quality performance indicators and drive improvement in care for women with ovarian cancer.

PR036 / #843

POSTER ROUNDS 08: CERVICAL CANCER II

Topic: *AS03. Cervical Cancer*

C-REACTIVE PROTEIN PROMOTES THE PROGRESSION OF CERVICAL CANCER BY STIMULATING LECTIN-LIKE OXIDIZED LOW-DENSITY LIPOPROTEIN RECEPTOR-1 (LOX-1).

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Introduction: C-reactive protein (CRP) is not only an indicator of inflammation, but also a prognosticator in patients with cardiovascular diseases and malignant diseases. Although previous investigations have suggested an elevated CRP in cancer patients is associated with poor prognosis, the mechanism remains unknown. We investigated the tumor-promoting effects of CRP in cervical cancer patients and in vitro cervical cancer models, with a special focus on lectin-like oxidized low-density lipoprotein receptor-1 (LOX-1).

Methods: To examine the tumor-promoting effect of CRP, the baseline characteristics, outcome data, and tumor specimens from 121 cervical cancer patients treated with definitive radiotherapy at our institution between 2014 to 2020 were collected and reviewed. We also performed laboratory investigations using cervical cancer cell lines overexpressing LOX-1 (ME180-LOX-1) or a control vector (ME-180-control).

Results: Elevated CRP was associated with poor prognosis. Immunohistochemical analyses showed that increased tumor LOX-1 expression is significantly associated with poor prognosis. When patients with high LOX-1 expression are evaluated according to serum CRP level, high CRP level (≥ 0.3mg/dL) exhibited significantly shorter overall survival compared with those with low CRP level (< 0.3mg/dL). In laboratory investigations, treatment ME180-LOX-1 cells with CRP stimulated cell proliferation in a dose-dependent manner via the activations of major survival signals, the effect of CRP was minimal in ME180-control cells. The effect of CRP in ME180-LOX-1 cells was canceled with LOX-1 inhibitor BI-0115.

Conclusion/Implications: Elevated CRP is associated with poor prognosis in cervical cancer patients treated with radiotherapy. LOX-1-mediated downstream signal activation may be a possible mechanism responsible for the tumor-promoting effect of CRP.

PR037 / #1078

POSTER ROUNDS 08: CERVICAL CANCER II

Topic: *AS03. Cervical Cancer*

CHARACTERIZATION OF MOLECULAR FEATURES AND IMMUNE MICROENVIRONMENT HETEROGENEITY IN HPV-NEGATIVE CERVICAL CANCER

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Introduction: Cervical cancer poses a significant threat to global women's health. HPV-negative cervical cancers are particularly notable due to their unique pathological profiles compared to their HPV-positive counterparts. A comprehensive understanding of their distinct molecular mechanisms and immune microenvironment is essential for advancing diagnostic and therapeutic innovations.

Methods: Our study encompassed nine HPV-negative cervical cancer cases. Molecular profiling was performed using next-generation sequencing with a 733-gene panel, while the immune microenvironment was assessed through two multiplex immunofluorescence panels, including markers such as CD68, PD-1, PD-L1, CD163, CD8, CK/S100, DAPI, CD56, CD4, FoxP3, CD20, and CD3. We analyzed tumor and stromal areas separately to evaluate the heterogeneity of the tumor microenvironment (TME).

Results: TP53 mutations were the most prevalent (33%), followed by ZFHX3 (22%). Other significant mutations included CDKN2A, CDH10, ATM, ARID2, ARID1A, each occurring once. No PTEN mutations were detected. Mutations were predominantly enriched in the TP53 pathway (44%), followed by the RTK-RAS pathway (33%).Clustering based on immune cell density within the tumor and stroma resulted in six and seven distinct groups, respectively. Notably, the TP53 pathway mutation group exhibited higher proportions of CD56 bright and CD56 dim cells in the stroma compared to the wild-type group (0.9 vs. 0.2, p=0.063; 1.6 vs. 0.5, p=0.086), with no significant differences in other markers.

Conclusion/Implications: HPV-negative cervical cancers exhibit distinct molecular and immune profiles compared to HPV-positive cancers. Particularly, mutations in the TP53 pathway are likely to influence patient prognosis by modulating immune cell distributions within the TME.

PR038 / #931

POSTER ROUNDS 08: CERVICAL CANCER II

Topic: *AS05. Fertility/Pregnancy*

UTERINE TRANSPOSITION IN CERVICAL CANCER TREATMENT. SIX YEARS EXPERIENCE.

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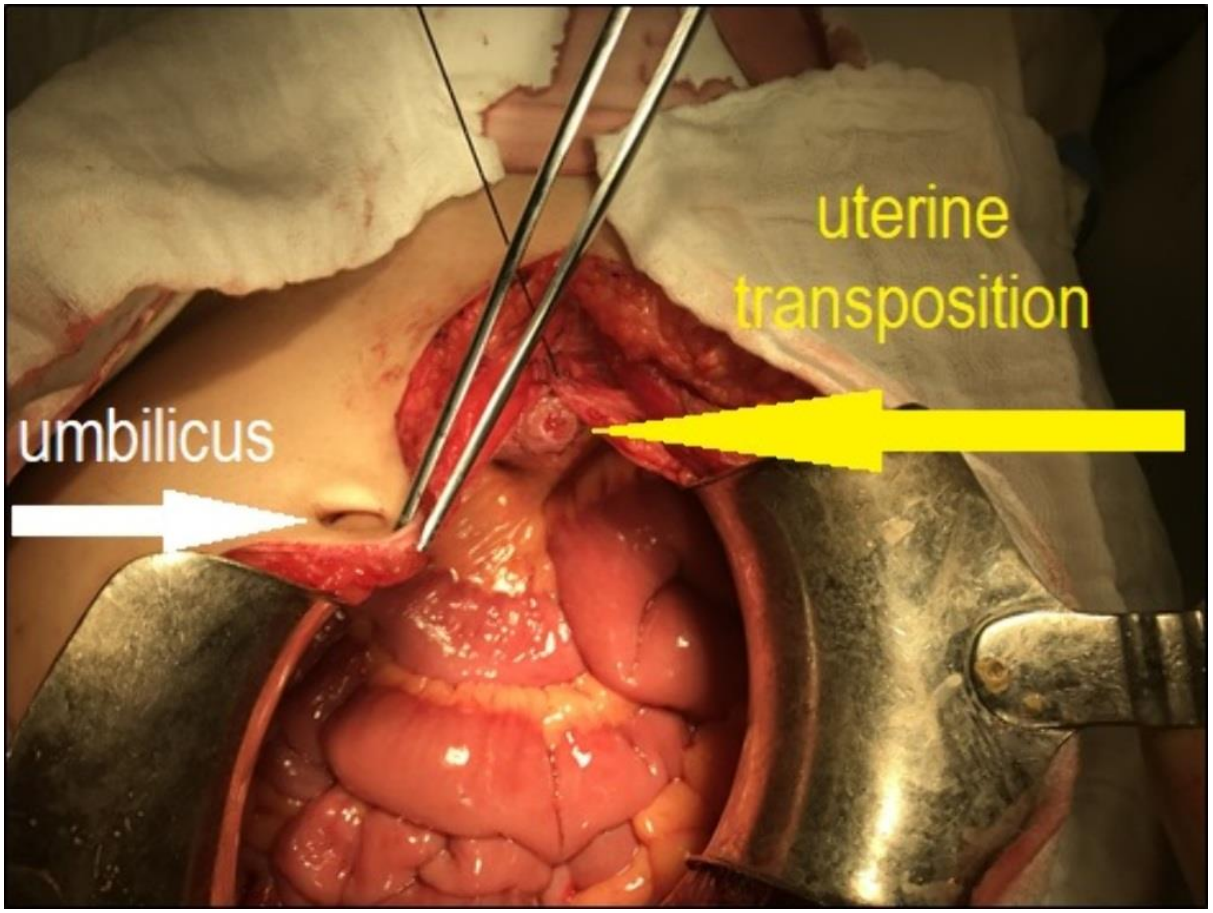
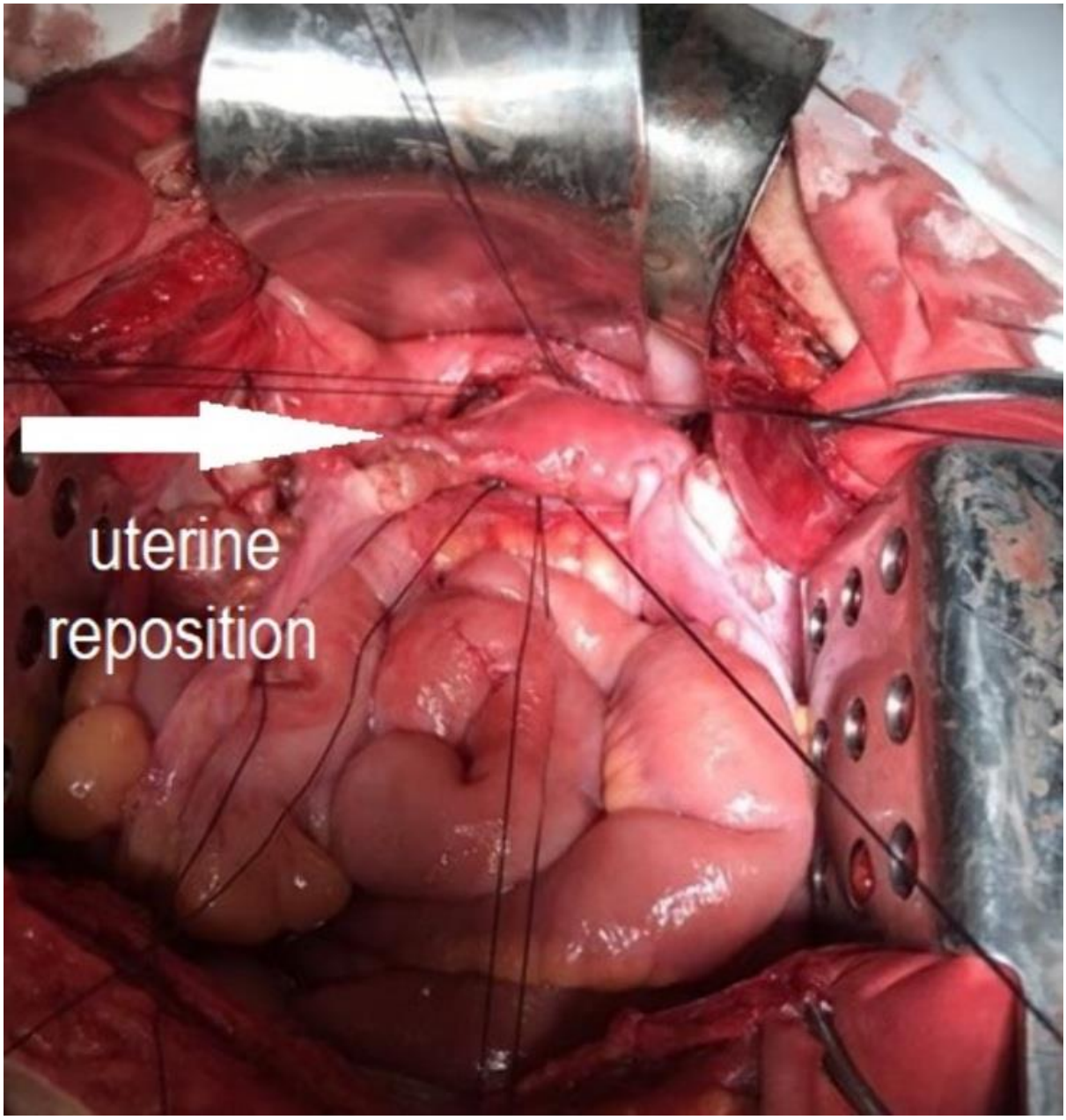
Introduction: The latest advancement in organ preserving treatment invasive cervical cancer for patients in reproductive age is radical trachelectomy. Nowadays, part of cases newly diagnosed invasive cervical cancer requires to combination of surgical and radiation treatment. The radiation component leads to lose fertility. Nevertheless, many women want to preserve hormonal and reproductive functions. Uterine transposition created conditions for performing the radiotherapy and allow execute fertility saving treatment without reducing oncological effectiveness.

Methods: Study included 16 patients with stages IB, II, IIIC cervical cancer. The median age is 31.1 years. Treatment was carried out in accordance with a research protocol including four steps. First step involved two courses of chemotherapy. At the second step radical trachelectomy (Piver type III) with transposition uterus and ovaries was performed (Photo 1).



Paraumbilically uterus transposition possible so, that created conditions for performing the radiotherapy. The third step included a standard chemoradiotherapy. On the next step of treatment, uterine reposition with utero-vaginal anastomosis was conducted

(Photo 2).



Results: The median observation is 21,2 months so far. Our entire patient's menses have been recovered. Nowadays no one has any signs of recurrence. Two patients are processing in vitro fertilization protocol.

Conclusion/Implications: The uterine transposition might be a novel standard of treatment for patients with invasive cervical cancer who interested to preserve hormonal and reproductive functions. The uterine transposition does not interrupt performing treatment according to the prescribed standards and, have not negative affect for ovarian function and menses.

PR039 / #987

POSTER ROUNDS 08: CERVICAL CANCER II

Topic: *AS18. Social Inequities and Impact on Cancer Outcomes*

RACIAL DISPARITIES IN RISK OF SECOND PRIMARY MALIGNANCIES AMONG PATIENTS WITH CERVICAL CANCER: ANALYSIS OF THE SEER DATABASE

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Introduction: Cervical cancer is the fourth most common cancer in women worldwide. This study aims to determine whether a history of cervical cancer is associated with an increased risk of a second primary (SP) compared to women without a history of cervical cancer.

Methods: Using the SEER database from 2000-2020, we calculated multiple primary standardized incidence ratios (MP-SIRs) across race/ethnicity in cervical cancer patients. Included in the analyses were non-Hispanic Whites (Whites), non-Hispanic Blacks (Blacks), non-Hispanic Asian/Pacific Islanders (APIs), and Hispanic Whites (Hispanics). We examined MP-SIRs for the following malignancies: all sites, all solid tumors, colon and rectum, lung and bronchus, breast, female genital system, urinary system, thyroid, and hematopoietic cancers. Demographic and clinical characteristics were compared across SP status (none vs. any) in all cervical cancer patients to determine which factors were associated with risk of SP.

Results: Included in the analyses were 58,414 women with a history of primary cervical cancer, of whom 3,747 (6.4%) developed SP. Of these 3,747 patients, 2,129 were White, 549 Black, 317 API, and 752 Hispanic. The MP-SIRs in all sites combined was significantly higher in all races ($p<0.05$), with Blacks having the highest MP-SIR at 1.79 (95% CI: 1.64-1.94) compared to 1.40 (95% CI 1.34-1.46) in Whites, 1.46 (95% CI 1.30-1.63) in APIs and 1.25 (95% 1.17-1.35) in Hispanics. The most marked increases in risk of a SP were cancers of the colon and rectum, lung and bronchus, female genital system, and urinary system. Characteristics associated with increased risk of a SP included older age at diagnosis ($p<0.01$), not having a surgical resection ($p=0.02$), undergoing radiotherapy ($p<0.001$), and a longer interval between diagnosis and

treatment (p=0.02).

	SIR (95% CI)			
Site	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian or Pacific Islander	Hispanic (All Races)
All Sites	1.40 (1.34 - 1.46)*	1.79 (1.64 - 1.94)*	1.46 (1.30 - 1.63)*	1.25 (1.17 - 1.35)*
All Solid Tumors	1.41 (1.35 - 1.47)*	1.89 (1.73 - 2.06)*	1.42 (1.26 - 1.59)*	1.21 (1.12 - 1.31)*
Colon and Rectum	1.46 (1.25 - 1.70)*	1.45 (1.07 - 1.92)*	1.18 (0.76 - 1.74)	1.39 (1.07 - 1.77)*
Lung and Bronchus	2.68 (2.44 - 2.95)*	2.71 (2.20 - 3.30)*	1.83 (1.30 - 2.50)*	1.23 (0.97 - 1.53)
Breast	0.77 (0.69 - 0.85)**	0.99 (0.81 - 1.21)	0.81 (0.62 - 1.05)	0.58 (0.47 - 0.69)**
Female Genital System	1.79 (1.61 - 1.99)*	3.92 (3.31 - 4.61)*	2.52 (1.98 - 3.17)*	2.40 (2.06 - 2.77)*
Urinary System	2.22 (1.88 - 2.59)*	2.43 (1.70 - 3.36)*	2.74 (1.70 - 4.19)*	1.95 (1.47 - 2.55)*
Thyroid	1.24 (0.99 - 1.53)	1.33 (0.66 - 2.37)	2.38 (1.54 - 3.51)*	1.85 (1.38 - 2.42)*
All Lymphatic/Hematopoietic Diseases	1.14 (0.95 - 1.35)	0.72 (0.43 - 1.14)	1.38 (0.85 - 2.14)	1.31 (1.00 - 1.70)

* significantly higher compared to baseline population
**significantly lower compared to baseline population

Conclusion/Implications: There is a significant association with black ethnicity and risk of developing a SP cancer in cervical cancer patients, highlighting the importance of optimizing screening and careful monitoring for SP.

PR040 / #437

POSTER ROUNDS 09: CANCER SURVIVORSHIP

Topic: *AS20. Survivorship*

IMPACT OF HORMONE THERAPY USE ON SURVIVAL OUTCOMES OF OVARIAN CANCER IN BRITISH COLUMBIA

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Introduction: There is ambiguity regarding the risks and benefits of using hormone replacement therapy (HRT) after a diagnosis of epithelial ovarian cancer. Studies suggest that HRT either has no impact or a potential benefit on survival, but they do not disaggregate histotypes, are based on self-reported data, or have very small sample sizes.

Methods: In this population-based, retrospective cohort study, we examined all people diagnosed with epithelial ovarian cancer between January 1st, 1996, and December 31st, 2020, in British Columbia, Canada, who survived at least one year after their diagnosis. We compared the survival of new HRT users after diagnosis using cumulative days exposed to hormone therapy using Cox proportional hazards regression with a time-varying exposure variable. Criteria for HRT use included a minimum of six months of exposure and systemic hormone usage.

Results: Of the 5,681 ovarian cancer patients, 446 (8%) initiated HRT post-diagnosis. With all histotypes aggregated, HRT was not significantly associated with survival (adjusted hazard ratio [aHR] 0.87, 95% confidence interval [CI] 0.74-1.02). However, upon disaggregating by histotype, HRT use was significantly associated with improved survival in the serous histotype ([aHR] 0.80, 95% [CI] 0.66-0.98). In contrast, in the endometrioid histotype, HRT was detrimental to ovarian cancer survival ([aHR] 2.47, 95% [CI] 1.41-4.30).

Conclusion/Implications: This study presents evidence that the effect of HRT use in ovarian cancer varies by histotype. These findings emphasize the importance of considering histotype for post-diagnosis HRT use and suggest the potential safety of HRT for serous cancer patients who want to use HRT for quality of life.

PR041 / #440

POSTER ROUNDS 09: CANCER SURVIVORSHIP

Topic: *AS20. Survivorship*

THE ASSOCIATION OF DIETARY FAT AND FATTY ACID INTAKE WITH OVARIAN CANCER SURVIVAL: FINDINGS FROM THE OOPS, A PROSPECTIVE COHORT STUDY

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Introduction: Dietary fat and fatty acid intakes impact the occurrence and development of several cancers. However, the evidence regarding dietary fat and fatty acid intake and ovarian cancer (OC) survival is limited. We, thus, aimed to provide a report on the associations between fat and fatty acid intake and OC survival.

Methods: This prospective cohort study analyzed data collected between 2015 and 2020 from 703 newly diagnosed OC patients, aged 18–79 years. Deaths were ascertained until March 31, 2021, via medical records and active follow-up. Dietary intake was derived from a validated food frequency questionnaire. Cox proportional hazard models were used to explore associations. Furthermore, several subgroup and sensitivity analyses were also performed.

Results: A total of 130 patients died during a median follow-up of 37.17 (interquartile: 24.73–50.17) months. Relative to the lowest tertile of intake, patients with the highest tertile of pre-diagnosis total fatty acid, total saturated fatty acid (SFA), shorter-chain SFA, long-chain SFA, total monounsaturated fatty acid (MUFA), and animal-based MUFA intake had worse overall survival. Additionally, poor survival associated with several common fatty acid intakes, including capric acid, palmitic acid, stearic acid, and oleic acid, was also observed. Furthermore, results from numerous subgroup and sensitivity analyses were consistent with the main finding.

Conclusion/Implications: We provide evidence linking pre-diagnosis consumption of total fatty acid, SFA, shorter-chain SFA, long-chain SFA, total MUFA, and animal-based MUFA with worse overall survival of OC patients.

PR042 / #588

POSTER ROUNDS 09: CANCER SURVIVORSHIP

Topic: *AS20. Survivorship*

NURSE-LED OVARIAN CANCER SURVIVORSHIP AND SURVEILLANCE CLINIC (THE GO-FORWARD CLINIC) OBSERVATIONS FROM A YEAR IN REVIEW.

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Introduction: The GO Forward clinic launched on the 12th May 2023 (World Ovarian Cancer Day). This nurse led initiative combines a comprehensive in person education clinic with virtual surveillance reviews supporting patients moving into the post active treatment phase of their cancer journey. The aim of the clinic is to empower patients to live well and achieve their best possible health whilst living with a poor prognosis cancer diagnosis.

Methods: The National Comprehensive Cancer Network (NCCN) distress thermometer and a holistic needs assessment (HNA) was used to guide the face to face consultations. Observations from these assessment tools over a 12 month period are presented to highlight the distinctive concerns of this cohort of patients.

Results: 151 patients have been reviewed in the GO Forward clinics to date (60% Stage 3/4 disease). 54 patients attended an in person education clinic and of whom, 46% report emotional concerns (thinking about the future, worry, fear, anxiety and uncertainty) and 35% psychosocial concerns (relationships, work, finances and childcare). Women with ovarian cancer live with a significant risk of cancer recurrence or disease progression making fear of cancer recurrence an important survivorship issue. Uncertainty around how to recognise signs and symptoms of recurrence heightens these concerns.

Conclusion/Implications: Nurse led clinics allow for a continuity of care, which identifies and addresses psychological and psychosocial distress. Specialist oncology nurse led clinics are pivotal in supporting the psychosocial and informational needs of survivors but also highlight key areas of unmet need that require further research.

PR043 / #891

POSTER ROUNDS 09: CANCER SURVIVORSHIP

Topic: *AS20. Survivorship*

A DEDICATED NURSE-LED FOLLOW-UP AND SURVEILLANCE CLINIC FOLLOWING VULVAL CANCER TREATMENT: ADDRESSING SEXUAL FUNCTION

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Introduction: The negative impact that a vulval cancer diagnosis and treatment can have on a woman's sexual health is widely recognised. This can contribute to feelings of loneliness and stigmatisation and is often a taboo subject in clinical practice. A lack of dialogue can validate these feelings and can contribute to the information needs of patients not being met.

Methods: In November 2022, the Gynaecological Oncology (GO) forward vulval clinic was established. A nurse-specialist-led follow-up and survivorship clinic,was established at the Mater Misericordicae University Hospital, Dublin, to provide care to women following treatment for vulval cancer. The establishment of a nurse-patient relationship through this clinic has allowed for discussion of the negative impact vulval cancer and its treatment can have on sexual function. The implementation of an integrated care model aiming to address both the physical and psychological side effects would then be introduced.

Results: A specific care bundle addressing sexual dysfunction was co-created with patients. This includes: 1. A referral to a dedicated pelvic floor physiotherapist. 2..Introduction of vaginal oestrogen. 3. Patient information regarding libido, and loss of sexual desire following a cancer diagnosis. 4. Information concerning dedicated psychosexual counselling. Delivery of this care bundle has facilitated discussion of sexual dysfunction, particularly in second and subsequent appointments

Conclusion/Implications: Healthcare professionals including oncology nurses might not feel that they have the skill set required to address this unmet need, simple tools can be implemented into their clinical practice which can optimise the management of this cancer-related side effect.

PR044 / #1049

POSTER ROUNDS 09: CANCER SURVIVORSHIP

Topic: *AS19. Surgical Techniques and Perioperative Management*

NON - HOME DISCHARGE AFTER SURGERY FOR OVARIAN CANCER: A NSQIP ANALYSIS OF PREDICTIVE FACTORS IN PREVIOUSLY INDEPENDENT PATIENTS

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Introduction: Non-home discharge after surgery for ovarian cancer (OC) can be associated with delay in adjuvant treatment. The purpose of this study is to identify predictive factors associated with non-home discharge (NHD) in previously independent patients undergoing surgery for OC.

Methods: Using the ACS-NSQIP 2013-2021, patients age ≥ 40 years old who underwent laparotomy for OC and had a pre-operative "independent" functional status were included. Study groups were stratified by discharge destination: "home" vs "non-home". NHD included: hospice, rehab, separate acute care, skilled care not home, and unskilled facility that is not home. Baseline characteristics, pre-operative and intra-operative factors were compared between groups.

Results:

Table 1 – Intra-Operative characteristics

Variable	Home N=10,467	Non-Home N=459	P value
Operative time, minutes	189.9±98.5	225.1±115.2	<.0001
ASA Class			<.0001
I	204 (2.0%)	1 (0.2%)	
II	3864 (36.9%)	96 (20.9%)	
III	5830 (55.7%)	322 (70.2%)	
IV	561 (5.4%)	40 (8.7%)	
None assigned	8 (0.1%)	0 (0)	
Bowel surgery	1753 (16.8%)	138 (30.1%)	<.0001
Low Anterior Resection	634 (6.1%)	38 (8.3%)	.05
Any abdominal lymph node dissection	1696 (16.2%)	75 (16.3%)	.938
Splenectomy	280 (2.7%)	26 (5.7%)	.0001
Days from operation to death	17.2±8.3	20.0±12.5	.546
Total units of transfusion	2.3±2.6	2.5±1.8	.837
Total length of hospital stay, days	4.6±3.3	8.9±6.7	<.0001
Days from operation to discharge	4.4±2.9	8.8±6.5	<.0001

Continues variables are presented as means ± standard deviation. Categorical variables are presented as n (%)

Table 2 – Multivariate logistic regression

Variable	Odds Ratio (95% CI)	p-value
Pre-operative Factors:		
Elderly (Age ≥70 years old)	6.03 (4.85-7.48)	<.0001
Obesity (BMI≥30 kg/m²)	1.24 (1.00-1.53)	.047
Diabetes	1.59 (1.00-2.53)	.050
Hypertension	1.41 (1.13-1.77)	.002
Smoking	0.88 (0.60-1.29)	.519
Frail	1.09 (0.67-1.78)	.738
Albumin < 3.5 g/dL	1.40 (1.15 -1.71)	.0006
Hematocrit <35%	1.12 (0.92-1.37)	.247
ASA Class ≥3	1.45 (1.14-1.84)	.002
Disseminated Cancer	1.16 (0.94-1.42)	.136
Intra-operative Factors:		
Bowel Surgery	1.69 (1.32-2.19)	<.0001
Low Anterior Resection	0.71 (0.47-1.06)	.094
Splenectomy	1.69 (1.08-2.64)	.020
Operative time ≥180 minutes	1.69 (1.37-2.08)	<.0001

Overall, 10,926 patients were included. Of whom, n=10,467 (95.8%) were discharged home, and n=459 (4.2%) in the NHD group. The NHD group were older (72.9±9.5 vs 61.5±10.5, p<.0001), and had higher rates of diabetes and hypertension, compared to those discharged home. In addition, NHD had higher rates of frailty (20.5% vs 9.5%, p<.0001). Concurrent bowel surgery, splenectomy and operative time≥180 minutes were all associated with NHD. As for intra-operative characteristics, NHD had longer operation time (225.1±115.2 vs 189.9±98.5, p<.0001), (table 1). In a multivariate logistic regression, pre-operative factors that remained significantly associated with NHD were age≥70 years old (OR 6.03, 95% CI 4.85-7.48, p<.0001), obesity, hypertension, albumin <3.5 g/dL, and ASA ≥3, (Table 2).

Conclusion/Implications: Predictive factors for NHD were identified for previously independent patients having surgery for OC. These factors should be considered in pre-operative counselling, as patients at risk might benefit from prehabilitation program.

PR045 / #341

POSTER ROUNDS 10: ENDOMETRIAL CANCER OUTCOME PREDICTION

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

DEVELOPING AN INTERPRETABLE DEEP LEARNING MODEL FOR PREDICTING MOLECULAR SUBTYPES OF ENDOMETRIAL CANCER USING H&E STAINED SLIDES

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Introduction: Endometrial cancer classification into four molecular subtypes is crucial for treatment efficacy and prognosis. Traditional molecular typing, while effective, involves high costs and technical complexity. Digital pathology and deep learning provide a cost-effective alternative, analyzing digital slides to predict tumor characteristics and aid in treatment planning.

Methods: The study utilized comprehensive datasets from 333 Fudan and 358 TCGA endometrial cancer patients, including clinical, prognosis, and gene sequencing data. After quality checks, 300 Fudan and 267 TCGA slides were categorized into MMRd, NSMP, p53abn, and POLEmut subtypes. Digital slides were processed to isolate tumor-rich image blocks, which were classified using an EfficientNetV2 network enhanced by 5-fold cross-validation and ImageNet pre-training.

Results: This study successfully predicted the 4 molecular subtypes of endometrial cancer and mutations in 9 related genes. Performance exceeded mainstream slice classification networks CLAM-SB and Attention-MIL. In the Fudan dataset, the model achieved AUROCs of 0.807 (95% CI: 0.753-0.860) for MMRd, 0.836 (95% CI: 0.761-0.910) for NSMP, 0.832 (95% CI: 0.768-0.887) for p53abn, and 0.836 (95% CI: 0.757-0.907) for POLEmut, with a macro-average of 0.836 (95% CI: 0.791-0.881). In the TCGA-UCEC test set, AUROCs were 0.741 for MMRd, 0.808 for NSMP, 0.885 for p53abn, and 0.791 for POLEmut. Combining TCGA with Fudan's 5-fold cross-validation, the model's overall performance only experienced slight degradation.

Conclusion/Implications: This innovative approach simplifies endometrial cancer subtyping and opens pathways for non-sequencing molecular classification across different cancers, enhancing personalized treatment strategies.

PR046 / #390

POSTER ROUNDS 10: ENDOMETRIAL CANCER OUTCOME PREDICTION

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

A RADIOGENOMICS APPLICATION FOR PREDICTING MOLECULAR SUBTYPING ENDOMETRIAL CANCER FEATURES: A MULTICENTER RETROSPECTIVE STUDY

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Introduction: The shift from FIGO 2008 to FIGO 2023 of EC introduces molecular subtyping, which include POLE, MMR-D, NSMP and p53abn for staging. We aimed to explore a novel radiogenomics approach to create a gene expression signature for EC patients, improving prognostic and predictive information for patients.

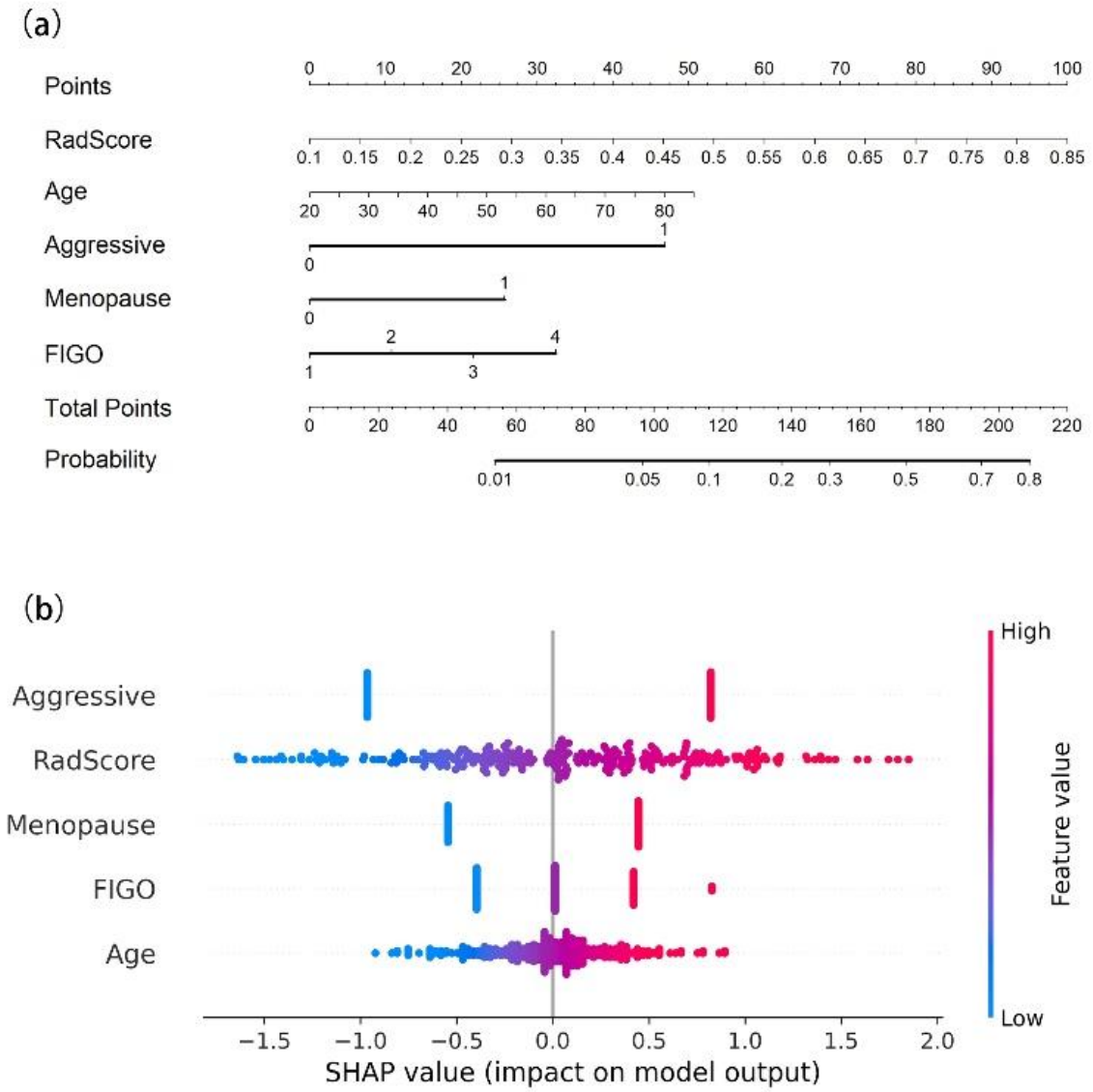
Methods: We collected preoperative MRI, molecular, and clinicopathological data from EC patients at three medical centers. ROIs were delineated and reviewed by two radiologists. The data served as training and test sets respectively. Radiomics features were extracted from the ROIs. The discrimination models for four molecular subtypes were established based on univariate and multivariate logistic regression analyses. Five-fold cross-validation was performed to determine the hyper-parameters. Performance was assessed using macro-average and class-wise AUCs in various models.

Results: Patients were recruited from three medical centers: 292 individuals from the Institution 1, 154 from Institution 2 and 80 from Institution 3. The AUC of the Clinical-Radiomics Combined Model improved by 0.771 (95% CI 0.704-0.803), 0.705(95% CI 0.594-0.769) and 0.731 (95% CI 0.570-0.815) in the internal and external test set 1 and 2, respectively. The class-wise AUCs were shown in Table 1. Nomogram and SHAP showcased the significance of the Rad Score compared with clinicopathological data (Figure 1). Table 1. The class-wise AUCs of Models in different molecular subtyping.

	POLE	MMR-D	NSMP	p53abn
AUC of Clinical Model (95% CI)				
internal test	0.677(0.574-0.776)	0.562(0.498-0.627)	0.739(0.677-0.804)	0.774(0.710-0.830)
external test 1	0.569(0.362-0.779)	0.625(0.522-0.721)	0.673(0.574-0.762)	0.739(0.615-0.849)
external test 2	0.532(0.386-0.688)	0.560(0.383-0.752)	0.674(0.542-0.794)	0.726 (0.491-0.916)
AUC of Radiomics Model (95% CI)				
internal test	0.674(0.563-0.777)	0.642(0.576-0.709)	0.695(0.627-0.755)	0.652(0.576-0.730)
external test 1	0.746(0.625-0.875)	0.632(0.520-0.749)	0.634(0.547-0.727)	0.640(0.534-0.744)
external test 2	0.699(0.556-0.835)	0.678(0.502-0.849)	0.688(0.569-0.799)	0.621(0.396-0.819)
AUC of Clinical-Radiomics Combined Model (95% CI)				
internal test	0.791(0.712-0.864)	0.698(0.631-0.761)	0.793(0.732-0.846)	0.803(0.744-0.858)
external test 1	0.697(0.566-0.829)	0.666(0.559-0.775)	0.694(0.602-0.782)	0.764(0.650-0.869)
external test 2	0.757(0.613-0.885)	0.677(0.499-0.840)	0.730(0.615-0.830)	0.761(0.556-0.920)

Figure 1. The Nomogram(a) and SHAP summary plot (b) of Rad Score and clinicopathological features in

p53abn.



Conclusion/Implications: MRI-based integrated radiogenomic profiling offers a refined molecular subtyping characterization, which can assist in prognostication and guide future treatment strategies for EC.

PR047 / #454

POSTER ROUNDS 10: ENDOMETRIAL CANCER OUTCOME PREDICTION

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

ONCOLOGICAL OUTCOMES IN PATIENTS UNDERGOING FERTILITY-SPARING TREATMENT OF ATYPICAL HYPERPLASIA AND GRADE 1 ENDOMETRIAL CANCER USING PROGESTIN THERAPY: RESULTS OF A NOVEL, SPECIALIZED ONCOFERTILITY PROGRAM

Oleksandra Dzyubak[1,2], Rachel Kim[1,2], Karen Glass[2], Megan Watts[3], Oishika Tarafdar[4], Andrea Simpson[2], Manjula Maganti[5], Shima Deljoomanesh[1], Stephane Laframboise[1,2], Sarah Ferguson[1,2]
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Introduction: This study describes the oncological outcomes of patients with atypical hyperplasia (AH) or low-grade endometrial cancer (EC) desiring fertility preservation, enrolled in a specialized oncofertility program.

Methods: Patients referred between 2019–2023 were reviewed. This novel program provides integrated oncologic and reproductive endocrinology and infertility care, following standardized treatment pathways. Enrollment criteria include: AH/EC grade 1 histology, no myometrial invasion or extra-uterine disease and desire to preserve fertility. Progestin IUD was the preferred treatment due to tolerance and compliance. Kaplan-Meier and Cox regression models were used to estimate the event rates and outcome predictors.

Results: Of 180 patients, 101 (56%) had AH and 79 (44%) had EC. Median age was 35.4 years (22.3–45.1) and median BMI was 32.7 kg/m^2 (17.6–64.1). Median follow up was 20.7 (0.49–134) months. In 149 patients on progestin treatment, the complete response (CR) rate was 78% (AH 82%; EC 72%). The CR probability for the whole cohort at 24 months was 82.4%. AH group had a significantly higher CR probability than EC (87.8% vs 73.6%, p= 0.011, Figure 1). The median time to CR was 10.3 months. On multivariate analysis, higher BMI was associated with lower likelihood of CR (HR 0.97, p=0.004). Despite routine endometrial protection with progestin, recurrence probability at 24 months was 32%, with no difference between AH and EC (33% vs 31%, p=0.62, Figure 2). There was no extrauterine recurrence or death.

Figure 1. Probability of complete response (CR) by pathology (*n* = 149)

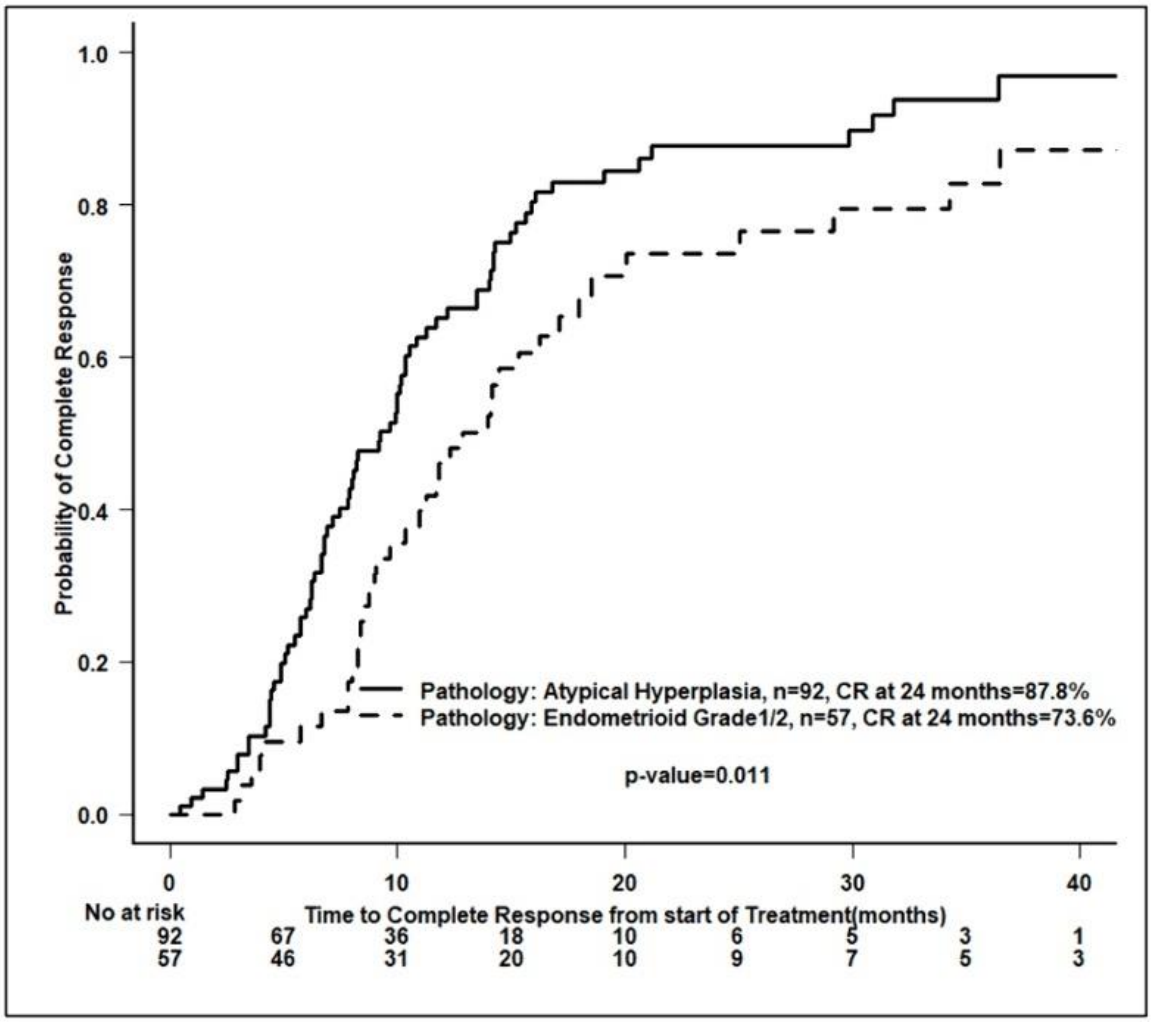
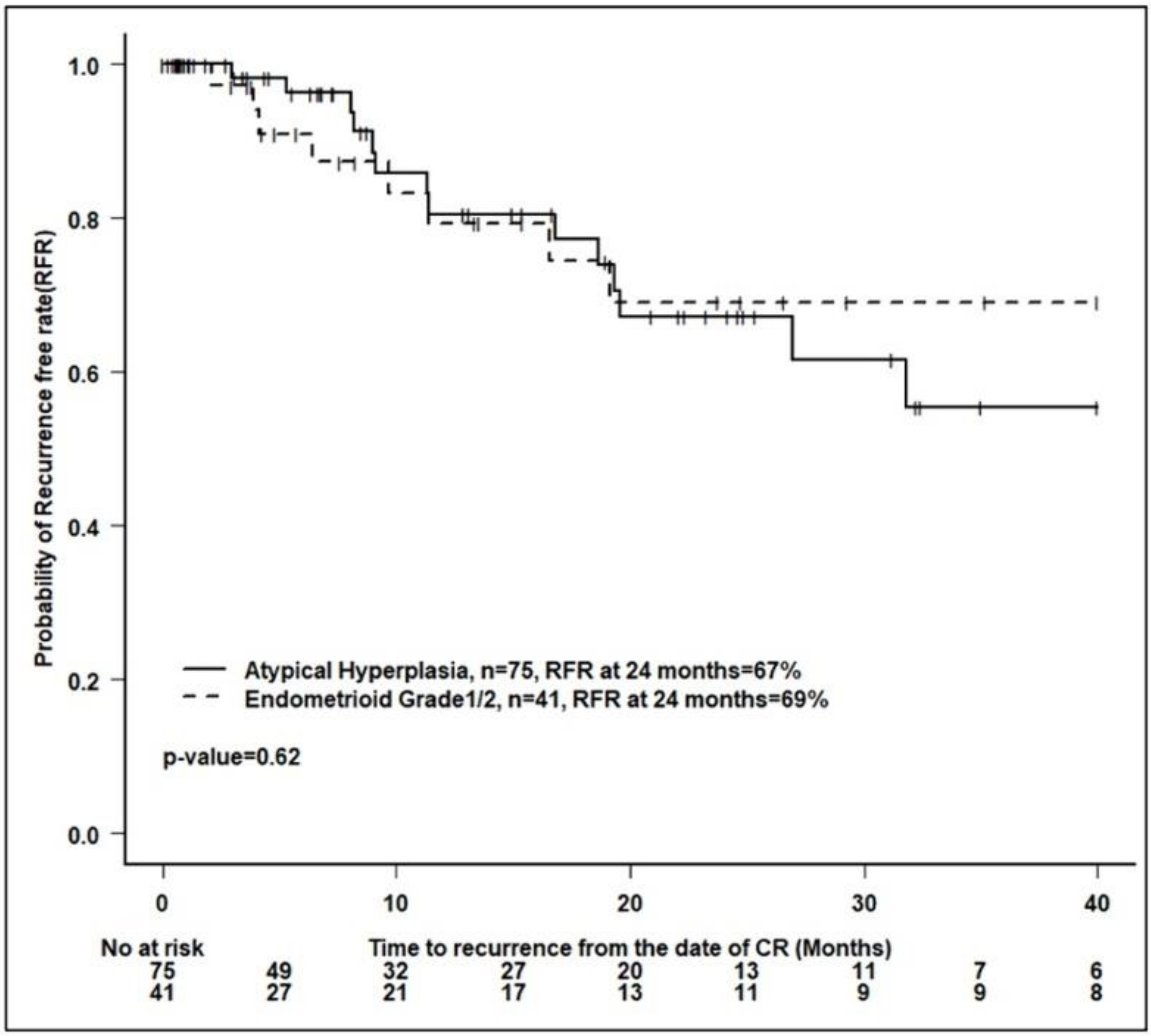


Figure 2. Probability of the recurrence free rate by pathology (*n* = 116)



Conclusion/Implications: Patients in a specialized oncofertility program had high rates of CR that continued up to 24 months suggesting that longer periods of treatment are feasible.

PR048 / #472

POSTER ROUNDS 10: ENDOMETRIAL CANCER OUTCOME PREDICTION

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

MICROSATELLITE INSTABILITY PREDICTION MODEL USING THE RADIOMICS OF F-18 FLUORODEOXYGLUCOSE POSITRON EMISSION TOMOGRAPHY/COMPUTED TOMOGRAPHY IN ENDOMETRIAL CANCER

Jong Mi Kim[1], Gun Oh Chong[2], Yoon Hee Lee[1], Hee Yeun Yoon[1], Min Ju Kim[1]
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Introduction: Microsatellite instability (MSI) is an essential test for predicting disease prognosis and setting treatment directions in endometrial cancer. However the testing methods such as sequencing (NGS, PCR) are expensive and time-consuming. In our study, we aimed to develop and evaluate a model to predict MSI in endometrial cancer using PET-CT radiomics.

Methods: This study was a retrospective study conducted at a single institution. We targeted 234 patients with pathologically confirmed endometrioid type endometrial cancer. We created a prediction model from PET-CT scans performed before surgery, and the actual MSI status was confirmed based on the pathology results. We extracted radiomics features from PET-CT images, and performed machine learning based on these features using techniques such as multi-layer perception, XGBoost, and random forest. And we measured the AUROC for each model to select the best model for predicting MSI status.

Results: Among the 234 patients, 50 patients had pathologically confirmed MSI-high, and 184 patients had MSI-low status. In multivariate analysis of clinical features using Ridge regression, the mean AUROC was confirmed to be 0.622. When using radiomics features, the multi-layer perception model showed the highest AUROC of 0.688. Combining clinical and radiomics features resulted in a higher AUROC than either feature alone, with the multi-layer perception model showing the highest value at 0.702.

Conclusion/Implications: In conclusion, our study demonstrates the ability to predict MSI status in endometrioid type endometrial cancer using machine learning with PET-CT radiomics. The maximum prediction performance was AUROC 0.702, sensitivity 0.721, and specificity 0.737.

PR049 / #1003

POSTER ROUNDS 10: ENDOMETRIAL CANCER OUTCOME PREDICTION

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

THE PREDICTION OF RECURRENCE AFTER FERTILITY SPARING TREATMENT IN PATIENTS WITH ATYPICAL ENDOMETRIAL HYPERPLASIA AND ENDOMETRIAL CANCER: THE PILOT MODEL.

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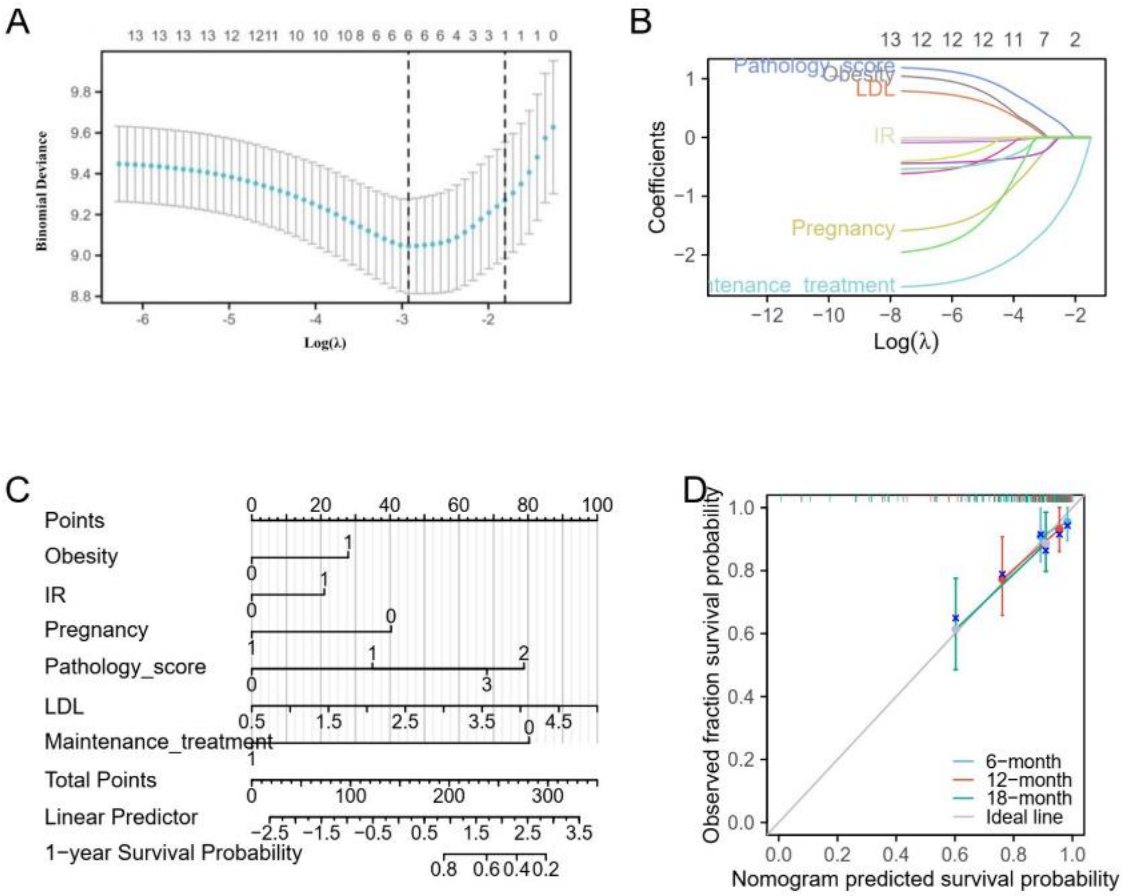
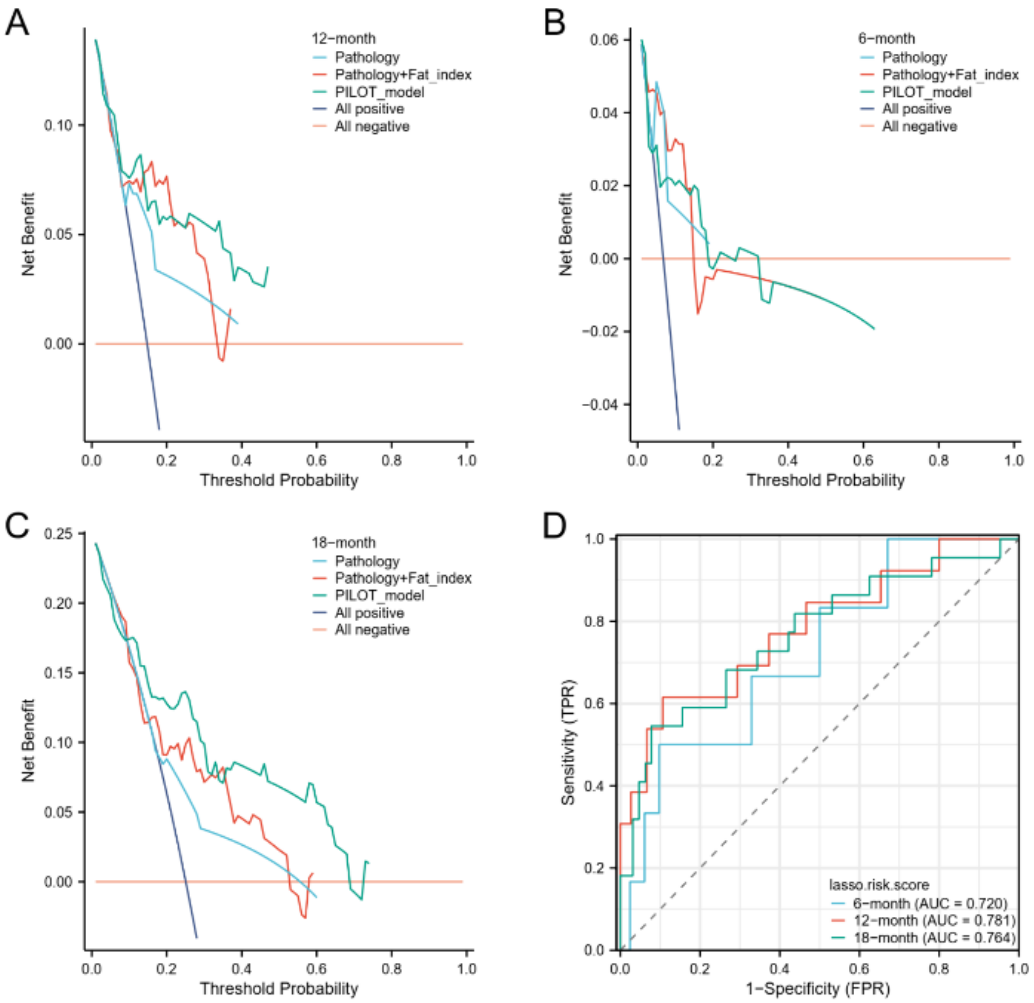
Introduction: The recurrence rate after fertility sparing treatment in patients with endometrial cancer (EC) and atypical endometrial hyperplasia (AEH) ranges from 20%~30%. But there is no predictive model available to guide clinical practice for recurrence.

Methods: A retrospective study was conducted, collecting data from January 2009 to March 2023, on patients with EC and AEH who achieved complete remission after fertility sparing treatment at Peking University People's Hospital. Data were analyzed using least absolute shrinkage and selection operator (LASSO) regression analysis to develop a predictive nomogram for recurrence. Decision curve analysis (DCA) and time-dependent receiver operating characteristic (ROC) curve were used to assess predictive performance.

Results: 55 non-recurrent patients and 34 recurrent patients were included in this study. The pathology score is defined as the sum of the pathology type (AEH=0, EC=1), histological stage (1a=1, 1b=2), and grade (G1=0, G2=1, G3=2). After retaining the pathology score, obesity, insulin resistance (IR), low-density lipoprotein (LDL), maintenance treatment, and pregnancy as factors affecting recurrence, the LASSO regression obtained the optimal evaluation value. The predictive model incorporating these six factors was named the PILOT model. A nomogram model was established using these six factors, and the calibration curve showed good consistency between predicted and observed outcomes. The PILOT model demonstrated considerable predictive efficacy at 6 months (AUC=0.720), 12 months (AUC=0.781), and 18 months (AUC=0.764) for recurrence
prediction.



(A) The coefficient selection plot of LASSO regression analysis. (B) The variable trajectory plot of LASSO regression analysis. (C) The nomogram for predicting recurrence. (D) The calibration curve of the recurrence nomogram.



(A) (B) (C) The DCA plots for the 6-month, 12-month, and 18-month prediction models of recurrence. Pathology includes pathology score; fat index includes obesity, LDL, and IR.(D) Time-dependent ROC curves for recurrence prediction by the PILOT model.

Conclusion/Implications: The PIOLT model, incorporating pathology score, obesity, LDL, IR, maintenance treatment, and pregnancy as risk factors, demonstrated good accuracy in predicting recurrence in patients with AEH/EC after fertility sparing treatment.

PR050 / #1030

POSTER ROUNDS 10: ENDOMETRIAL CANCER OUTCOME PREDICTION

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

EFFECTS OF METABOLIC RISK SCORE ON TREATMENT DECISION FOR ENDOMETRIAL CANCER: ESTABLISHMENT OF A MACHINE LEARNING-BASED PREDICTIVE MODEL FOR SURVIVAL

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Department of Obstetrics and Gynecology, Peking University People's Hospital, Beijing, China, Beijing, China

Introduction: This study assessed the predictive value of the metabolic risk score (MRS) for survival in endometrial cancer (EC) patients.

Methods: We included 834 patients who were diagnosed with EC between January 2006 and December 2022 in Peking University People's Hospital. All patients were randomly divided into the training and validation cohorts in a ratio of 2:1. Data on clinicopathological information were collected. The univariate COX analysis was used to define candidate factors for survival. Ninety-six kinds of predictive models via the Leave-One-Out Cross-Validation framework were used to screen for the combination with the highest C-index. Survival curve and receiver operating characteristic (ROC) curve were used to estimate the accuracy of the enrolled factors for OS and RFS.

Results: Independent predictors included high-density lipoprotein (HDL) , age, MSR, histology, grade, peritoneal cytology, and FIGO stage. Our model was established to predict the patient's probability of OS and RFS based on these factors. ROC curve analysis showed that both training and validation cohorts demonstrated excellent predictive ability for OS and RFS at 1-, 3-, and 5-year follow-ups. Subsequently, the Kaplan-Meier curves demonstrated differences that proved the accuracy of the models. It is worth noting that in model2 with MRS removed, there is an overall decrease in AUC values. The AUC value for the OS curve in the training cohort decreased from 0.9 to 0.85, while for RFS curve, it decreased from 0.86 to 0.79.

Conclusion/Implications: Establishment of MRS-based prediction model are useful for predicting survival in patients with EC and may facilitate better clinical decision-making.

PR051 / #883

POSTER ROUNDS 11: OVARIAN CANCER IV

Topic: *AS02. Breast Cancer*

INDUCING A DOUBLE HIT TO BREAST TUMORS USING INTRA-TUMORAL DRUG DELIVERY WITH LOCAL ABLATION

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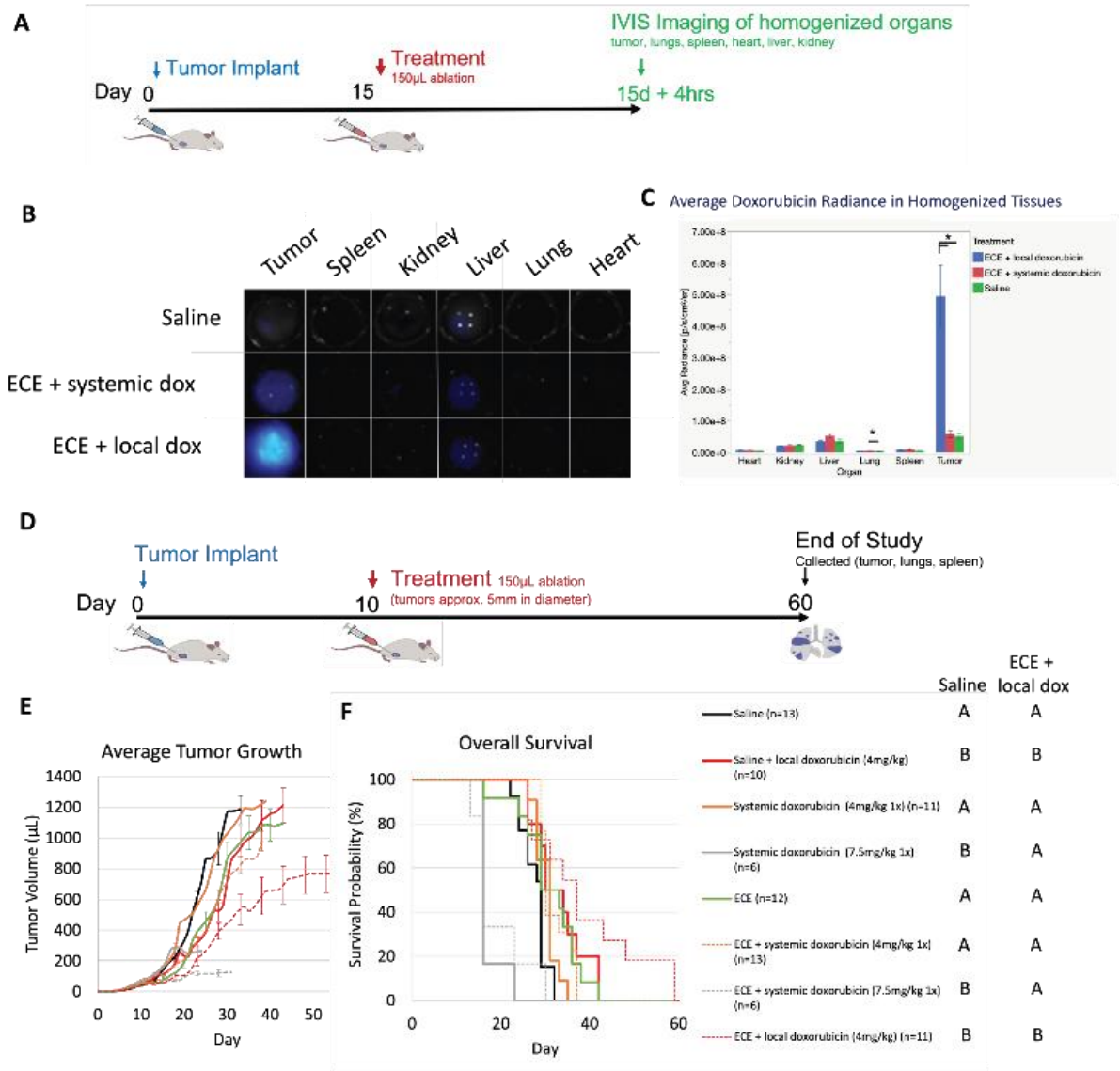
[1]Duke University, Bme, Durham, United States of America, [2]Calla Health Foundation, Durham, United States of America

Introduction: Our objective was to demonstrate the safety and efficacy of an ablation-based drug delivery method using ethyl-cellulose ethanol (ECE) through a biodistribution study looking at chemotherapy concentrations in the heart, kidney, liver, lung, spleen, and tumor, as well as a long term survival study in a murine model of breast cancer.

Methods: Biodistribution study: 4T1-Luc murine breast tumors were established in female BALB/c mice randomized to one of three groups (n=10 mice per group): ECE + local doxorubicin, ECE + systemic doxorubicin, or saline injection (no ECE) alone. Organ tissue was collected 4 hours after treatment and homogenized for analysis with IVIS imaging to quantify fluorescence from doxorubicin. Survival: 4T1-Luc bearing mice were randomized ECE with local doxorubicin or one of seven control groups (n=~10 mice per group).

Results: Figure 1A-C shows the results from the biodistribution study. There were no significant differences in doxorubicin fluorescence within the heart, kidney, liver, and spleen; however, there was a significant increase in doxorubicin fluorescence within the lungs from mice treated with ECE + systemic doxorubicin. Further, there was a significant increase in doxorubicin fluorescence within the tumors of mice treated with ECE + local doxorubicin compared to ECE + systemic doxorubicin and saline control. Figure 1D-F shows the results from the suvival study. Overall survival for ECE + local doxorubicin was significantly longer than treatment with the same doxorubicin dose delivered systemically or

locally.



Conclusion/Implications: Chemotherapy-loaded ECE reduces systemic chemotherapeutic distribution and increases chemotherapy concentration within the tumor, translating into delayed tumor growth and improved overall survival.

PR052 / #1196

POSTER ROUNDS 11: OVARIAN CANCER IV

Topic: *AS06. Genetics and Epidemiology*

METABOLIC SYNDROME AND RISK OF BREAST, ENDOMETRIAL AND OVARIAN CANCER AMONG POSTMENOPAUSAL WOMEN IN THE UK BIOBANK.

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Queen's University Belfast, Centre For Public Health, Belfast, United Kingdom

Introduction: There is some evidence that metabolic syndrome (MetS) is associated with postmenopausal breast and gynaecological cancer risk. However, the results from previous studies have been inconsistent and varied by MetS definition. This study aimed to investigate if women with MetS had a higher risk of breast, endometrial or ovarian cancer than women without MetS.

Methods: Using data from the UK Biobank the association between MetS, according to three definitions, and the risk of breast, endometrial and ovarian cancer was assessed in a cohort of over 100,000 postmenopausal women with serological biomarker data. Cox proportional hazards regression was used to calculate hazard ratios (HRs) and 95% confidence intervals (CIs), adjusting for important confounders.

Results: In total, 3,398 breast, 652 endometrial and 327 ovarian cancers occurred. For all three definitions, MetS was associated with a higher risk of breast (adjusted; HR 1.11, 95% CI: 1.04-1.19), and endometrial cancer (adjusted; HR 2.18, 95% CI: 1.86-2.55) but not ovarian cancer (adjusted; HR 1.03, 95% CI: 0.82-1.29) compared to no MetS. Assessment of the individual components of MetS revealed that only abdominal obesity and hypertension were associated with breast cancer, whilst all components were associated with a higher risk of endometrial cancer.

Conclusion/Implications: This study found that MetS was strongly associated with endometrial cancer, and to a lesser extent with breast cancer, among postmenopausal women, whilst no associations were observed for ovarian cancer. These findings underline the importance of public health strategies to support good metabolic health to reduce the burden of cancer, particularly endometrial, in postmenopausal women.

PR053 / #481

POSTER ROUNDS 11: OVARIAN CANCER IV

Topic: *AS07. Global Health/Economic Challenges*

OVARIAN CANCER CARE IN SUB-SAHARAN AFRICA: A SURVEY OF HEALTHCARE ORGANISATION, CURRENT PRACTICES, AND BARRIERS

Gillian Reid-Schachter[1], Marc Algera[2,3,4], Samuel Meja[5,6], Rhett Morton[7], Sudha Sundar[8], Rhonda Farrell[9], Donal Brennan[1], Willemien Van Driel[10], Mary Eiken[11], Robert Coleman[11,12], Marcus Rijken[10]
[1]UCD Gynaecological Oncology Group, Ucd School Of Medicine, Mater Misericordiae University Hospital, Dublin, Ireland, [2]Scientific Bureau, Dutch Institute for Clinical Auditing (DICA), Leiden, Netherlands, [3]Maastricht University Medical Center (MUMC+), Department Of Obstetrics And Gynaecology, Maastricht, Netherlands, [4]GROW- School for Oncology and Reproduction, Maastricht, Netherlands, [5]Kamuzu University of Health Sciences, Department Of Obstetrics And Gynaecology, Blantyre, Malawi, [6]University of Malawi (UNIMA), Obstetrics And Gynaecology, Zomba, Malawi, [7]Queensland Centre for Gynaecological Cancer, Brisbane, Australia, [8]University of Birmingham, Gynaecological Cancer Surgeon And Clinical Academic, Birmingham, United Kingdom, [9]Chris O'Brien Lifehouse, Gynaecological Oncology Department, Camperdown, Australia, [10]Center for Gynecological Oncology Amsterdam, Netherlands Cancer Institute, Department Of Gynaecology, Amsterdam, Netherlands, [11]International Gynecologic Cancer Society, Austin, United States of America, [12]SCRI, Sarah Cannon Research Institute, Nashville, United States of America

Introduction: Although global variability in ovarian cancer survival exists, barriers to optimal care, challenges in healthcare organization, and resource limitations enlarge care gaps between and within countries. This study aims to explore the organization, challenges, and barriers to ovarian cancer care as reported by healthcare professionals from fifteen Sub-Saharan African countries.

Methods: A survey was developed by international ovarian cancer specialists and distributed throughout networks and organizational partners of the International Gynecologic Cancer Society, Society of Gynecologic Oncology, and European Society of Gynaecological Oncology. A subset analysis of the larger survey was performed to stratify outcomes for Sub-Saharan Africa based on United Nations regional classification (West, East, Central, Southern). Results were analyzed using descriptive statistics and Fisher exact probability test.

Results: From a global total of 1,059 responses from 115 countries, 75 responses from 15 countries were received from Sub-Saharan Africa (Figure 1). Respondents were gynecological cancer surgeons (80%), obstetricians/gynecologists (11%), and other

specialists (9%). Results shown in Table 1. 81% reported an absence of national guidelines. Extensive resections were routinely performed by 59%. 75% reported a lack of standardized documentation for recording residual disease. Main barriers were advanced presentation, lack of genetic services, social factors, patient factors, cost of treatments, and perioperative care. 47% of respondents reported lack of access to systemic
agents.

Figure 1: Number of survey respondents per country in Sub-Saharan Africa.

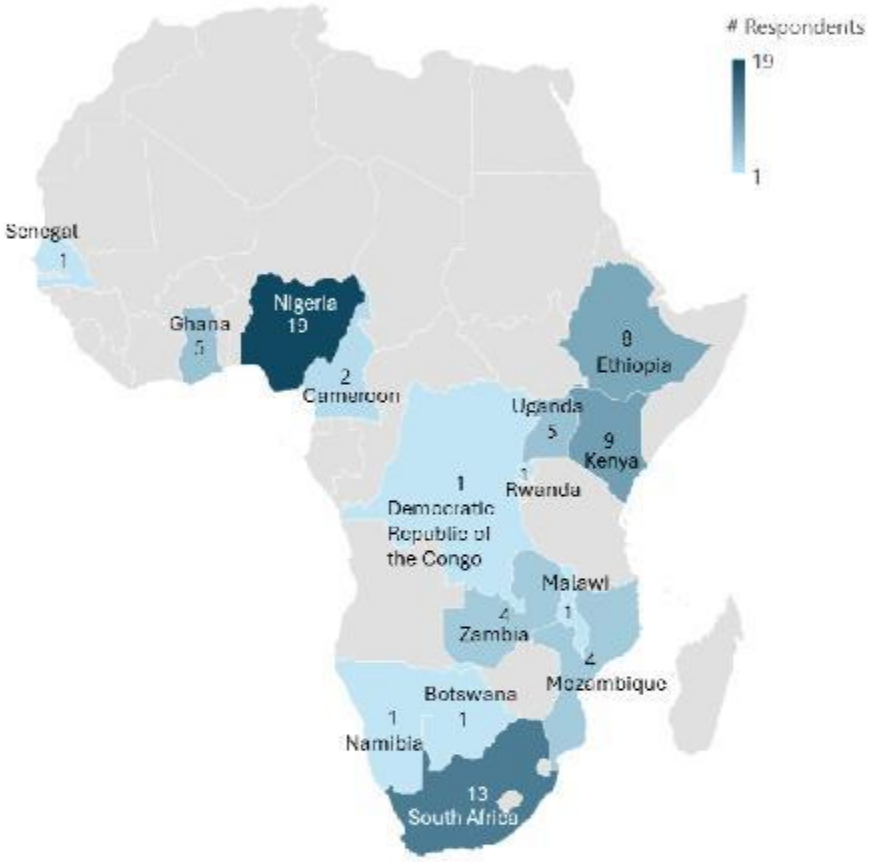

Table 1: Summary of select results, including Fisher exact probability tests, showing associations between regional classification and outcomes.

Subgroup				Fisher Exact Test
Participation in Cancer Registry				
Region	Total, N	Yes, n (%)	No, n (%)	p-value
Central Africa	3	2 (67)	1 (33)	0.032
East Africa	32	26 (81)	6 (19)	
Southern Africa	15	12 (80)	3 (20)	
West Africa	25	20 (80)	5 (20)	
Total	75	60 (80)	15 (20)	
Participation in Quality registry				
Region	Total, N	Yes, n (%)	No, n (%)	p-value
Central Africa	3	1 (33)	2 (67)	0.179
East Africa	32	13 (41)	19 (59)	
Southern Africa	15	6 (40)	9 (60)	
West Africa	25	16 (64)	9 (36)	
Total	75	36 (48)	39 (52)	--
Presence of Regional networks				
Region	Total, N	Yes, n (%)	No, n (%)	p value
Central Africa	3	3 (100)	0 (0)	0.001
East Africa	32	7 (22)	25 (78)	
Southern Africa	15	7 (47)	8 (53)	
West Africa	25	2 (8)	23 (92)	
Total	75	19 (25)	56 (75)	
Presence of active Patient Advocacy Groups in the country				
Region	Total, N	Yes, n (%)	No, n (%)	p-value
Central Africa	3	0 (0)	3 (100)	0.009
East Africa	32	10 (31)	22 (69)	
Southern Africa	15	4 (27)	11 (73)	
West Africa	25	5 (20)	20 (80)	
Total	75	19 (25)	56 (75)	--
Presence of Surgical training programs in the country				
Region	Total, N	Yes, n (%)	No, n (%)	p value
Central Africa	3	1 (33)	2 (67)	0.012
East Africa	32	31 (97)	1 (3)	
Southern Africa	15	13 (87)	2 (13)	
West Africa	25	21 (84)	4 (16)	
Total	75	66 (88)	9 (12)	--
Standard of Care to discuss patients at Multidisciplinary Team Meetings				
Region	Total, N	Yes, n (%)	No, n (%)	p-value
Central Africa	3	2 (67)	1 (33)	0.446
East Africa	32	30 (94)	2 (6)	
Southern Africa	15	14 (93)	1 (7)	
West Africa	25	23 (92)	2 (8)	
Total	75	69 (92)	6 (8)	--
Is Multimultidisciplinary Team Core Membership Criteria Fulfilled?				
Region	Total, N	Yes, n (%)	No, n (%)	p-value
Central Africa	3	0 (0)	3 (100)	0.004
East Africa	32	1 (3)	31 (97)	
Southern Africa	15	0 (0)	15 (100)	
West Africa	25	8 (32)	17 (68)	
Total	75	9 (12)	66 (88)	--
Presence of National Guidelines to Inform Treatment Recommendations				
Region	Total, N	Yes, n (%)	No, n (%)	p-value
Central Africa	3	1 (33)	2 (67)	0.026
East Africa	32	10 (31)	22 (69)	
Southern Africa	15	5 (33)	10 (67)	
West Africa	25	0 (0)	25 (100)	
Total	75	14 (19)	61 (81)	
Use of Standardized Documentation for Recording Residual Disease				
Region	Total, N	Yes, n (%)	No, n (%)	p-value
Central Africa	3	0 (0)	3 (100)	0.023
East Africa	32	10 (31)	22 (69)	
Southern Africa	15	7 (47)	8 (53)	
West Africa	25	2 (8)	23 (92)	
Total	75	19 (25)	56 (75)	--
Routinely carrying out Extensive Resections during Debulking Surgery				
Region	Total, N	Yes, n (%)	No, n (%)	p value
Central Africa	3	2 (67)	1 (33)	0.177
East Africa	32	17 (53)	15 (47)	
Southern Africa	15	11 (73)	4 (27)	
West Africa	25	14 (56)	11 (44)	
Total	75	44 (59)	31 (41)	

** Multidisciplinary team core membership criteria was met when the following healthcare workers were represented: gynecological cancer surgeon, a medical oncologist or gynecological oncologist who prescribes systemic therapy, a radiation oncologist, a pathologist, a radiologist, and a nurse.*

Conclusion/Implications: This survey report notes challenges and barriers to optimal ovarian cancer care in Sub-Saharan Africa. It highlights the need for locally adapted guidelines, increased resource allocation, enhanced national referral networks, improved local awareness and education, and strengthened global networks.

PR054 / #480

POSTER ROUNDS 11: OVARIAN CANCER IV

Topic: *AS10. Ovarian Cancer*

EFFICACY OF POLY(ADP-RIBOSE) POLYMERASE INHIBITORS ACCORDING TO CLINICAL RISK IN NEWLY DIAGNOSED, ADVANCED OVARIAN CANCER – A META-ANALYSIS OF PHASE III CLINICAL TRIALS

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Introduction: PARP inhibitor (PARPi) maintenance therapy improves survival in patients with advanced ovarian cancer. The greatest benefits are observed in patients with BRCA alterations and homologous recombination deficiencies. The benefit of PARPi according to clinical risk factors remains unclear. We sought to evaluate the progression-free survival (PFS) benefit of PARPi based on clinically relevant risk factors.

Methods: Six phase III randomised controlled trials were included (SOLO-1, PAOLA-1, PRIMA, PRIME, ATHENA-MONO and VELIA). Data was extracted and random effect models constructed using Review Manager (RevMan Version 7.2.0. The Cochrane Collaboration). Outcomes were reported as pooled hazard ratio (pHR) and 95% confidence intervals (95% CI). Patients were classified as high-risk if they had stage III/IV disease with neoadjuvant chemotherapy or upfront surgery and residual disease.

Results: PARPi improved PFS in high-risk patients (pHR 0.53, 95%CI 0.45-0.63) with the greatest effect seen in BRCA mutated patients. PARPi were beneficial regardless of disease stage, timing of surgery, or chemotherapy response (Table 1). PARPi appear to be beneficial in patients with macroscopic residual disease after primary cytoreductive surgery (pHR 0.59, 95% CI 0.44-0.77) but showed no benefit in patients with macroscopic residual disease following interval cytoreductive surgery (ICS) (pHR 0.63,

95% CI 0.36-1.09).

Table 1: Summary statistics comparing the effect of poly(ADP-ribose) polymerase inhibitors (PARPi) maintenance therapy on progression-free survival (PFS) according to clinically relevant risk factors in newly diagnosed advanced ovarian cancer.

Subgroup	Weight (%)	Hazard ratio	95% CI	*p*-value
Clinically High Risk Groups				
Stage III/IV with NACT/Interval CRS	74.4	0.52	0.41-0.66	<0.00001
Stage III/IV with primary CRS + VRD	25.6	0.56	0.43-0.74	<0.0001
Total	100.0	0.53	0.45-0.63	<0.00001
Genetic Status				
BRCAmut	100.0	0.40	0.34-0.47	<0.00001
HRD	100.0	0.49	0.43-0.56	<0.00001
HRP	100.0	0.73	0.58-0.92	0.007
Age				
<65 yrs	58.3	0.54	0.42-0.68	<0.00001
≥65 yrs	41.7	0.59	0.46-0.75	<0.0001
Total	100.0	0.56	0.47-0.66	<0.00001
ECOG score				
0	58.2	0.56	0.44-0.71	<0.00001
≥1	41.8	0.60	0.50-0.73	<0.00001
Total	100.0	0.58	0.50-0.67	<0.00001
Stage at Diagnosis				
Stage III	58.5	0.54	0.44-0.67	<0.00001
Stage IV	41.5	0.58	0.43-0.77	0.0002
Total	100.0	0.56	0.47-0.66	<0.00001
Timing of Surgery				
Primary cytoreductive surgery	49.7	0.63	0.55-0.73	<0.00001
Interval cytoreductive surgery	50.3	0.52	0.41-0.66	<0.00001
Total	100.0	0.58	0.50-0.66	<0.00001
Response to Chemotherapy				
Complete response	52.8	0.47	0.36-0.62	<0.00001
Partial response	47.2	0.46	0.28-0.75	0.002
Total	100.0	0.47	0.37-0.61	<0.00001
Residual Disease Status post-CRS				
NVRD	58.2	0.51	0.40-0.65	<0.00001
VRD	41.8	0.50	0.41-0.61	<0.00001
Total	100.0	0.50	0.43-0.58	<0.00001
No Residual Disease post-surgery				
NVRD after primary CRS	42.6	0.67	0.50-0.89	0.007
NVRD after interval CRS	57.4	0.49	0.33-0.72	0.0004
Total	100.0	0.55	0.42-0.72	<0.0001
Residual Disease post-surgery				
VRD after primary CRS	57.5	0.59	0.44-0.77	0.0001
VRD after interval CRS	42.5	0.63	0.36-1.09	0.10
Total	100.0	0.59	0.46-0.77	<0.0001

NACT: neoadjuvant chemotherapy, CRS: cytoreductive surgery, VRD: visible residual disease, BRCAmut: BRCA mutation, HRD: homologous recombination deficiency, HRP: homologous recombination proficient, ECOG: Eastern Cooperative Oncology Group, NVRD: no visible residual disease.

Conclusion/Implications: Although PARPi therapies show benefit in various patient subgroups, no benefit is observed in patients with macroscopic residual disease following ICS. Consideration should be given to clinical risk factors when evaluating PFS benefit and designing future PARPi trials in advanced ovarian cancer.

PR055 / #448

POSTER ROUNDS 11: OVARIAN CANCER IV

Topic: *AS10. Ovarian Cancer*

EFFICACY AND SAFETY PROFILE OF MIRVETUXIMAB IN FOLATE RECEPTOR ALPHA-POSITIVE OVARIAN CANCER

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Introduction: Mirvetuximab soravtansine-gynx (MIRV) is an antibody-drug conjugate that binds to folate receptor alpha and delivers a microtubule inhibitor payload. We report its efficacy and safety in a large institutional cohort.

Methods: We studied 170 patients with high folate receptor alpha expressing (≥75% of tumor cells with ≥2+ staining intensity) ovarian cancer who received MIRV between 2/2023 and 4/2024. We evaluated best radiographic response (BRR), progression-free survival (PFS), and the following adverse events: ocular toxicity, neuropathy, infusion reactions, and pneumonitis. Genomic alterations were analyzed in 139 patients whose tumors underwent next generation sequencing with MSK-IMPACT.

Results: The BRR was regression in 36.1% of patients. Median PFS was 3.4 months (95% CI: 2.8 – 4.2). The PFS was ≥6 months in 13.5% of patients. Median PFS did not significantly differ based on number of prior treatment lines (for 1-3 versus >3 lines, $P = 0.3$) or prior PARP inhibitor ($P = 0.9$) or bevacizumab ($P = 0.4$) use. Ocular toxicity occurred in 34.1% of patients. The median time to first ocular event was 42.5 days. In total, 34.7% patients developed neuropathy, 5.3% had infusion reactions, and 1.8% developed pneumonitis. Dose reductions occurred in 44.1% of patients and 4.7% discontinued due to toxicity. There were no disproportionately enriched oncogenic variants in tumors with versus without regression. In total, 2.2% of profiled tumors were *HER2* amplified and 13.7% were *CCNE1* amplified.

Conclusion/Implications: MIRV confers meaningful PFS benefit for a subset of individuals. Biomarkers of response and resistance are urgently needed to optimize patient selection for treatment.

PR056 / #319

POSTER ROUNDS 11: OVARIAN CANCER IV

Topic: *AS16. Rare Tumors*

HIGH FREQUENCIES OF FUSION TRANSCRIPTS (FT) IDENTIFIED IN OVARIAN CLEAR CELL CARCINOMA (OCCC) BY COMPREHENSIVE GENOMIC PROFILING (CGP)

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Introduction: OCCC is a subtype of ovarian cancer with with high incidence in East Asia. OCCC tumors are known to have low frequencies of genomic alterations such as high tumor mutation burden (TMB), microsatellite instability (MSI), and high genomic instability scores (GIS). However, the molecular heterogeneity in FT has not been fully described.

Methods: This study adopted a CGP approach using the Illumina TruSight Oncology 500 HRD assay to characterize a ten-year cohort of 160 early-stage OCCC tumors. DNA and RNA were extracted from FFPE tumors for library preparation. Libraries were sequenced on a NextSeq 550. Variant calling and analysis were performed using DRAGEN TSO 500 2.1.0.4 (with HRD).

Results: Majority of tumors were TMB-low (133/160; 83.7%), microsatellite stable (MSS) (154/160; 96.3%), and GIS-low (157/160; 98.1%). High frequencies of FT (33/160; 20.6%) were identified with MET being the most frequent fusion loci (7/33; 21.2%) followed by FGFRs (5/33; 15.2%). Five tumors with MET FT (5/7, 71.4%) showed high immunoreactivity. Among 33 tumors with FT, all were MSS and GIS-low with 3 being TMB-high. Tumors without FT showed higher mean immune scores in CD45 (12.6% vs 7.7%, p= 0.005), CD8 (4.6% vs 2.6%, p= 0.027), and tryptase (2.7% vs 1.5%, p= 0.004). OCCC with FT had less recurrence (4/33, 12.1% vs 42/127, 33.1%). Among the detected FT, 8 were known and 21 were novel with CAPZA2::MET being the most common recurrent FT (5/160; 3.1%).

Conclusion/Implications: Early-stage OCCC tumors showed high occurence of FT associated with lower immune scores and recurrence rate. Functional elucidation of novel FT is warranted.

PR057 / #745

POSTER ROUNDS 11: OVARIAN CANCER IV

Topic: *AS16. Rare Tumors*

CIRCULATING TUMOUR DNA SURVEILLANCE IN LOW GRADE SEROUS OVARIAN CARCINOMA

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Introduction: Low grade serous ovarian carcinoma (LGSC) is a rare malignancy with limited systemic treatment options. LGSC can harbour mitogen-activated protein kinase (MAPK) gene aberrations in approximately 50%. 'Liquid biopsies' can offer continuous, less invasive monitoring when compared to tissue biopsy procedures. We aim to establish whether MAP kinase mutations are detectable in circulating-tumour (ct)DNA of patients with LGSC; track changes over time, and predict treatment response and drug resistance.

Methods: Blood samples were collected at baseline, on treatment and disease progression from LGSC patients (Biomarkers in gynaecological cancers study, CCR3705). Tumour specimens were tested using the Royal Marsden RMH200Solid panel including *KRAS, NRAS, BRAF, NF1* and *ESR1* mutations. Plasma samples were tested using the Royal Marsden ctPC panel.

Results: Among 40 patients with tissue-based NGS test results, 45% (n=18/40) showed MAPK pathogenic genomic alterations: KRAS (14/40, 35%), NRAS (1/40, 2.5%), BRAF (1/40, 2.5%) and NF1 (2/40, 5%). CtDNA analysis over time was carried out in 14/18 (77%) patients with known tumour mutation. Of the 14 tumours harbouring KRAS mutation, ctDNA was available for 12 patients. In 5/12 cases (41%), KRAS mutation was detected in ctDNA at time of radiological progression. Following MEK inhibition, KRAS mutation continued to be detectable in one patient with disease progression whereas KRAS mutation was not detected in the patient with radiological response.

Conclusion/Implications: ctDNA-based surveillance to monitor disease status and treatment benefit may be applicable to LGSC patients with KRAS-mutated tumours. These findings warrant further investigation in clinical trials to aid the development of personalised therapeutic strategies.

PR058 / #966

POSTER ROUNDS 12: SURGERY

Topic: *AS19. Surgical Techniques and Perioperative Management*

THE IMPACT OF OPERATIVE TIME IN MINIMALLY INVASIVE SURGERY FOR ENDOMETRIAL CANCER

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Introduction: Objective: Operative time is an important risk factor for post-operative complications. The current study compares the outcomes of patients undergoing minimally invasive hysterectomy for endometrial cancer based on their operative time.

Methods: Study methods: The American College of Surgeons National Surgical Quality Improvement Program (NSQIP) database was employed to identify all gynecology oncology cases from 2013 to 2021. Endometrial cancer patients scheduled for minimally invasive surgery were included and separated according to 120min surgical duration cut-off. Clinical, surgical characteristics, and 30-day postoperative complications were collected. The primary outcome was readmission rate and secondary outcomes were surgical complications after 30-day. Chi square, Fisher, and Wilcox tests, and logistic regression were used to compare outcomes.

Results: Results: The study included 34066 patients with 3.1% readmissions. When comparing patients that had surgery under 120 minutes (n=12096) to patients that had longer than 120 minutes surgery (n=21970), the readmission rate was 2.4% versus 4.4% respectively ($p<0.05$). At 30 days, there were statistically significant ($p<0.05$) differences in length of stay (mean 1.2 days versus 1.5 days), reoperation (0.7% versus 1.2%), infection (3.9 versus 7.0%) favouring shorter surgery. There was no difference between reoperation, transfusion, thromboembolism, cardiovascular events, or death ($p>0.05$). After adjusting for body mass index, diabetes, hypertension, ASA class, and lymphadenectomy status, operative time remained a significant risk factor for readmission, reoperation, infection, and increased length of stay ($p<0.05$).

Conclusion/Implications: Conclusion: Longer operative time increases surgical risks with clinically significant detrimental impact on infection and readmission risks for patients undergoing minimally invasive surgery for endometrial cancer.

PR059 / #1230

POSTER ROUNDS 12: SURGERY

Topic: *AS19. Surgical Techniques and Perioperative Management*

A MODIFICATION OF THE KEYSTONE PERFORATOR ISLAND FLAP IN VULVO-PERINEAL RECONSTRUCTION FOLLOWING VULVECTOMY

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Introduction: Conventional flaps in perineal reconstruction can result in significant donor site morbidity. Advances in reconstructive surgery have led to the development of the perineal perforator flap (PPF) and the random island perineal perforator flap (RI-PFF); the latter eliminating the need for extensive perforator dissection. To build on this further, we provide a case series describing the use of a Keystone perforator island flap (KPIF). The KPIF is raised based on the “perforator-rich” region at the posterolateral vulva; an anterior Z-plasty offers protection of the clitoral hood, while a posterior V-Y-plasty allows for an aesthetically pleasing, tension-free primary closure of the donor site.

Methods: A retrospective study was conducted of patients who underwent vulvectomy with concurrent KPIF reconstruction at the Mater Hospital, Dublin, between 2015 and 2023.

Results: 12 patients (age range 34 to 80) underwent vulval reconstruction following vulvectomy (6 unilateral, 6 bilateral). Indications included both pre-invasive and malignant disease of the vulva. All reconstructions were performed by a single operator. There were no cases of flap loss or donor-site complications, as defined by wound infection, dehiscence, or keloid formation. All 12 patients reported excellent satisfaction with donor-site aesthetics.

Conclusion/Implications: The use of the KPIF eliminates the need to identify perforators intra-operatively, thus reducing operating time. The modified design at the apex, and base of the flap, aims to create a more functional and aesthetically pleasing result. The KPIF is, therefore, a good option for reconstruction post vulvectomy.

PR060 / #1232

POSTER ROUNDS 12: SURGERY

Topic: *AS19. Surgical Techniques and Perioperative Management*

BOWEL ANASTOMOSIS BEFORE OR AFTER HIPEC: COMPARATIVE STUDY IN PATIENTS UNDERGOING CRS+HIPEC FOR ADVANCED EPITHELIAL OVARIAN CANCER

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Introduction: Gastrointestinal leak after CRS HIPEC is associated with significant morbidity and mortality. To do bowel anastomosis before or after HIPEC has been debated topic with no definitive evidence.

Methods: A non-randomized two-arm comparative study. Outcomes of bowel anastomosis when performed before or after HIPEC was analysed. All data was collected & entered prospectively in HIPEC registry and analysed retrospectively. we have two teams,one performs anastomosis before and one after HIPEC.

Results: 220 patients underwent CRS+ HIPEC for advanced epithelial ovarian cancer. Upfront 12%, interval 58% & recurrent 30%. Prior surgical score was 0 (62%), 1 (11%), 2 (23%), 3 (4%). 100 patients had anastomosis before HIPEC and 120 patients after. Mean PCI 13.4±4.5, blood loss 750±253.9 ml, duration of surgery 9.5±2.4 hrs, duration of hospital stay 9±3.5 days. Overall 57.05% had bowel resections, of which large bowel was 47.8%, small bowel 17.7%. 19.6% required multivisceral resection & stoma rate was 4.5%. We had 4 (1.84%) leak overall, of which 2 were in either groups. Overall G3-4 morbidity was 22.4%, surgical G3-4 was 12.5%, 30-day mortality was 1.3%. On Multivariate analysis PSS >1 and number of anastomosis >2, were most significant factors predicting bowel complications.

Conclusion/Implications: Anastomosis of bowel done after or before HIPEC does not affect the leak rates. Higher prior surgical score & more than two bowel anastomosis are independent unfavourable risk factors. Standardization of surgical procedures, immediate attention & repair of serosal tears while performing surgery & thorough inspection of bowel before closure of abdomen helps in decreasing bowel complications.

PR061 / #1297

POSTER ROUNDS 12: SURGERY

Topic: *AS19. Surgical Techniques and Perioperative Management*

NORTHERN IRELAND OVARIAN CANCER PREHABILITATION PROJECT

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Introduction: Ovarian cancer patients are often diagnosed late, in advanced stages (stage III-IV) and are often deconditioned due to disease burden. Frailty is reported in up to 60% of gynaecological oncology patients and many report malnutrition, anxiety and depression. As surgery is the mainstay of treatment for ovarian cancer, with maximum surgical effort being a priority, patients are at increased risk of peri-operative morbidity and mortality. Multi-modal prehabilitation aims to improve the functional capacity of surgical patients. Prehabilitation commonly includes physical, nutritional, medical optimisation, smoking cessation and emotional wellbeing interventions.

Methods: All advanced ovarian cancer patients were included. The pathway included exercise, nutritional and psychological interventions. The outcome measures included the Rockwood frailty score, 6 minute walk test (6MWT), 30 second sit to stand test (30-CTS), grip strength and ECOG performance status as a measure of functional capacity. Nutritional intervention outcomes included the MUST score, BMI and mid-arm circumference. The psychological intervention outcomes included a holistic needs assessment, the distress thermometer and EQ-5D-5L quality of life status.

Results: A total of 76 patients were included of which 65% completed the prehabilitation program. Half of patients had improved functional capacity (53% 6MWT, 50% 30-CTS), 83% of those with moderate-extreme anxiety/depression at baseline had no or mild anxiety/depression. 84% of those with medium-high risk MUST scores maintained stable or increased BMIs.

Conclusion/Implications: prehabilitation can improve the peri-operative outcomes for advanced ovarian cancer patients and should be considered as standard of care.

PR062 / #202

POSTER ROUNDS 13: OVARIAN CANCER TREATMENT

Topic: *AS10. Ovarian Cancer*

USE OF NOVEL PLATINUM NANOTHERAPEUTICS (CARRIER-PT) TO ERADICATE CHEMORESISTANT EPITHELIAL OVARIAN CANCER

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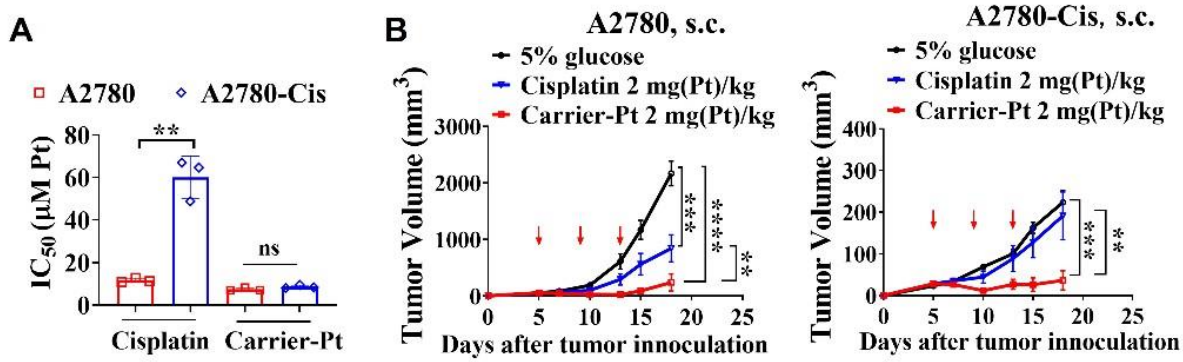
Introduction: Epithelial ovarian cancer (EOC) is a lethal gynecological malignancy. Primary treatment involves platinum (Pt)/taxane-based chemotherapy. However, chemoresistance emerges in most cases, alongside significant toxicity, leading to poor prognosis. Harnessing reactive oxygen species (ROS) induction leads to cancer cell death. This study aims to develop a potent Pt-based ROS inducer to overcome drug resistance in the treatment of EOC.

Methods: We synthesized a novel Pt drug, comprising a poly(amino acid)-based polymer incorporating Pt-based nanoparticles (termed: carrier-Pt). We evaluated its ROS-inducing capacity on both parental and drug-resistant EOC *in vitro* and assessed its therapeutic efficacy in A2780 subcutaneous and intraperitoneal tumor models, along with toxicity profiling.

Results: Carrier-Pt elevated intracellular ROS levels by 5-fold in human EOC A2780 cells within 30 minutes, contrasting with minimal effects from cisplatin, docetaxel, or doxorubicin. Carrier-Pt exhibited rapid cytotoxicity (within 30 minutes), outperforming cisplatin (24 hours). Remarkably, carrier-Pt selectively targeted EOC cells with 4-5 times lower IC_{50} compared to non-cancerous Human Ovarian Surface Epithelial (hOSE) cells. It effectively eliminated cisplatin-resistant A2780-Cis and taxanes-/anthracyclines-resistant Hey-T30 cells. Carrier-Pt also surpassed cisplatin in inhibiting tumor growth *in vivo*, in both subcutaneous and intraperitoneal models, even in drug-resistant model. Furthermore, carrier-Pt maintained stable body weight in the models and had no hematotoxicity, hepatotoxicity, nephrotoxicity, or cardiac

toxicity.



Conclusion/Implications: The novel Pt nanotherapeutic, carrier-Pt, robustly triggers intracellular ROS, eradicating both parental and therapeutic-resistant EOC tumors *in vivo,* while maintaining a favorable toxicity profile. Carrier-Pt presents a promising option for EOC patients resistant to current chemotherapeutics.

PR063 / #206

POSTER ROUNDS 13: OVARIAN CANCER TREATMENT

Topic: *AS10. Ovarian Cancer*

THE ROLE OF HYPERTHERMIA IN INTRAPERITONEAL CHEMOTHERAPY ON ABDOMINAL TISSUE CONCENTRATIONS OF CISPLATIN – INSIGHTS FROM A PORCINE MODEL

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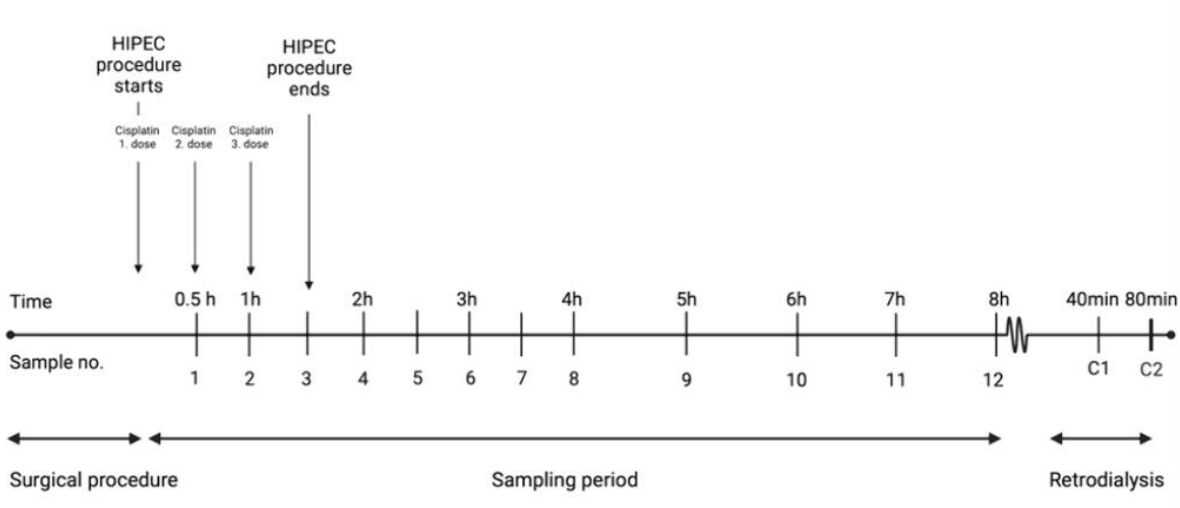
Introduction: In clinical studies cytoreductive surgery (CRS) combined with hyperterm intraperitoneal chemotherapy (HIPEC) utilizing cisplatin has revealed enhanced survival in patients with advanced ovarian cancer. One potential mechanism behind the effect of HIPEC is increased local penetration of chemotherapy. This study aims to examine the effect of hyperthermia during intraperitoneal chemotherapy on local abdominal tissue concentrations of cisplatin during and after HIPEC and normothermic intraperitoneal chemotherapy (NIPEC).

Methods: We used microdialysis to dynamically sample tissue concentrations during and after HIPEC/NIPEC in a porcine model. All 16 pigs underwent CRS and were divided into two groups, receiving either CRS+HIPEC or CRS+NIPEC. Figure 1 shows the experimental timeline and sampling times. Table 1 shows sampling sites. The concentration of cisplatin in dialysate samples was determined by UPLC-MS/MS.



Organ/tissue	Depth of microdialysis catheter placement	Number of microdialysis catheters
Liver	1 mm	2
Rectum	1-1.5 mm (superficial) and 2.5-3 mm (profound)	2
Stomach	1-2 mm (superficial) and 4-5 mm (profound)	2
Peritoneum	1 mm	3

Results: There was no statistical significant difference between the maximal concentration or area under the curve between the two groups. For both the HIPEC and NIPEC setup we found statistical significantly higher concentrations in the peritoneal compartments compared to all other compartments in terms of C_{max} and $AUC_{0\text{-last}}$

Conclusion/Implications: Applying hyperthermia during intraperitoneal chemotherapy did not enhance cisplatin penetration or concentration in abdominal tissue in our study. It remains to be established whether HIPEC confers benefits compared to NIPEC beyond drug penetration by inducing other cytotoxic effects such as promoting apoptosis or impairing DNA repair mechanisms in cancer cells.

PR064 / #383

POSTER ROUNDS 13: OVARIAN CANCER TREATMENT

Topic: *AS10. Ovarian Cancer*

IMPACT OF HYPERTHERMIC INTRAPERITONEAL CHEMOTHERAPY AT TIME OF SECONDARY CYTOREDUCTIVE SURGERY ON IMMEDIATE PLATINUM RESISTANCE: A MEMORIAL SLOAN KETTERING TEAM OVARY STUDY

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Introduction: To determine if hyperthermic intraperitoneal chemotherapy (HIPEC) with carboplatin at time of secondary cytoreductive surgery (SCS) impacts immediate platinum resistance.

Methods: We performed an exploratory analysis of patients with platinum-sensitive epithelial ovarian cancer who underwent SCS at our institution and were randomized to HIPEC with carboplatin or no intervention as part of a phase II trial (NCT01767675). Medical records were re-reviewed. Immediate platinum resistance was defined as radiographic/pathologic recurrence within 6 months of the last dose of platinum treatment after SCS.

Results: Overall, 82 patients met inclusion criteria; 39 (48%) received HIPEC and 43 (52%) did not. Median age at SCS was 59 years (range, 34-78). Sixty patients (73%) had stage III disease at initial diagnosis. The median number of lines of treatment after SCS was 4 (range, 1-17) and median total lines of platinum therapy after SCS was 2 (range, 1-5). Of 17 patients with immediate platinum-resistant disease, 11 (28%) received HIPEC and 6 (14%) did not (P=0.17). On univariate logistic regression analysis, no variable demonstrated significant prediction ability for immediate platinum-resistant disease. Patients who received HIPEC at time of SCS had an OR of 2.36 (95% CI: 0.8-7.58) for developing immediate platinum resistance compared to those not receiving HIPEC

(*P*=0.12).

Table 1: Univariate logistic regression analysis assessing platinum resistance after secondary cytoreductive surgery (SCS) with or without hyperthermic intraperitoneal chemotherapy (HIPEC) with carboplatin.

Characteristic	N*	Platinum-resistant disease (N)	Not platinum-resistant disease (N)	OR	95% CI	*P* value
Received HIPEC?						0.12
No	42	6	36	1.00	—	
Yes	39	11	28	2.36	0.80-7.58	
Disease-free interval before SCS						0.16
<12 months	22	7	15	1.00	—	
>12 months	59	10	49	0.44	0.14-1.39	
Age at SCS						0.70
<65 years	59	13	46	1.00	—	
≥65 years	22	4	18	0.79	0.20-2.57	
Stage at initial diagnosis						0.18
III	59	15	44	1.00	—	
IV	18	2	16	0.37	0.05-1.50	
***BRCA* status**						0.27
Negative/VUS/not performed	64	15	49	1.00	—	
Positive	17	2	15	0.44	0.06-1.79	
Bowel surgery at SCS						0.90
No	37	8	29	1.00	—	
Yes	44	9	35	0.93	0.32-2.78	
Disease sites per operative report at SCS						0.62
Single site	7	2	5	1.00	—	
Multiple sites	74	15	59	0.64	0.12-4.74	
CGR						0.47
Yes	71	14	57	1.00	—	
No	10	3	7	1.74	0.34-7.20	

OR, odds ratio; CI, confidence interval; VUS, variant of unknown significance; EBL, estimated blood loss; CGR, complete gross resection.
*One patient had <6 months of follow-up so was excluded from the univariate analysis.

Conclusion/Implications: Patients who receive HIPEC with carboplatin at time of SCS do not appear to have an increased risk of developing immediate platinum-resistant disease compared to those who do not receive HIPEC. In the recurrent setting, no clinico-demographic or surgical variable predicts immediate platinum resistance after SCS with or without HIPEC.

PR065 / #669

POSTER ROUNDS 13: OVARIAN CANCER TREATMENT

Topic: *AS10. Ovarian Cancer*

O-RADS™ - SHOULD WE GIVE ONE IOTA™? - A UK CANCER CENTRE'S EXPERIENCE

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Introduction: The aims of this study were to assess the outcomes of ovarian masses after the introduction of the Ovarian-Adenexal Imaging-Reporting-Data System (ORADS). This system allows a standardised classification of ovarian lesions. It consists of two classifications for ultrasound and magnetic resonance imaging. The aim is to optimise cancer outcomes and reduce unnecessary surgery. ORADS has been shown to have similar sensitivities as the IOTA simple rules and ADNEX model but has the advantage of assigning management.

Methods: Ultrasound and MRI ORADS scores of 1-5 over the period of one year from the 1st october 2022 to the 30th september 2023 were assessed along with histology outcomes.

Results: 777 patients had ultrasound ORADS scores of 1-3. 96 patients had ultrasound ORADS scores of 4-5. Of the USS ORADS score 4, 38.0% were benign, 13.9% were borderline or malignant, the rest were downgraded on MRI. Of the MRI ORADS 4, 62.5% were benign, 37.5% were malignant. Of the USS ORADS score 5, 25% were benign, 50% were borderline or malignant and the rest were downgraded on MRI. Of the MRI ORADS 5, all were malignant. The sensitivity of ultrasound was 92% with a specificity of 59%, and the sensitivity of MRI was 86% with a specificity of 96% to differentiate between benign and malignant masses.

Conclusion/Implications: The diagnostic performance of both ultrasound and MRI for benign and malignant masses was high. MRI should be considered as the next in line investigation over CT by the multidisciplinary team to help downgrade lesions and avoid more extensive surgery.

PR066 / #816

POSTER ROUNDS 13: OVARIAN CANCER TREATMENT

Topic: *AS10. Ovarian Cancer*

EFFICACY OF SUBSEQUENT CHEMOTHERAPY REGIMENS IN PLATINUM-SENSITIVE RECURRENT OVARIAN CANCER FOLLOWING PARP INHIBITOR PROGRESSION: A MULTICENTER RETROSPECTIVE STUDY

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Introduction: To compare the effectiveness of pegylated liposomal doxorubicin/platinum-based (PLD/P) chemotherapy versus taxane/platinum-based (T/P) chemotherapy in patients who developed recurrent ovarian cancer (ROC) during or after PARP inhibitor (PARPi) therapy.

Methods: This multi-center retrospective study included ROC with a platinum-free interval (PFI) of over 6 months, who received at least four months of PARPi maintenance. Patients were devided into two groups based on their subsequent treatment: either T/P ± bevacizumab or PLD/P ± bevacizumab. The primary endpoint was PFS measured from the initiation of post-PARPi chemotherapy to the subsequent recurrence.

Results: From January 2016 to December 2024, 295 patients were included, with 216 receiving T/P and 79 undergoing PLD/P chemotherapy. BRCA1/2 mutations were present in 35.2% (76) of the T/P cohort and 32.9% (26) of the PLD/P cohort. As of March 2024, after a median follow-up of 11.5 months, disease progression was observed in 75.9% of the T/P group and 77.2% of the PLD/P group. The T/P group showed a median PFS of 10.9 months versus 9.5 months in the PLD/P group (HR 0.68, p=0.011). Among BRCA1/2 mutations carriers, T/P treatment showed a longer median PFS of 11.8 months, compared to 8.7 months with PLD/P regimen (p<0.001). Multivariate analysis identified the T/P regimen (HR 0.676, p=0.013) and secondary cytoreductive surgery (HR 0.661, p=0.039) as independent prognostic factors for improved
PFS.

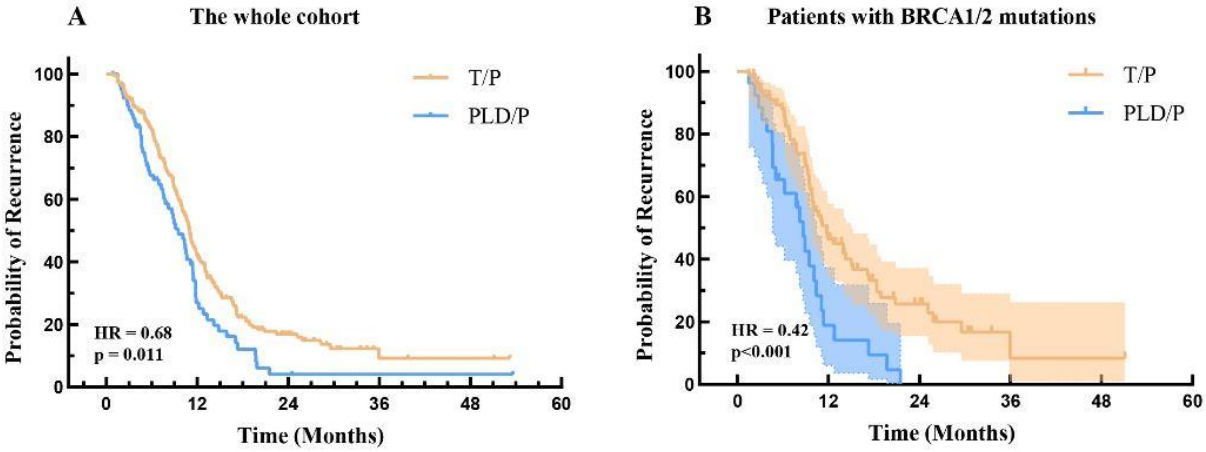

Figure 1. Prognostic analysis of (A) the whole cohort; (B) patients with BRCA1/2 mutations

Variables	n (%)	PLD/P	T/P	HR (95%CI)	P
		No. of recurrence/ No. of total			
All Patients	295 (100.00)	61/79	164/216	0.68 (0.51 ~ 0.92)	0.011
Surgery					
PDS	157 (53.22)	28/35	96/122	0.67 (0.44 ~ 1.02)	0.064
NAC-IDS	138 (46.78)	33/44	68/94	0.71 (0.47 ~ 1.09)	0.116
Age					
<60	190 (64.41)	36/42	108/148	0.57 (0.39 ~ 0.84)	0.004
>=60	105 (35.59)	25/37	56/68	0.90 (0.56 ~ 1.44)	0.655
Completness of PDS					
R0	98 (35.90)	20/28	55/70	0.76 (0.45 ~ 1.28)	0.302
R1	173 (63.37)	35/44	96/129	0.63 (0.42 ~ 0.92)	0.018
R2	2 (0.73)	0/1	1/1	1.00 (1.00 ~ 1.00)	NA
FIGO					
I-II	22 (7.46)	5/5	12/17	0.23 (0.07 ~ 0.78)	0.018
III-IV	273 (92.54)	56/74	152/199	0.74 (0.54 ~ 1.01)	0.054
BRCA status					
w/t	149 (50.51)	29/42	83/107	1.03 (0.67 ~ 1.57)	0.892
mutated	102 (34.58)	23/26	54/76	0.44 (0.26 ~ 0.72)	0.001
unknwon	44 (14.92)	9/11	27/33	0.30 (0.13 ~ 0.71)	0.006
CT lines before PARPi					
1st L	152 (51.53)	28/42	76/110	0.68 (0.44 ~ 1.06)	0.088
2nd L	109 (36.95)	30/33	66/76	0.69 (0.44 ~ 1.07)	0.096
>3rd L	34 (11.53)	3/4	22/30	0.92 (0.27 ~ 3.08)	0.886
Platinum-free interval					
6-12 m	116 (39.32)	35/48	53/68	0.87 (0.56 ~ 1.33)	0.514
>12 m	179 (60.68)	26/31	111/148	0.45 (0.29 ~ 0.69)	<.001
Secondary Cytoreduction					
No	246 (83.39)	49/65	141/181	0.75 (0.54 ~ 1.04)	0.084
Yes	49 (16.61)	12/14	23/35	0.38 (0.18 ~ 0.80)	0.010
Bevacizumab use					
No	171 (57.97)	37/47	92/124	0.70 (0.48 ~ 1.03)	0.071
Yes	124 (42.03)	24/32	72/92	0.63 (0.39 ~ 1.00)	0.050
PARPi reuse					
No	204 (69.15)	45/60	99/144	0.65 (0.46 ~ 0.93)	0.019
Yes	91 (30.85)	16/19	65/72	0.84 (0.49 ~ 1.46)	0.542

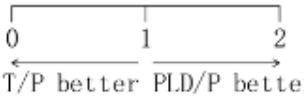

Figure 2. Subgroup Analysis of effectiveness of chemotherapy regimen

Conclusion/Implications: Our retrospective study showed the superiority of T/P over PLD/P in PFS among patients with platinum-sensitive ROC progressed after PARPi therapy, particularly for those harboring BRCA1/2 mutations.

PR067 / #512

POSTER ROUNDS 14: GENETIC PREDICTIONS

Topic: *AS01. Basic/Translational Science*

OBESITY AND LIPID GENE SIGNATURE BEATS BMI AND ADIPOSITY IN PREDICTING SURVIVAL FOR GYNECOLOGIC CANCERS.

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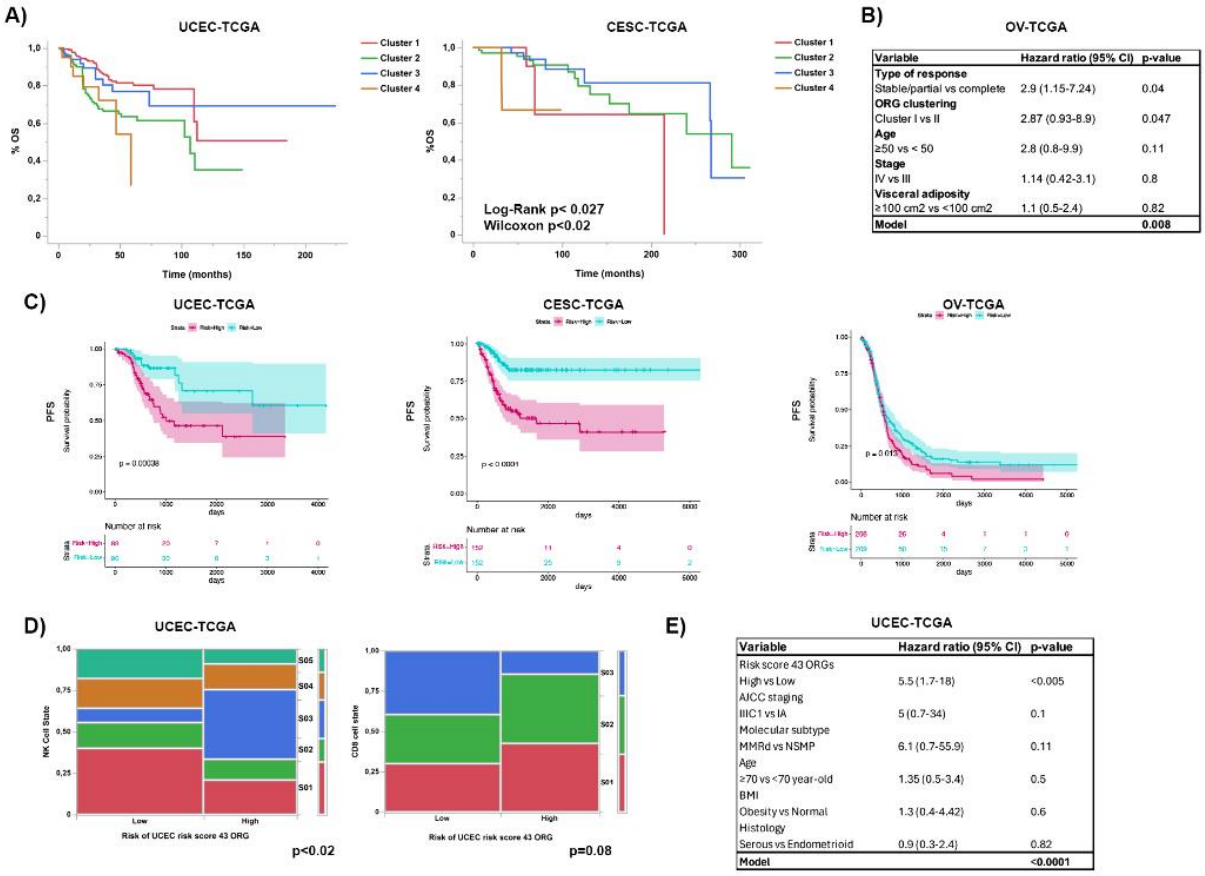
Introduction: The rise in obesity among younger generations is linked to increased incidence of 13 cancers, including gynecologic cancers. However, the impact of obesity on treatment response and cancer prognosis remains unclear. This study explores the correlation between the expression of genes related to obesity and lipid metabolism (ORGs) in the tumor microenvironment (TME) with body mass index (BMI), visceral adiposity, and cancer outcomes.

Methods: Genomic expression data from primary tumors in gynecologic cancers were analyzed using datasets downloaded from UCSC-XENA or ICGC data portals. A list of 425 ORGs was used for clustering analysis in endometrial (UCEC, n=618), ovarian (OV, n=526), and cervical (CESC, n=255) cancers. Prognostic factors in these cancers were identified through cross-referencing with UALCAN data portal. Prognostic signatures were identified using TOPP and Smultcan tools, while immune cell states and TME ecotypes were characterized with Ecotyper. Survival curves and Cox models were constructed for analysis.

Results: Distinct clusters with unfavorable prognosis were found in each cancer. A prognostic signature involving 43-genes was established using cases from these three cancers. Elevated signature scores were associated with poorer outcomes regardless of age, BMI, visceral adiposity, or treatment response. These cases exhibited immune-suppressive/inflammatory ecotypes in the TME, suggesting reduced response to

immunotherapy.



Variable	Hazard ratio (95% CI)	p-value
Type of response		
Stable/partial vs complete	2.9 (1.15-7.24)	0.04
ORG clustering		
Cluster I vs II	2.87 (0.93-8.9)	0.047
Age		
≥50 vs < 50	2.8 (0.8-9.9)	0.11
Stage		
IV vs III	1.14 (0.42-3.1)	0.8
Visceral adiposity		
≥100 cm2 vs <100 cm2	1.1 (0.5-2.4)	0.82
Model		**0.008**

Variable	Hazard ratio (95% CI)	p-value
Risk score 43 ORGs		
High vs Low	5.5 (1.7-18)	<0.005
AICC staging		
IIIC1 vs IA	5 (0.7-34)	0.1
Molecular subtype		
MMRd vs NSMP	6.1 (0.7-55.9)	0.11
Age		
≥70 vs <70 year-old	1.35 (0.5-3.4)	0.5
BMI		
Obesity vs Normal	1.3 (0.4-4.42)	0.6
Histology		
Serous vs Endometrioid	0.9 (0.3-2.4)	0.82
Model		**<0.0001**

Conclusion/Implications: The study highlights the predictive value of abnormal gene expression in primary tumors for cancer outcomes in gynecological cancers. It challenges conventional beliefs by demonstrating that individuals with normal BMI/visceral adiposity may have gene profiles linked to worse outcomes, while obese individuals may show gene profiles associated with better outcomes.

PR068 / #811

POSTER ROUNDS 14: GENETIC PREDICTIONS

Topic: *AS01. Basic/Translational Science*

GENOMIC ALTERATIONS PREDICTIVE OF OUTCOME IN EARLY STAGED CERVICAL CANCER: A TRANSLATIONAL INVESTIGATION FROM THE SENTICOL III TRIAL

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Introduction: Our translational study aims to identify prognostic and actionable biomarkers in early-staged cervical cancer from Senticol III cohort.

Methods: Tumoral slides of the first 150 randomized patients were analyzed based on SEDLIS criteria, TIL's infiltration, PD-L1 expression and HPV status. Sequencing of tumor DNA was carried out using an in-house targeted next-generation sequencing panel of 571 genes. Relapse-free survival (RFS) was defined as the time between randomization and relapse of any type. We performed univariate and multivariate analysis to compare distributions of categorical variables.

Results: The sequencing quality control criteria were met for 135 samples. PIK3CA was the most commonly altered gene (17%). Loss-of-function variants in KMT2-family genes were found in 16% of samples, and in 6% for ARID1A. There were 6 relapses, of which 4 were considered as low-risk based on SEDLIS criteria. KMT2C (p=0,018) and ARID1A (p < 0,001) pathogen variants were significantly associated with RFS. On multivariate

analysis, alteration of ARID1A was independently associated with relapse. We found 32% of genomic alterations actionable for a target therapy.

Conclusion/Implications: Genes involved in chromatin remodeling (ARID1A and KMT2C) are prognostic biomarkers of clinical interest in ESCC. On multivariate analysis, only alteration of ARID1A remains an independent biomarker predictive of relapse. Actionable molecular alterations were identified in 32% of the patients, highlighting the relevance of personalized therapeutic approaches including epidrugs in ESCC.

PR069 / #459

POSTER ROUNDS 14: GENETIC PREDICTIONS

Topic: *AS06. Genetics and Epidemiology*

MOLECULAR TUMOR BOARD FOR GYNECOLOGIC MALIGNANCIES: THE REAL-WORLD EXPERIENCE FROM THE DEPARTMENT FOR GYNECOLOGY AND GYNECOLOGIC ONCOLOGY OF KLINIKEN ESSEN-MITTE

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Introduction: Advances in cancer research are leading to a shift from the traditional 'organ-centric' therapies to a personalized tumor biology-based approach. Molecular tumor boards (MTB) are now implemented in many cancer centers. Here, we report the outcomes of patients undergoing molecular tumor profiling for gynecologic malignancies.

Methods: We retrospectively collected and analyzed clinical data, next-generation sequencing (NGS) results and tumor board recommendations of all patients, undergoing MTB at the Department for Gynecology and Gynecologic Oncology, Kliniken Essen-Mitte, from 03/2019 to 03/2024.

Results: Altogether, 237 patients with the median number of previous lines of 3 were discussed at MTB. High-grade serous ovarian cancer was the most common diagnosis (n=144, 61%). In 220 (93%) patients, genomic tumor alterations were found and classified according to ESMO Scale for Clinical Actionability of Molecular Targets: Tier-X (no relevance) n=115, Tier-I (clinically relevant) n=35, Tier-II/III (potentially clinically relevant) n=43, Tier-IV (preclinical) n=20, Tier-V (improved objective response) n=7. The most common alterations were found in *TP53* (n=142), *BRCA1* (n=20), *PIK3CA* (n=17), *KRAS* (n=16), and others (n=167). The NGS results had an impact on MTB decision in 65 (27%) patients with 9 (3.8%) patients receiving a biomarker-based therapy. Eight of them experienced disease control lasting over 3 months. The most common causes of not following the MTB decision were poor performance status (n=19), no progression after MTB (n=12), starting another treatment (n=5) or death (n=3).

Conclusion/Implications: Molecular tumor profiling provided additional treatment strategies in a meaningful number of patients. Earlier inclusion into MTB might lead to increased applicability of results for patients.

PR070 / #754

POSTER ROUNDS 14: GENETIC PREDICTIONS

Topic: *AS06. Genetics and Epidemiology*

THE POTENTIAL CLINICAL UTILITY OF WHOLE GENOME SEQUENCING FOR PATIENTS WITH GYNAECOLOGICAL CANCER: THE 100,000 GENOMES PROJECT REGIONAL IMPLEMENTATION.

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Introduction: The 100,000 Genomes Project (the 100K Project) established infrastructures for whole-genome sequencing (WGS) in the United Kingdom. The West Midlands Genomic Medicine Centre (WMGMC) covers a geographically wide, ethnically diverse population and extremes of socioeconomic status. This study aimed to evaluate the clinical utility of WGS in cancers. We present the overall results of the 100K Project participant recruited via WMGMC, and the experience of patients with gynaecological cancers.

Methods: A retrospective study of a genomics medicine trial. We analyzed the WGS pathway and outcomes of the multidisciplinary Genomic Tumor Advisory Boards (GTABs) at the WMGMC. We also followed up patients with gynecological cancers with potential treatment or clinical trial recommendations.

Results: Overall, 4851 participants were included. Of those with successful sequencing (24.4%; 1183/4851), 71.5% (846/1183) had clinically actionable variants, of whom 50.6% (428/846) had recommendations made. 8.6% of participants (416/4851) had recommended actions; the majority were recommendations for treatments or trials (60.6%; 252/416). Clinical exclusion rates and availability of GTAB recommendations varied significantly between cancer types ($p<0.0001$). GTAB recommendations were more common in less common cancers, such as gynaecological cancers. Within gynaeoncology, 21/73 (28.7%) were discussed at GTAB. The majority (12/21; 57.1%) had a GTAB recommended action. Sixteen potential treatment or clinical trial

recommendations were made for gynaeoncology patients; only one (6.3%) of these were followed.

Conclusion/Implications: The 100K Project has established essential infrastructure to deliver a uniform genomic test in routine clinical settings. The majority had actionable variants of potential clinical value. Ensuring GTAB recommendations are followed will maximise benefits in cancer care.

PR071 / #817

POSTER ROUNDS 15: ENDOMETRIAL CANCER III

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

THE MECHANISM STUDY OF LIPID METABOLISM DISORDER TO PROMOTE LYMPHOVASCULAR SPACE INVASION IN ENDOMETRIAL CANCER BY REGULATING PI3K/AKT AXIS MEDIATED BY ITGB3

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Introduction: The aim is to clarify the influence of dyslipidemia on endometrial cancer (EC) and explore the mechanism involved.

Methods: The lipid metabolism-related genes and transcriptomics were retrieved from GSEA and TCGA databases. Differentially expressed lipid genes were extracted and a risk signature was identified by using LASSO analysis. A nomogram was established and validated by our own clinical data including 24 EC samples. Furthermore, high-fat diet mice model was established, and the effect of dyslipidemia on the occurrence of lymphovascular space invasion (LVSI) was explored. The transcriptome sequencing technology and the bioinformatics analysis were carried out. Western blot was applied to explore further mechanism.

Results: Twelve lipid metabolism-related genes were selected for the development of the risk prediction model. The Kaplan-Meier curve indicated that patients in the low-risk group had better overall survival. Then a nomogram was constructed and validated in external cohort. Oleic acid and palmitic acid were selected for subsequent experiments. The proliferation and migration were promoted by free fatty acids, which might be related to the upregulation of ITGB3. The expression of ITGB3 was related to poor clinicopathological characteristics. The expression of p-PI3K and p-Akt increased under stimulation by free fatty acids; While the upregulation could be inhibited by knocking down ITGB3. Dyslipidemia could promote the development of LVSI in mice, while knocking down ITGB3 could reverse this effect and inhibit the expression of p-PI3K and p-Akt.

Conclusion/Implications: The mechanism of dyslipidemia to promote LVSI in EC may have association with the activation of PI3K-Akt signaling pathway mediated by ITGB3.

PR072 / #892

POSTER ROUNDS 15: ENDOMETRIAL CANCER III

Topic: *AS04. Endometrial/Uterine Corpus Cancers*

MONITORING RESPONSE TO IMMUNE CHECKPOINT INHIBITION IN PATIENTS WITH ENDOMETRIAL CANCER USING CELL-FREE DNA ANALYSIS

Beryl Manning-Geist[1], Juber Patel[2], Antonio Marra[3], William A. Zammarrelli Iii[1], Arnaud Da Cruz Paula[2], Nadeem Abu-Rustum[1], Ronak Shah[2], Michael Berger[2], Martee Hensley[4], Yulia Lakhman[5], Weining Ma[5], Dmitriy Zamarin[6], Britta Weigelt[2], Claire Friedman[4]
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Introduction: We investigated whether circulating cell-free (cf)DNA sequencing analysis is associated with response to immune checkpoint inhibition (ICI) in patients with endometrial cancer (EC) enrolled on a phase II trial (NCT03241745).

Methods: Patients with MSI-H/dMMR/hypermutated EC and ≥1 prior cytotoxic lines received nivolumab until progression/toxicity. Pretreatment EC and matched blood-derived DNA underwent whole-exome sequencing; cfDNA at baseline, 2 weeks, and then every 6 weeks underwent high-depth sequencing using MSK-ACCESS (129 genes). cfDNA allele fraction changes were correlated with RECIST responses and AquariusNet-generated tumor volume.

Results: At baseline, median circulating tumor (ct)DNA fraction in cfDNA was 13.1% (range, 0.0-86.0%), and high-depth sequencing captured somatic mutations (median, 29.5; range: 2-75). Liquid biopsy MSI status matched tumor MSI status defined by whole-exome sequencing. Median ctDNA fraction percent difference from week 0 to week 8 was -51.6% (IQR: -6.2%, -85.1%) in 5 patients with partial response/stable disease versus +17.7% (IQR: -6.6%, +356.6%) in 5 patients with progressive disease (P=0.08). ctDNA fraction changes correlated with tumor volume changes (R^2=0.684, P<0.001). ctDNA predicted ICI response by week 2 in all patients but 1, who had a stable ctDNA fraction but increasing allele frequency of *B2M* alterations, associated with ICI resistance. Among 2 patients with long-term nivolumab response, ctDNA fraction remained low up to week 140.

Conclusion/Implications: In patients with advanced MSI-H/dMMR/hypermutated EC, changes in ctDNA are detected as early as 2 weeks after ICI initiation, can anticipate radiologic progression/response, and can monitor durable responders. Future studies may use ctDNA to assess mechanisms of ICI resistance and offer adaptive therapy intervention.

PR073 / #584

POSTER ROUNDS 16: GENETIC IMPACT

Topic: *AS17. Screening/Early Detection*

RISK REDUCING SURGERY FOR HEREDITARY GYNAECOLOGICAL CANCER SYNDROMES - ARE WE FAILING A GENERATION OF WOMEN IN ACHIEVING THEIR REPRODUCTIVE POTENTIAL?

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Introduction: Genetic testing rates for hereditary cancer syndromes have increased over the past few decades. These patients are at increased risk of gynaecological cancers including ovarian and endometrial cancer. Since these cancers often present at a relatively young age, many of these patients are recommended risk reducing surgery before the age of 40 years old which affects fertility potential and menopausal status.

Methods: A retrospective analysis was conducted of 126 patients under the care of the genetic screening clinic at Imperial College NHS Trust over three years. Patients who featured in this cohort had the genotype of BRCA, BRCA 2, Lynch and PTEN mutations.

Results: 19.8% (n=25) of these patients were under the age of 38 and 12 of these patients were nulliparous. 56% (n=14) of these patients were offered risk reducing surgery with a median age of 36, however half of those patients declined or delayed surgery. The most cited reason for declining surgery was unfulfilled fertility aspirations. Across the entire cohort, discussion of oocyte cryopreservation and onward referral to fertility teams was offered in just 5.5% of patients, this increased to 12% of women under the age of 38. A surveillance-approach was offered to 44% (n=11) of patients, with a median age of 30.

Conclusion/Implications: Improvements in genetic screening is meaning younger patients are being diagnosed with genetic cancer syndromes. Current practice may not acknowledge the impact of risk reducing surgery on fertility aspirations, nor the need for onward referrals. Therefore we propose developing a national fertility preservation guideline for these patients.

PR074 / #1236

POSTER ROUNDS 16: GENETIC IMPACT

Topic: *AS17. Screening/Early Detection*

INCIDENTAL BRCA1/2 AND LYNCH SYNDROME FINDINGS IN A GENERAL POPULATION SCREENING STUDY

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Introduction: The Centers for Disease Control and Prevention categorize recognizes interventions for carriers of hereditary breast and ovarian cancer syndrome and Lynch Syndrome as tier 1 evidence that reduce morbidity and mortality. Reports on outcomes of population-based testing are limited. In the Phase III trial -DOvEEgene (Detecting Ovarian and Endometrial Cancer Early Using Genomics) (NCT04891029), currently ongoing in Montreal, women aged 45-75 were offered the DOvEEgene uterine test designed to detect deleterious somatic mutations indicating prevalent endometrial and ovarian cancers. Participants also provided a saliva sample to detect germline pathogenic variants (PVs). Here, we report on women identified as carriers of germline PVs.

Methods: Massive parallel sequencing of the coding regions of BRCA1/2, MLH1, MSH2, MSH6, PMS2, PALB2, APC, TP53, and PTEN was performed. Pathogenic/likely pathogenic variants were reviewed by a molecular geneticist and subsequently confirmed by a clinical lab. Participants were allowed to opt-in or out of receiving results of clinically actionable incidental findings.

Results: Of 4,096 participants with germline results processed, only 37 (0.9%) opted out of receiving the results of their germline findings. We identified 43 carriers, details of PVs highlighted in Table 1. Apart from one individual, all identified carriers followed through with genetic counselling and recommended interventions, and indicated appreciation for the opportunity to adopt preventive

measures.

BRCA1 N (%)	BRCA2 N (%)	MLH1 N (%)	MSH2 N (%)	MSH6 N (%)	PMS2 N (%)	PALB2 N (%)	APC N (%)	TP53 N (%)	PTEN N (%)	TOTAL N (%)
4 (0.1)	26 (0.63)	1 (0.02)	0 (0)	4 (0.1)	2 (0.05)	3 (0.07)	0 (0)	3 (0.07)	0 (0)	43 (1.0)

Table 1. Summary of incidental germline findings in the DOvEEgene study.

Conclusion/Implications: We report the rates of incidental germline PVs in an ethnically diverse general population of women enrolled in a cancer surveillance study. These results serve as proof of principle for broader genetic testing to identify at-risk individuals before they develop cancer.

PR075 / #502

POSTER ROUNDS 17: COMMUNITY PERSPECTIVE

Topic: *AS13. Patient Advocacy*

ONCOLOGY CLINICAL TRIALS FROM A PATIENTS PERSPECTIVE: A QUALITATIVE STUDY

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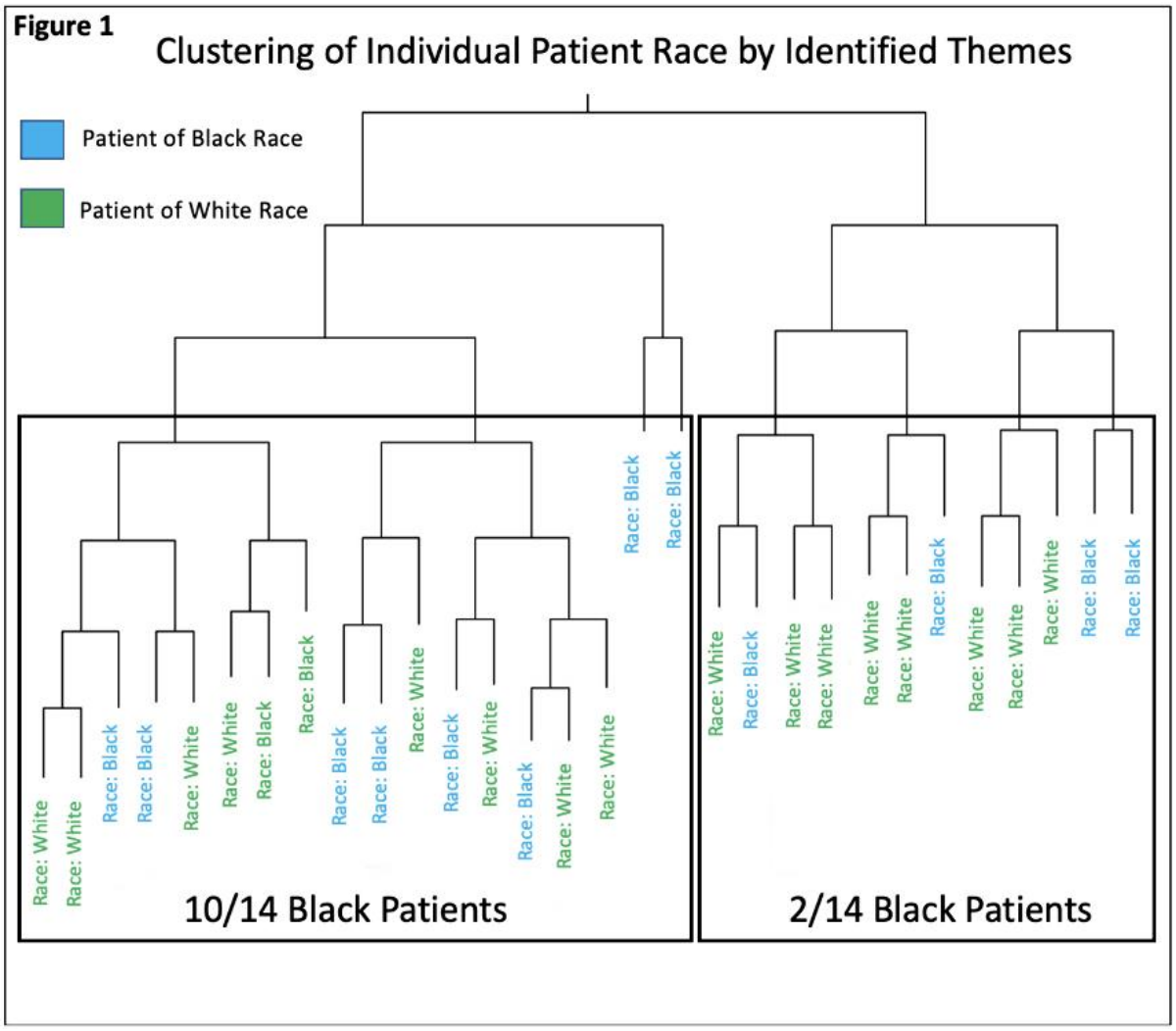
Introduction: Less than five percent of oncology clinical trial participants are Black. We sought to investigate differences in reason for trial enrollment, trial experience, and trial importance by race.

Methods: This prospective study was at a Minority and Underserved Community Oncology Research site where minorities are over 30% of trial enrollments. We interviewed thirty gynecologic cancer patients enrolled on Phase I-III trials about their reason for enrollment, trial experience, and trial importance. Interviews were thematically analyzed by three trained staff with comparison between White and Black patients.

Results: We interviewed 14 Black and 16 White patients. Among Black patients, the most common theme referenced for trial enrollment, experience, and importance were better chance at cure (n = 6), positive trial experience (n = 15), and improving the future (n = 6), respectively. The most common themes referenced among White patients were helping others (n = 8), caring and personable interactions (n = 22), and improving the future (n = 9), respectively. Cluster analysis of identified themes revealed that themes tended to align along racial lines indicating a shared experience among Black women on trial **Figure 1**. When asking minority patients what facilitated trial participation at our site, the top three themes were community outreach, perceived equity, and diversity in our patient population and

staff.



Conclusion/Implications: Our results indicate that Black patients report a positive clinical trial experience and appeared to have a shared trial experience. Minority patients voiced perceived equity and community outreach being key to facilitators of enrollment on trials.

PR076 / #516

POSTER ROUNDS 17: COMMUNITY PERSPECTIVE

Topic: *AS13. Patient Advocacy*

RACIAL AND ETHNIC ENROLLMENT DISPARITIES IN CLINICAL TRIALS LEADING TO FDA APPROVAL OF GYNECOLOGIC CANCER TREATMENT

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Introduction: Objectives: The magnitude of disparities in the enrollment of racial/ethnic groups in clinical trials for the treatment of gynecologic malignancy is unknown. We sought to analyze the enrollment rates of patients by race/ethnicity in clinical trials for which FDA granted treatment approvals for gynecologic malignancies in the last decade.

Methods: Methods: We conducted a retrospective review of clinical trials registered with ClinicalTrials.gov between 2010-2020. Enrollment rates for clinical trials were stratified by race/ethnicity and type of cancer. Enrollment fractions (EFs) were calculated using prevalence data from the US cancer statistics database for cervical, uterine and ovarian cancer 2016-2020. Odds ratios (OR) and 95% confidence intervals (CI) were calculated to compare racial/ethnic group enrollment rates to Non-Hispanic (NH) White enrollment rates.

Results: Results: A total of 11/17 (65%) identified trials reported race enrollment: 5,032 (57.1%) patients were NH-White and 3,776 (42.9%) were other races/ethnicities. The EFs for included trials were 1.6% for NH-White versus 2.9% for other races/ethnicities. Two trials dichotomized race/ethnicity into NH White and Non-White; Non-White were significantly over-represented (OR 1.79, 95% CI [1.71-1.87], p<0.001). Analysis of the other 9 trials showed that NH Black (OR 0.34, 95% CI [0.30-0.39], p<.001) and Hispanic patients were underrepresented (OR 0.27, 95% CI [0.23-0.32], p<.001). Patients who identified as Asian/Pacific Islander were overrepresented (OR 1.48, 95% [1.35-1.63], p<.001).

Conclusion/Implications: Conclusions: NH-Black and Hispanic patients are significantly underrepresented in clinical trials leading to FDA approved treatment for gynecologic malignancies. Enrollment strategies are needed to increase diversity in clinical trials studying treatment for gynecologic malignancies.

PR077 / #722

POSTER ROUNDS 17: COMMUNITY PERSPECTIVE

Topic: *AS13. Patient Advocacy*

PATIENT AND PUBLIC INVOLVEMENT IN DESIGNING A WILLINGNESS TO PAY SURVEY FOR A PARP INHIBITOR DE-ESCALATION STUDY IPIROC IN OVARIAN CANCER: A UK- INDIA EXPERIENCE

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Introduction: IPIROC (Intermittent PARP inhibitor Regimen in Ovarian Cancer) is an Indo-UK and GCIG collaborative pragmatic study for optimal scheduling of PARPi (dose de-escalation) as an acceptable and affordable alternative in LMICs. Willingness-to-pay (WTP) for an intervention is a measure used in the valuation of health benefits for a cost-benefit analysis. We carried out a Patient and public involvement (PPI) activity, both in the UK and India to assess patient viewpoints in the design of a WTP survey on daily versus intermittent PARPi for maintenance treatment, and to determine the threshold for acceptability of a detriment in efficacy as the trade-off for affordability and reduced toxicity with the intermittent regimen.

Methods: NIHR guidance was used to conduct the UK PPI workshop at South Tees NHS Trust with further feedback from the regional Northern Cancer Voices patient group and ovarian cancer patient experience groups. In India, KolGOTRG PPI group was created following the CRUK PPI toolkit.

Results: The complexities of understanding the concept of WTP and dose de-escalation as a trade-off was evident and differed amongst PPI groups (Table 1). In India, during both the workshops held in 2020 and 2024, a 30-40% detriment in efficacy as a trade-off for affordability and reduced toxicity was voiced as an acceptable threshold in a recurrent

setting.

Table 1: PPI group features in UK and India for the IPIROC WTP survey

Country	UK	INDIA
PPI group location	North-East England	KolGOTRG, Eastern India
Guidance document	NIHR toolkit	CRUK PPI Toolkit adapted for KolGOTRG
Year of workshop	2024	2020 and 2024
Type of workshop	Virtual and face to face	Virtual
Funding status for the intervention (Drug)	• Funded in the UK • WTP scenario hypothetical	• Out of pocket expenditure in India • WTP scenario can be related to practice
Patient perspectives and themes	Concerns of reduced efficacy with treatment de-escalation and possibility of paying for cancer treatment	30-40% detriment in efficacy as a trade-off for affordability and reduced toxicity was voiced as an acceptable threshold
Recommendation from PPI group	A revised survey design with more clarity on the purpose of the study, minimised information, and simplified language with use of infographics was needed.	• WTP context would vary in the frontline versus recurrent settings for the maintenance therapy with PARPi as there is different expectation in terms of what is most important to the patient at that given timepoint and context. • Clarity is required on endpoints (cure versus prolongation of life for some months) and the predicted efficacy of the costly targeted drug in biological subgroups (i.e. BRCA/Lynch versus non BRCA). • Complexity of the survey questionnaire may require face to face explanation and administration by trained personnel using infographics/Visual aid tools.
Study funding	UKIERI, CRUK- DBT seed corn funding, Newcastle University, James Cook University Hospital	DST-UKIERI, CRUK- DBT seed corn funding, ICMR (Indian Council of Medical Research)

Conclusion/Implications: In multicentric studies with LMIC participation, local PPI group involvement should be sought at the planning phase as patient perspectives differ in the context of relevance and acceptability requiring customised survey design, content and administration strategies.