Conclusions There is no clear benefit in the use of adjuvant treatment for patients with early stage adenocarcinoma.

IGCS20_1065

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PRACTICING KNOWLEDGE TRANSLATION: BUILDING AWARENESS AND ASSESSING BARRIERS AND FACILITATORS TO PROVINCIAL IMPLEMENTATION OF THE PROACTIVE MOLECULAR RISK CLASSIFIER FOR ENDOMETRIAL CANCER (PROMISE)

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Objectives In preparation for provincial implementation of ProMisE molecular classification, two KT objectives were identified: 1) build awareness of ProMisE with first line knowledge users (KUs); and 2) elucidate barriers and facilitators to KUs use of ProMisE.

Methods KUs were defined as pathologists, and clinicians (general practitioners, gynecologists, and oncologists) from rural and urban centres. The KT intervention was an explanatory video reviewing the rationale and relevance of molecular classification via three segments: ProMisE overview, clinician-focused, and pathologist-focused. Dissemination of the video to KUs occurred using a mixed-methods approach in two phases: I: KUs were exposed to the video and survey through institutional listservs; II: KUs were engaged for in-person viewing and focus group.

Results The survey received 41 partial and 37 complete responses with representation from all targeted KUs: gynecologists (62.2%), oncologists (rad+gyn-oncs+other 32.4%), pathologists (5.4%) and all provincial health authorities. 95.1% of KUs watched the ProMisE overview, with 80.5% and 68.3% completing the clinician and pathology segments, respectively. Over 90% of respondents reported it having contained enough information to understand the advantages, and 64% felt ProMisE would be useful to guide management. KUs across specialties participated in a focus group (n=19; 7 rural) to identify barriers and facilitators to implementation. Thematic analysis of survey and focus group illuminated implementation concerns related to cost, availability, accessibility, process, training, and interpretation of the test.

Conclusions Motivation and engagement for EC molecular classification was recognized by KUs with implementation concerns. Addressing cross-provincial access, process, and timely results will ensure rapid uptake and fidelity.

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ENDOMETRIAL CANCER: THE ROLE OF PROGNOSTIC FACTORS AND THEIR IMPACT ON RECURRENCE PATTERN

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Introduction The rate of recurrence of endometrial cancer is 11–19%. It is related to different prognostic factors which define

specific risk classes in order to decide for an adjuvant treatment. The objective of this study is to evaluate how prognostic factors influence the probability and pattern of recurrence.

Methods This monocentric observational retrospective study was conducted on 214 patients treated for endometrial cancer between February 2011–2019. The considered parameters were: age, BMI, surgery, stage, LVSI, myometrial infiltration, histological grade, lymph node involvement, adjuvant therapy, relapse. DFS and OS were stratified by the presence or absence of prognostic factors.

Results The rate of recurrence was 18,7%. DFS was 24,5 months and OS was 103,2 months. We observed an increase from 5 to 25% in the distance metastasis rate associated with positive LVSI. The monovariate analysis showed a correlation between DFS and advanced stage (O.R. II 9,2; III-IV 7,9 p=0,0001), positive lymph node infiltration (O.R. 4,2; p=0,02), myometrial infiltration (O.R. 4,3 p=0,0001) and LVSI (O.R. 2,4 p=0,008). A similar result was observed considering the OS and the grading (p=0,003). We conducted the multivariate analysis of Cox according to the ESGO/ESMO/ESTRO risk class classification and multicollinearity among variables was observed. The results were statistically significant for both DFS (p=0,002) and OS (p=0,000).

Conclusions Almost all the considered prognostic factors influence the presence of recurrence, but the stage is the most impactful factor while LVSI correlates with distance metastasis. The definition of the risk factors must be considered to develop targeted therapeutic pathways.

IGCS20_1070

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ONCOLOGICAL OUTCOMES FOLLOWING RISK REDUCING BILATERAL SALPINGO-OOPHORECTOMY IN WOMEN DEEMED HIGH RISK FOR OVARIAN CANCER

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Introduction This study aims to determine cancer rates following risk reducing bilateral salpingo-oophorectomy (BSO) in a high risk cohort. High risk women are those who carry an oncogenic gene mutation or have a strong family history of cancer. We aimed to establish the rate of both occult cancer and the precursor lesion serous tubal intraepithelial carcinoma (STIC). We also documented any subsequent diagnosis of primary peritoneal carcinoma (PPC).

Methods A retrospective study of 274 patients who underwent prophylactic BSO between January 2009 and January 2019 at the Royal Derby Hospital.

Results The median age at risk reducing surgery (RRS) was 47 (range 29 to 78). 151 patients (55%) were confirmed to have a high risk gene mutation. STIC was found in only one patient (0.3%) at RRS, however 3 further malignancies were diagnosed (1% of cases) one of which was tubal. Two patients subsequently developed PPC (0.7%), at 42 and 70 months respectively; neither of whom had STIC diagnosed at surgery. 99% of procedures were completed laparoscopically with a complication rate of 3%.

Conclusion Women with the BRCA gene or significant family history can carry up to a 50% lifetime risk of ovarian cancer. This study has shown that BSO reduces that risk to under

1%. Primary peritoneal carcinoma remains a risk despite surgery, and although it has been suggested that this may arise from a tubal precursor lesion (STIC), in our cohort, this was not isolated in either of the patients who developed PPC.

IGCS20_1071

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NEOADJUVANT CHEMOTHERAPY WITH UTERINE ARTERY CHEMOEMBOLIZATION IN THE MANAGEMENT OF LOCALLY ADVANCED CERVICAL CANCER: BELARUS EXPERIENCE

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Objective To study the efficacy of neoadjuvant chemotherapy (NACT) with uterine artery chemoembolization (UACE) followed by radical surgery or radiotherapy in patients with locally advanced cervical cancer (LACC).

Methods Study included 55 primary LACC patients: 25 presented stage IIB (45.5%), 28 – IIIB (50.9%) and 2 – IVA (3.6%). Forty-seven patients had squamous cell carcinoma (85.5%), 7 – adenocarcinoma (12.7%) and one – undifferentiated cancer (1.8%). Patients underwent two courses of NACT: intravenous infusion of cisplatin and gemcitabine during first course and after 3 weeks transcatheter uterine artery infusion of gemcitabine, gelatin sponge particles were applied for UACE. After NACT, all patients underwent evaluation for response and operability. Those who were not amenable to surgery received radiotherapy.

Results Bilateral UACE was performed in 36 patients (65.5%) and unilateral – in 19 (34.5%). Patients who responded to NACT (42, 76.4%) underwent surgery: 40 patients had radical hysterectomy and 2 – anterior pelvic exenteration. After bilateral UACE surgery was performed in 83.3% (30/36), unilateral – in 63.1% (12/19) ($p < 0.05$). Radical surgery was performed in 38 (90.5%) of the patients. Patients who did not respond to NACT (13, 23.6%) underwent pelvic radiotherapy. The 5-

year overall survival was $76.2 \pm 6.6\%$ in patients receiving surgery and $23.1 \pm 11.7\%$ for those receiving radiotherapy ($p < 0.0011$); the 5-year disease-free survival was $82.7 \pm 6.0\%$ and $48.6 \pm 16.7\%$, respectively ($p = 0.028$).

Results In LACC patients after NACT with UACE resection rate was 76.4%, the surgery was performed radically in most of the cases (90.5%), showing better survival benefits if followed radical surgery rather than radiotherapy.

IGCS20_1072

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ARTIFICIAL INTELLIGENCE PUBLICATION TRENDS IN REPRODUCTIVE CANCERS – WHO IS BEING LEFT BEHIND?

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Introduction There is an increasing presence and utility of artificial intelligence (AI) in oncology. We proposed to determine the trends of AI publications in screening, diagnosis, surgery, and treatment of reproductive cancers over time.

Methods Using the PubMed database, we used keywords and MeSH terms to index research articles from 1990 to 2019, and the National Cancer Institute's Joinpoint Regression Program for statistical analysis.

Results We identified a significant increase in AI research on all cancer types over the last 30 years from 19 to 1,829 publications per year. 14,721 publications were related to AI and cancer, 41% of which discussed diagnosis, 30% treatment, 24% surgery, and 5% screening ($p < 0.001$). Despite having the lowest number of publications, screening had the highest average annual rate of increase at 23.6% ($p < 0.001$) (table 1A). The numbers of breast and prostate cancer publications were significantly higher than that of gynecologic cancers. Of 5,808 reproductive cancer and AI publications, prostate cancer comprised 42%, breast 40%, cervical 8%, ovarian 6%, and uterine

Abstract 103 Table 1A Average annual percent change of artificial intelligence and reproductive cancer publications

Estimated Joinpoints								
Cohort	Joinpoint	Estimate	Lower CI	Upper CI				
Breast - 1 Joinpoint	1	1996	1992	2001				
Prostate - 1 Joinpoint	1	2010	2007	2012				
GYN Cancers - 3 Joinpoints	1	1998	1995	1999				
GYN Cancers - 3 Joinpoints	2	2001	1999	2004				
GYN Cancers - 3 Joinpoints	3	2011	2007	2015				
Annual Percent Change (APC)								
Cohort	Segment	Lower Endpoint	Upper Endpoint	APC	Lower CI	Upper CI	Test Statistic (t)	Prob >
Breast - 1 Joinpoint	1	1990	1996	34.3*	15.7	56.0	4.1	0.0
Breast - 1 Joinpoint	2	1996	2019	12.3*	10.1	14.5	12.1	0.0
Prostate - 1 Joinpoint	1	1990	2010	32.8*	28.9	36.8	19.5	0.0
Prostate - 1 Joinpoint	2	2010	2019	-10.0*	-18.5	-0.6	-2.2	0.0
GYN Cancers - 3 Joinpoints	1	1990	1998	46.2*	31.2	63.0	7.3	0.0
GYN Cancers - 3 Joinpoints	2	1998	2001	-30.8	-74.4	87.3	-0.8	0.4
GYN Cancers - 3 Joinpoints	3	2001	2011	32.1*	20.6	44.6	6.4	0.0
GYN Cancers - 3 Joinpoints	4	2011	2019	-3.2	-13.1	7.9	-0.6	0.5
* Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.								
Average Annual Percent Change (AAPC)								
Cohort	Range	Lower Endpoint	Upper Endpoint	AAPC	Lower CI	Upper CI	Test Statistic~	P-Value
Breast - 1 Joinpoint	Full Range	1990	2019	16.5*	12.7	20.4	9.1	0.0
Prostate - 1 Joinpoint	Full Range	1990	2019	17.7*	13.6	21.9	9.0	0.0
GYN Cancers - 3 Joinpoints	Full Range	1990	2019	16.6*	4.7	30.0	2.8	0.0
* Indicates that the AAPC is significantly different from zero at the alpha = 0.05 level.								
~ If the AAPC is within one segment, the t-distribution is used. Otherwise, the normal (z) distribution is used. See Help to Learn More								