

mutation characteristics, and oncogenic signaling pathways in the two groups.

Results The five genes with the highest frequency of somatic SNV/Indel mutations are: PIK3CA (39%), MLL3 (26%), MLL2 (21%), EP300 (15%), and FBXW7 (13%). Further differential analysis find EP300 and FBXW7 are significantly enriched in lymph node-positive patients. Mutation coexistence-mutual exclusion analysis find both lymph node-positive and negative patients have large number of coexisting mutations, while mutually exclusive mutations are rare, and the patterns of coexisting mutations are different between the two groups. Cosmic mutational signature analysis reveal the homologous recombination-mediated DNA repair defect signature is enriched in lymph node-positive, but not in negative patients.

Conclusion/Implications The gene mutation characteristics of both are different, the somatic SNV/Indels of EP300 and FBXW7 are significantly enriched in lymph node positive patients. The co-occurrence and cosmic features of gene mutations are also different, homologous recombination-mediated DNA repair defects only exist in lymph node-positive patients. These different features may be potential molecular markers to predict lymph node metastasis in cervical cancer.

EP104/#212

A RETROSPECTIVE STUDY COMPARING WEEKLY VERSUS TRI-WEEKLY CISPLATIN PLUS PACLITAXEL CHEMOTHERAPY CONCOMITANT WITH RADIOTHERAPY IN THE TREATMENT OF LOCALLY ADVANCED CERVICAL CANCER

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10.1136/ijgc-2023-IGCS.206

Introduction To assess the tumor response following definitive concurrent chemoradiotherapy (CCRT) for locally advanced cervical cancer (LACC) using magnetic resonance imaging before and after treatment. The prognosis and side effects of CCRT with weekly cisplatin plus paclitaxel versus tri-weekly cisplatin plus paclitaxel should also be compared.

Methods We collected clinical data from the medical records of patients diagnosed with International Federation of Gynecology and Obstetrics (FIGO 2018) stage IIB to IIIC1r LACC at Chongqing University Cancer Hospital from 1 March 2016 to 31 November 2020. A total of 191 patients who underwent MRI before CCRT and 1,3,6 months after CCRT were included in this analysis.

Results With a median follow-up of 39 months, the complete response rates were 57.8% vs. 41.2% ($P=0.026$) in the weekly and triweekly groups at 1 month, 72.2% vs. 60.7% ($P=0.086$) and 76.6% vs. 71.3% ($P=0.400$) at 3 and 6 months. Separately, the 5-year OS was 83.1% vs. 82.7% ($P=0.690$) and the PFS was 80.4% vs. 83.5% ($P=0.650$). Patients with residual disease >1 cm and ≤1 cm had a median PFS rate of 88.3% and 57.4%, respectively ($P=0.000$). An increase in toxicities were observed in the tri-weekly group in terms of grade 3/4 thrombocytopenia ($P=0.000$) and grade 1/2 nausea/vomiting ($p=0.049$).

Conclusion/Implications Tri-weekly cisplatin & paclitaxel chemotherapy concurrent with radiotherapy showed worse short-term efficacy compared with the weekly group, and increased side effects but didn't improve PFS and OS. Patients with

residual disease measuring more than 1 cm associated with worse PFS.

AS04. Endometrial/Uterine corpus cancers

EP105/#527

ABERRANT BETA-CATENIN DISTRIBUTION AS POTENTIAL PROGNOSTICATOR FOR ENDOMETRIOID ENDOMETRIAL CANCER

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10.1136/ijgc-2023-IGCS.207

Introduction Aberrant beta-catenin distribution has been theorized as a predictive biomarker for recurrence in early stage, low grade endometrioid endometrial cancer.

Methods Retrospective single institution cohort study of 298 endometrioid endometrial cancer patients 5/2018–2/2022. Demographic and tumor molecular characteristics collected. Beta-catenin status defined as aberrant nuclear distribution, wild-type plasma membrane distribution. X^2 test, Fisher test, adjusted multivariable logistic regressions, sensitivity analyses were performed.

Results Most tumors were stage IA (55.4%) grade 1 (65.8%). 45.3% of tumors aberrant beta-catenin, 70% MMR proficient, 94% p53 wild type, 95% POLE wild type, 98% ER positive, 97.3% PR positive. Aberrant beta-catenin distribution in 74.1% of FIGO grade 1 tumors, 22.5% of LVSI tumors and in 69% of patients younger than 70 years. Aberrant status in 39.6% of recurrences vs. 46.4% without recurrence ($p=0.38$). Recurrences in the vagina (29.2%), lung (25%). In early stage, low grade cohort, recurrence did not vary by beta-catenin status (42.9% of aberrant with recurrence versus 47.2% of aberrant without recurrence ($p=0.71$)). In the NSMP cohort, recurrence did not vary by beta-catenin status (61.9% recurred vs. 53.2% did not recurred) ($p=0.45$). In adjusted logistic regression, aberrant beta-catenin distribution did not affect disease recurrence in the overall cohort with aOR 1.12 [95% CI 0.50–2.48], early stage/low grade cohort with aOR 1.03 [0.35–3.10], and the NSMP cohort with aOR 0.58 [0.14–2.56]. Among tumors that received adjuvant RT ($n=84$), 2.86% aberrant beta-catenin tumors recurred vs. 8.16% wild-type beta-catenin recurred.

Conclusion/Implications Aberrant beta-catenin distribution did not significantly correlate with recurrence in early stage, low grade endometrioid uterine cancer

EP106/#616

OUR SINGAPOREAN EXPERIENCE IN ADOPTION OF FERTILITY SPARING STRATEGIES FOR ENDOMETRIAL HYPERPLASIA AND CANCER

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10.1136/ijgc-2023-IGCS.208

Introduction Endometrial Cancer (EC) is the commonest gynaecological cancer in Singapore and affects an increasing