synergistic effect, significantly upregulating CDKN1A and SOX17, which resulted in cell cycle arrest and inhibited the proliferation, migration and invasion of EC cells. Additionally, it showed that AQB can enhance the anti-tumor effect of TAZ in vivo.

Conclusion/Implications AQB has demonstrated a promising inhibitory effect on EC cells. When combined with TAZ, the expression of CDKN1A and SOX17 was significantly upregulated, resulting in more potent anti-tumor effects. This combination therapy could provide a novel strategy for treating EC.

EP114/#688 EVALUATING CDK 4/6 INHIBITORS IN COMBINATION WITH ENDOCRINE THERAPY IN ENDOMETRIAL CANCERS: A RETROSPECTIVE STUDY

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Introduction CDK 4/6 inhibitors (CDK4/6i) with endocrine therapy (ET) has promising phase II results in estrogen receptor (ER)+ recurrent/advanced endometrial cancer (EC). The purpose of our study is to evaluate characteristics and clinical outcomes of patients with ER+EC who have received a CDK4/6i+ET at our institution.

Methods This is a multi-center institution retrospective chart review, which included patients diagnosed with endometrial cancer and treated with CDK4/6i+ET between 2016- March 2023 for $\geq$1 month in duration. Outcomes evaluated included time to treatment failure (TTF) and progression free survival (PFS).

Results Thirteen patients were identified, with an average age of diagnosis at 61 years (IQR: 50–68). The most common histopathologic diagnosis was endometrioid (n=8, 61.5%), followed by endometrial stromal sarcoma (ESS) (n=4, 30.8%). The median follow-up after CDK4/6i was 8.6 months (IQR 4.7–17.5). The median number of treatments since recurrence was 2, including 9 with prior ET. The TTF in the endometrioid group was 5.1 months (95% CI 3.8-NR), where PFS was not reached (NR) (95% CI 5.4-NR). The TTF and PFS in the ESS group was the same at 9.8 months (95% CI 7.9-NR). Four patients were still on treatment upon study completion, five patients discontinued due to disease progression, and four discontinued because of toxicity.

Conclusion/Implications Patients with ER+EC have reasonable responses to CDK4/6i+ET with the majority of patients with endometrioid histology discontinuing due to toxicity rather than progression. This data supports the findings from the previously published clinical trials that CDK4/6i+ET should be considered as a treatment option in recurrent ER+EC.

EP115/#847 CORRELATION BETWEEN MISMATCH REPAIR STATUS AND LYMPH NODE METASTASIS IN ENDOMETRIAL CANCER

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Introduction Endometrial cancer is the most common gynecologic malignancy worldwide, and lymph node metastasis is a major prognostic factor for patients with this cancer. Mismatch repair (MMR) deficiency is known to play a critical role in the development of endometrial cancer, but its association with lymph node metastasis and recurrence remains unclear. In this study, we aimed to investigate the correlation between MMR status and lymph node metastasis/recurrence rate in endometrial cancer.

Methods We retrospectively analyzed 59 patients with endometrial cancer who underwent surgery and received MMR testing at out institution between 2010 and 2022. Immunohistochemistry was performed to assess the expression of MMR, including MLH1, PMS2, MSH2, and MSH6.

Results Of these patients, 14 (23.7%) had MMR deficiency. The MMR deficient group had a higher proportion of early stage (stage I and II) compared to the MMR proficient group (78.6% vs. 64.4%). However, lymph node metastasis was more common in the MMR deficient group (21.4%) compared to the MMR proficient group (13.3%) (p=0.038). Furthermore, the recurrence rate was higher in the MMR deficient group (21.4% vs. 15.6%).

Conclusion/Implications Therefore, MMR status may serve as a useful biomarker to predict the risk of lymph node metastasis and recurrence in patients with endometrial cancer. Based on our findings, knowing the MMR status before surgery may help in determining an appropriate surgical plan, which could potentially improve the prognosis and quality of life of the patients. Further studies with larger sample sizes are needed to validate our findings.

EP116/#189 RADIOGRAPHER LED INSERTION OF POST-OPERATIVE VAGINAL APPLICATOR FOR ENDOMETRIAL CANCER BRACHYTHERAPY: CLATTERBRIDGE CANCER CENTRE EXPERIENCE

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Introduction Vaginal vault brachytherapy (VBT) using post-operative vaginal applicator (POVA) has been a standard adjuvant treatment for endometrial cancer and reduces the risk of local recurrence. The Clatterbridge Cancer Centre (CCC) has offered VBT since the start of the service. Radiographer-led delivery of POVA was implemented to free up clinician time and improve service delivery. Historically all POVA insertions were carried out by the clinicians. More recently clinicians have performed the initial assessment and applicator placement for the first insertion and the subsequent insertions were then carried out by competent radiographers. The aim of this study was to evaluate the safety and effectiveness of radiographer-led delivery for subsequent treatments.

Methods This is a retrospective audit of endometrial cancer patients treated with VBT between 31st March 2020 and 28th February 2023. The aim is to identify the frequency of clinician input for the subsequent treatments and identify any complications.

Results During the specified time period, 278 patients were treated with VBT amounting to a total of 724 treatments. All of the 278 planned first fractions were carried out by the clinicians and only 15 of the subsequent 446 treatments

required clinician input. 431 (96.6%) treatments were carried out solely by the radiographers. There were no procedure related complications noted. Some of the reasons requiring clinician input were radiographer unavailability, anxious and tense patients requiring change in the size of applicator and vaginal bleeding requiring examination.

Conclusion/Implications Radiographer led VBT is safe, effective, frees up clinician time, improves service delivery and streamlines work force utilisation.

EP117/#831 ARE WE UNDERUTILIZING STEREOTACTIC BODY RADIOTHERAPY IN THE TREATMENT OF OLIGOMETASTATIC UTERINE CANCER?

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Introduction Oligometastatic disease is an intermediate state between locoregional disease and widely metastatic disease. Previous work by our group showed a significant difference between the median survival of uterine cancer patients with a single metastatic site versus multiple sites, hence we defined our oligometastatic cohort as having one metastatic site at diagnosis. In our current analysis we explore the trends of stereotactic body radiotherapy (SBRT) use in this oligometastatic population.

Methods The National Cancer Database was analyzed in patients diagnosed with uterine cancer between 2004–2019. We excluded patients with non-metastatic disease at diagnosis, lack of metastatic sites listed, multiple primaries and missing survival data. We included patients treated with radiotherapy and defined SBRT as ≤5 fractions and ≥500cGy dose per fraction.

Results Among 641,276 women with uterine cancer, 17,343 remained after exclusion and 12,214 had oligometastatic disease. 23.7% of metastatic patients received radiation (4.3% SBRT) and 22.0% of oligometastatic patients received radiation (3.2% SBRT). Among the oligometastatic SBRT cohort, patients received a median total dose of 21 Gy (range 800 cGy-67 Gy). SBRT sites include: brain (46.3%), uterus (11%), lung (9.8%), spine (8.5%), pelvis (7.3%), extremity bone (6.1%), other bone (4.8%), vagina (2.4%), liver (1.2%), lymph node (1.2%) and other (1.2%). SBRT patients had a median age of 63, low comorbidity index scores, and were high income earners.

Conclusion/Implications SBRT is underutilized in the treatment of uterine cancers, particularly in oligometastatic disease. Increasing the use of SBRT may have implications for increasing overall survival in oligometastatic uterine cancer.

EP119/#398 RECURRENT POSTMENOPAUSAL BLEEDING: PATHOLOGICAL OUTCOMES AND PROGNOSTIC FACTORS. A MULTICENTER OBSERVATIONAL STUDY

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Introduction Recurrent postmenopausal bleeding (PMB) occurs in 6–25% of postmenopausal women. Controversy exists as to whether recurrent PMB leads to a higher risk of endometrial cancer (EC) in comparison to a first presentation of PMB. Additionally, little is known about predictive factors for recurrent PMB.

Methods We conducted an observational multicenter prospective cohort study over a 7 year period in four hospitals in the Netherlands. Women aged ≥40 years with PMB undergoing endometrial sampling were included after written consent was obtained. Occurrence of recurrent PMB was retrospectively determined. Chi-square, univariate and multivariate analysis were performed using SPSS28 to compare pathological outcomes and identify predictive factors. Central study approval was obtained (MEC 2015–740).

Results We included 468 women, of whom 28% experienced recurrent PMB. Median follow-up time was 61 months (IQR 54–69). Compared to women with recurrent PMB, women with one episode of PMB were more often diagnosed with a malignancy (RR 1.979, 95% CI 1.071–3.657, p=0.023) and less frequently with benign polyps (RR 0.735, 95% CI 0.547–0.987, p=0.045). Identified predictive factors for recurrent PMB include higher BMI (OR 1.041, 95% CI 1.004–1.079, p=0.03) and use of hormone replacement therapy (HRT) (OR 2.754, 95% CI 1.476–5.138, p=0.001). Presence of polyps was not independently associated with recurrence (OR 1.527, 95% CI 0.978–2.385, p=0.063).

Conclusion/Implications Recurrent PMB occurred in 28% of postmenopausal women. Women with recurrent PMB were less often diagnosed with malignancies and more frequently with benign polyps, compared to women with one episode of PMB. Predictive factors for recurrent PMB include high BMI and HRT.

EP123/#1544 IDENTIFICATION OF A DNA DAMAGE RESPONSE RELATED PROGNOSTIC MODELS IN ENDOMETRIAL CANCER

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Introduction Genomic instability is a hallmark of cancers, which leads to tumor heterogeneity and tolerance to chemoradiotherapy thus affecting the prognosis. Exploring the DDR gene in the prediction of prognosis, response of ICB and antitumor therapy is of great importance.

Methods RNA-seq data was from 19 endometrial cancer patients. 585 patients' data were from TCGA. Cox, Kaplan Meier, and Lasso logistic regression were used to screen the univariate factor and build the DDR nomogram. R 'limma' package was used to analyze the DEGs between the high and low-risk groups. Enrichment analysis was achieved. Immune infiltration status and ICB response prediction were performed. r-H2AX foci after UBE2T knockdown were analyzed. Comet assay was used to observe the DNA damage caused by UBE2T knockdown. Western blot was used to investigate DDR protein expression.

Results A DDR-related nomogram containing UBE2T and EME1 was established. UBE2T expression increased in high-risk group. The high-risk group showed different infiltration patterns. DDR nomogram exhibits an AUC of 0.764 to