

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 our 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 28<sup>th</sup> 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