Conclusion HPV persistence is one of the most important factors predicting the risk of CIN2+ recurrence. The risk of CIN2+ recurrence increased by the increase of HPV persistence up to one year. The persistence of HPV after the first year does not appear as a risk factor.

**2022-RA-743-ESGO**

**IMPROVING RISK STRATIFICATION FOR CERVICAL CANCER IN PATIENTS TREATED WITH CONCURRENT CHEMORADIATION AND MRI-IMAGE GUIDED ADAPTIVE BRACHYTHERAPY IN EMBRACE STUDY: RESULTS FROM AN INTERNATIONAL COLLABORATIVE TRANSLATIONAL RESEARCH STUDY (BIOEMBRACE-I)**

Introduction/Background BIOEMBRACE-I is a translational sub-study of EMBRACE-I, initiated to improve risk stratification for cervical cancer patients treated with chemoradiation and MRI-guided brachytherapy.

Methodology Between 2018–2021, patients were included from EMBRACE study sites. Prognostic factors at baseline and brachytherapy (FIGO stage, nodal involvement, histology, necrosis on MR, poor response indicated by high risk clinical target volume at brachytherapy (HRCTV-BT > 40 cc) were included. In the first phase, immunohistochemistry for p16 and L1CAM was performed. p16 was categorized as ‘positive’ or ‘negative’ and L1CAM was categorized as 0–10%, 10–50% or 50% overexpression. Response to EBRT and disease outcomes were tested after including p16 and L1CAM along with other prognostic factors. Univariate and multivariable analysis (MVA) was performed.

Results Eight EMBRACE study sites included 264 patients with a median follow up of 50 months (21–67). Distribution of prognostic factors, including p16 and L1CAM expression is summarized in Table 1. The median HRCTV-BT and D-90 was 30 cm³ (IQR 22–44) and 89 Gy (IQR 86–95 Gy). p16 positive patients had higher nodal positivity (96% vs. 3%, p=0.0001) or necrosis on MRI (73% vs. 26%, p=0.01) and proportion of HRCTV-BT < 40 cc (72.8% vs. 54.5%, p=0.03). The 5-year pelvic, disease control and disease free survival (DFS) was 87.3%, 72.6% and 66.7% respectively. On MVA, FIGO stage (HR=5.4, p<0.0001), necrosis on MR (HR =2.6, p=0.005) and p16 negative status (HR=2.1, p=0.07) predicted for HRCTV-BT > 40cc. For pelvic and disease control HRCTV-BT > 40cc and L1CAM > 50% were independent predictors, though reduced pelvic control was also observed at L1CAM >10% on univariate analysis. For DFS, nodal status and HRCTV-BT > 40 cc were independent predictors (table 1).

**2022-RA-755-ESGO**

**COMPARISON OF PD-L1 STATUS BETWEEN PRIMARY AND PAIRED RECURRENT/METASTATIC CERVICAL CANCER**

Introduction/Background Randomized trials established the clinical benefit of PD-1-inhibitors in recurrent/metastatic cervical cancer (CC). However, this benefit seems to be restricted mainly to PD-L1-positiv CC. The purpose of this study was to compare the PD-L1-status in primary CC with a paired sample at the time of recurrent/metastatic disease.

Methodology PD-L1-scoring was analyzed by immunohistochemistry (Ventana PD-L1 (SP263) in archived tumor tissue of primary CC and paired recurrent/metastatic CC (n= 24). PD-L1-positivity was defined as CPS (combined positive score) ≥1.

Results 50% (12/24) of patients were in FIGO stage IB1-IIA2 at primary diagnosis and the majority had squamous cell histology (87.5%; 21/24). Median PFS was 8.9 (95% CI: 7.8–10.0) months. PD-L1-CPS ≥1 was found in 96% (23/24) of primary and 92% (22/24) of paired recurrent/metastatic CC. The median CPS was 22 (range 0–80) in primary and 20 (range 0–90) in recurrent/metastatic CC. Correlation between primary and recurrent/metastatic CC was high (0.79). Only in one case a shift from a CPS-positive primary to CPS-negative relapsed disease was detected.

Conclusion Comparing PD-L1-status (CPS) between primary and recurrent/metastatic CC demonstrated a high concordance. Our data indicate that PD-L1 testing in archival material from primary tumor is sufficient, if a fresh sample at relapse or of metastases is not available.