

logistic regression analysis showed that age(OR=4.82, 95% CI:1.85~13.62), preoperative tumor area score(OR=6.24,95% CI:1.73~30.4), tumor load score(OR=6.25,95% CI:2.34~18.14), albumin(OR=0.19,95%CI:0.07~0.47) were independent influencing factors of SPC after cytoreductive surgery. The nomogram model was constructed by using the above indexes. The Area Under Curve of the model was 0.913(95%CI:0.866~0.959), the sensitivity was 82.50%,and the specificity was 88.80%.

Conclusion/Implications Age, preoperative tumor area score, tumor load score, albumin are independent factors of SPC after cytoreductive surgery. Nomogram can provide an individualized postoperative SPC risk prediction for cytoreductive surgery patients.

EP146/#636

NOMOGRAM BASED ON HUMAN EPIDIDYMIS PROTEIN 4 PREDICTED CONCURRENT ENDOMETRIAL CANCER FOR PATIENTS DIAGNOSED WITH ATYPICAL ENDOMETRIAL HYPERPLASIA BEFORE SURGERY

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Introduction This study aimed to investigate whether preoperative human epididymis protein 4 (HE4) could predict concurrent endometrial cancer (EC) for patients diagnosed with atypical endometrial hyperplasia before surgery and help to establish a nomogram for better clinical management.

Methods Preoperative-AEH patients who underwent hysterectomy in a tertiary hospital from Jan 2020 to Dec 2022 were retrospectively analyzed. Independent predictive factors determined by multivariate logistic regression model were used to establish nomogram and internal validation was performed by a bootstrap resampling method.

Results A total of 455 preoperative-AEH patients were included, 23.4% of whom had concurrent EC. HE4 level significantly increased in concurrent-EC patients compared with final-diagnosed AEH patients (median 50.5 vs 43.7 pmol/L, $p < 0.001$). ROC curves also showed good predictive potential of HE4 for concurrent EC (AUC = 0.696, 95%CI=0.633–0.760, $p < 0.001$) and concurrent intermediate-high-risk EC (AUC = 0.713, 95%CI=0.563–0.863, $p = 0.005$). Multivariate analysis revealed the independent predictive factors for concurrent EC were HE4 level (OR = 3.84; 95% CI = 2.07–7.13), postmenopausal status (OR = 5.25; 95% CI = 2.26–12.22) and BMI (OR = 2.09, 95% CI = 1.12–3.91). The three factors were used to create the nomogram that showed a better goodness-of-fit for predicting concurrent EC. The bootstrap-corrected of concordance index of nomogram was 0.726 (95% CI=0.665–0.784), which was higher than that of each factor alone.

Conclusion/Implications HE4 presented good predictive potential for concurrent EC in preoperative-AEH patients. The nomogram based on HE4, postmenopausal status and BMI might improve this predictive value to stratify high-risk patients for better clinical strategy.

EP149/#421

MMR STATUS ACCORDING TO ETHNICITY IN NEW ENDOMETRIAL CANCER DIAGNOSES WITHIN THE AUCKLAND REGION

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Introduction Endometrial cancer (EC) is the most common gynaecological malignancy in New Zealand. Pacific women have the highest incidence, which is rising in those under 50 years of age. The introduction of immunohistochemistry for EC has important implications for identification of potential Lynch syndrome (LS). Universal testing of EC tumours for a mutation in one of the DNA mismatch repair genes (MMR) was introduced to New Zealand in 2017. The objective of this study was to investigate the rate of MMR deficient and proficient tumours within our population, and whether these rates vary according to ethnicity.

Methods This is a retrospective population-based cohort study of all cases of EC diagnosed between 1st January 2017 until 31 December 2018 within the Auckland region. Incidence of MMR deficient and proficient tumours was assessed for each ethnicity and compared.

Results 409 patients were diagnosed with EC, 81.6% (n=334/409) underwent MMR IHC testing. There were 266 pMMR (79.6%) and 68 dMMR (20.4%) EC tumours. 26.1% of EC in European patients were dMMR, compared with 10% in Māori ($p = 0.06$, RR 0.4 (0.1 – 1.2)), and 11.4% in Pacific ($p = 0.004$ RR 0.5 (0.3 – 0.9)), and 28.3% in Asian (ns). 8 patients (2.3%) were diagnosed with Lynch Syndrome: 4/8 (50%) European, 2/8 (25%) Asian, 1/8 (12.5%) Indian, 1/8 (12.5%) Middle Eastern.

Conclusion/Implications Despite having an increased incidence of EC in New Zealand, Māori and Pacific people have significantly lower rates of MMR deficient tumours than the European population. None of the Pacific or Māori patients had Lynch syndrome.

EP150/#674

THE ROLE OF DDIT4 AS A HYPOXIA-INDUCIBLE GENE AND PROGNOSTIC BIOMARKER IN TYPE II ENDOMETRIAL CANCER

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Introduction Although extensive research has been conducted on endometrial cancer and its hypoxic microenvironment, the role of DDIT4 in endometrial cancer remains unexplored. This study aimed to investigate the significance of DDIT4 as a prognostic biomarker for endometrial cancer using immunohistochemical staining and RNA-sequencing.

Methods Four types of endometrial cancer cells were cultured under normoxia and hypoxia conditions, and RNA-seq was used to examine differentially expressed genes. Immunohistochemical staining for DDIT4 and HIF1A was performed in 86