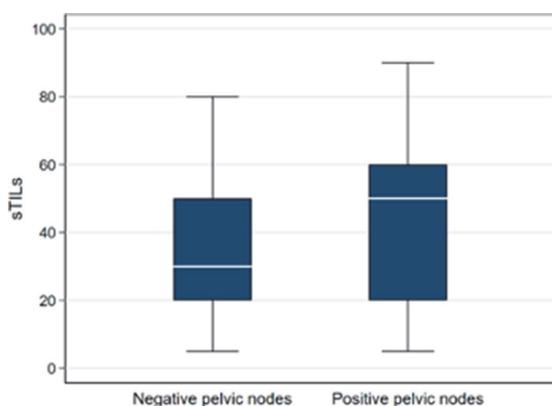


**Introduction/Background** Literature data suggests an association between PET/CT metabolic metrics and tumor microenvironment in several malignancies, and a potential role of PET/CT to monitor response to immunotherapy. The aim of the study is to evaluate the correlation between PET/CT tumor metabolic metrics and tumor-infiltrating lymphocytes (TILs) infiltration in locally advanced cervical cancer (LACC) prior to concurrent chemo-radiotherapy.

**Methodology** Patients with LACC and negative para-aortic extensions on the PET/CT were included. Two senior nuclear medicine physicians specialising in gynaecologic oncology reviewed all PET/CT exams, and extracted tumour SUVmax, MTV, and TLG, as well as pelvic lymph node (PLN) involvement. One senior gynecologic oncology pathologist assessed intraepithelial (iTILs) and stromal tumor-infiltrating lymphocytes (sTILs).

**Results** 86 patients were included in the analysis. High iTILs and sTILs were identified in 29 (34.9%) and 26 (30.2%) patients, respectively. iTILs and sTILs were non significantly associated with tumor metabolic metrics. A high sTILs score was significantly associated with PLN uptake (61.5% compared to 31.7% in low sTILs,  $p=0.009$ ). Tumors with low iTILs score were significantly associated with a higher magnetic resonance imaging (MRI) tumor size ( $\geq$ median) (63.3% versus 39.3%,  $p=0.042$ ). Low iTILs score was also higher in patients with lymph node aortic involvement (14.8% versus 3.4%).



**Abstract 2022-RA-711-ESGO Figure 1** Stromal tumor-infiltrating lymphocytes (sTILs) and lymph node PET/CT uptake

**Conclusion** Poor or absent iTILs was associated with a more advanced disease at diagnosis, with larger tumor size, and more frequent para-aortic lymph node extension. Intraepithelial and stroma TILs are not redundant and should be assessed separately. Further work is needed to evaluate the association between tumor metabolic profile and immune populations, including different T-cell subtypes.

2022-RA-719-ESGO

**IMPACT OF COVID-19 ON RADICAL (CHEMO)RADIOTHERAPY FOR LOCALLY ADVANCED CERVICAL CANCER IN THE WEST OF SCOTLAND, APRIL 2020 – MARCH 2021**

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**Introduction/Background** Chemoradiotherapy (CCRT) is the gold standard treatment for locally advanced cervical cancer. The COVID-19 pandemic resulted in a UK-wide lockdown in March 2020. As a ‘Category 1’ malignancy, cervical cancer remained a key treatment priority, but the safety of chemotherapy was unclear, and many centres including our institution required urgent implementation of spinal as opposed to general anaesthesia to facilitate brachytherapy. We evaluated the impact of COVID-19 on the CCRT pathway.

**Methodology** The central radiotherapy prescribing system at a single institution was interrogated to identify patients who commenced radical RT/CCRT from 1st April 2020 to 31st March 2021.

**Results** Primary RT/CCRT was delivered to 80 patients (adjuvant/salvage therapies were excluded). Median age was 53 years (range 30 – 77) and the majority had squamous cell carcinoma (75%). FIGO 2018 stage distribution was Stage I (3.8%), II (26.2%), III (47.5%) and IV (22.5%). Diagnostic imaging consisted of: MRI 96.3%; PET-CT 98.8%; both 95.0%. Concomitant cisplatin was administered to 81.3%; the remaining patients received neoadjuvant chemotherapy (10%) or had poor performance status/medical comorbidities precluding chemotherapy (8.7%). Median time to complete treatment was 39 days (range 31 – 59). Standard external beam dose of 4500cGy-5000cGy in 25 fractions was prescribed in virtually all cases (98.8%). Median brachytherapy dose was 2400cGy in 4 fractions. SABR boost was delivered to the cervix in 8.8% of cases (unfavourable anatomy or patient refusal). Spinal anaesthetic was performed for the majority of insertions. No patients tested positive for COVID-19 during RT/CCRT and/or required alteration to the usual treatment pathway following prior infection.

**Conclusion** Other than immediately adopting spinal anaesthesia for brachytherapy, the advent of a novel virus threat did not result in deviation to standard CCRT protocol. There was no effect on diagnostic imaging rates, dose-fractionation, concomitant cisplatin, or overall treatment times.

2022-RA-721-ESGO

**CLINICAL OUTCOMES OF SBRT BOOST TO THE CERVIX AS AN ALTERNATIVE TO INTRACAVITARY BRACHYTHERAPY IN LOCALLY ADVANCED CERVICAL CANCER: RETROSPECTIVE ANALYSIS FROM THE WEST OF SCOTLAND**

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**Introduction/Background** Concurrent chemoradiotherapy (CCRT) combined with image guided brachytherapy (IGBT) is the international gold standard management for locally advanced cervical cancer. ESTRO guidelines recommend aiming for EQD<sub>2</sub> of 85–90Gy to the cervix, in order to achieve local control rate of >90%. Associated G3–5 morbidity is up to 5–10%, with fistula incidence <5%. However, a proportion of patients are ineligible for IGBT and a standard photon boost is suboptimal. We evaluated the indications for SBRT boost at our institution and the resultant local control/toxicity outcomes.