THE IMPACT ON SURVIVAL OF FDG-TEP VERSUS SURGICAL PRETHERAPEUTIC PARAORTIC LYMPH NODE STAGING IN LOCALLY ADVANCED CERVICAL CANCER BEFORE CONCOMITANT CHEMORADIATION. A RETROSPECTIVE SINGLE-CENTER COHORT

Introduction/Background Aortic lymph node (LN) involvement represents one of the essential prognosis factors and defines the extent of external definitive chemoradiation. Fluorodeoxyglucose (FDG) positron emission tomography-computed tomography (PET-CT) remains the most accurate imaging technique to assess the extratumoral dissemination of the tumor unless it fails to detect between 10% to 15% of metastasis in aortic area. Despite false negatives of imaging, it remains unclear if surgical staging (SS) improves disease-free survival (DFS) and overall survival (OS). We aim to determine the impact of SS on efficacy.

Methodology From 01/2009 to 12/2019, we retrospectively reviewed all consecutive patients (pts) addressed for brachytherapy diagnosed with locally advanced cervical cancer. FDG PET-CT staging (cohort 1) versus exclusive imaging staging (cohort 2) was estimated using Cox models adjusted on baseline characteristics which are significantly different between groups (age, BMI, diabetes, ECOG performance status, pelvic LN status, FIGO stage). Adjusted hazard ratio (adjHR) were estimated with 95% confidence interval (CI95%).

Results Among the 225 pts analyzed, 178 pts were in cohort 1 and 47 in cohort 2. Respectively for cohort 1 and 2, median age was 47 and 58 years, ECOG = 1 for 10 (6%) and 22 pts (47%) and 22 pts (47%) and FIGO stage ≥ III for 72 (40%) and 29 pts (62%). Five-years OS was 79% (CI95%; 72–85) and 52% (36–65) respectively, with adjHR=0.71 (0.37–1.36) and p=0.30. Five-years DFS was 67% (60–74) and 42% (27–56), with adjHR=0.81 (0.47–1.42) and p=0.47.

Conclusion In this single-institution retrospective serie, SS appears not significantly different for OS and DFS compared to TEP-CT staging. However, the baseline characteristics of both groups were different. Prospective randomized trials should further evaluate the role of surgical staging.

CON¬ERVE STUDY DEMONSTRATES THAT CLINICAL REGRESSION OF HIGH-GRADE CERVICAL INTRAEPITHELIAL NEOPLASIA IS ASSOCIATED WITH ABSENCE OF FAM19A4/miR124–2 DNA METHYLATION

Introduction/Background Cervical screening can prevent cancer by detection and treatment of cervical intraepithelial neoplasia grade 2 or 3 (CIN2/3). Screening also results in considerable overtreatment possibly causing complications, unnecessary anxiety and costs, and preterm birth because many CIN2/3 lesions show spontaneous regression when left untreated. Therefore there is a clinical need for a test predicting spontaneous regression in CIN2/3 lesions. In this multicenter longitudinal cohort study of women with untreated CIN2/3, the prognostic value of FAM19A4/miR124–2 methylation was evaluated for clinical regression.

Methodology We prospectively followed women with CIN2/3 for 24 months. Surgical excision was replaced by a wait-and-see policy. FAM19A4/miR124–2 methylation was evaluated on all clinician-collected samples and self-collected samples collected at baseline. Every 6 months, human papillomavirus (HPV) testing and cytology were conducted on a clinician-collected sample, and a colposcopic examination was performed by a gynecologist to exclude progression. At 24 months at the final study visit, two biopsies were taken. Clinical regression was defined as histologically confirmed absence of CIN2+ or an HPV-negative clinician-collected sample with normal cytology. Regression incidences were estimated using the Kaplan-Meier method.

Results 80/114 women included were diagnosed with CIN2 and 34/114 with CIN3. During the study, 65.8% of women (75/114) did not receive surgical treatment. Women with a negative FAM19A4/miR124–2 result on the baseline clinician-collected sample showed more clinical regression (74.7%) than women with a positive methylation result (51.4%, P=0.013). Regression in women with a negative FAM19A4/miR124–2 methylation test was highest when cytology was atypical squamous cells of undetermined significance/low-grade squamous intraepithelial lesion (88.4%) or HPV16 was negative (85.1%).

Conclusion • Most women with untreated CIN2/3 and a negative baseline FAM19A4/miR124–2 methylation test showed clinical regression. • Methylation, in combination with cytology or HPV genotyping, can be used to support a wait-and-see policy in women with CIN2/3.