

Poster 27: Attenuation of COVID-19 infection among patients with endometrial and cervical cancer receiving immunotherapy

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Topic: Endometrial

Objectives

To quantify the incidence of COVID-19 infection among patients receiving anti-PD1 checkpoint immunotherapy for gynecologic malignancy in an integrated healthcare system.

Methods

Patients with recurrent/metastatic endometrial or cervical carcinoma who received pembrolizumab (200 mg IV q3wks or 400 mg IV q6wks) within the Southern California Kaiser Permanente Medical Group (SCKPMG) from December 11, 2020 through July 1, 2022 were retrospectively evaluated for COVID-19 infection. The Electronic Medical Record (EMR) was used to abstract the following data: type of cancer, vaccination status, vaccination date, number of doses, documented COVID-19 infection, date of COVID-19 infection if present, age, and BMI. Patients with COVID-19 infection within 14 days of initial dose of vaccination were excluded.

Results

4,521 patients with a diagnosis of endometrial or cervical cancer were treated at one of eight SCKPMG hospitals during the study period. 178 patients (3.9%) received pembrolizumab (cervical cancer: n= 37; endometrial cancer: n=141) and 154 (86.5%) of the combined study population were vaccinated. Patients with cervical cancer and those with endometrial cancer received similar doses and schedules ($p=0.817$) Nineteen percent (n=36) of the combined study population were diagnosed with COVID-19. Using logistic regression, an inverse relationship between Pembrolizumab dose and rate of COVID-19 was noted ($p=0.0332$, 95% CI: [-0.0998,-0.0033] percent decrease in COVID infection rate per 100mg). This finding was more pronounced in patients with cervical cancer ($p=0.0279$, 95% CI: [-0.201,-0.011]).

Conclusions

I-O may modulate the clinical sequelae of COVID-19 infection, regardless of vaccination status among women with recurrent/metastatic endometrial or cervical cancer.

Abstract Table or Graph

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